

# Summary of Changes

## Publication 52, *Hazardous, Restricted, and Perishable Mail*

Publication 52, *Hazardous, Restricted, and Perishable Mail*, has been updated, effective November 10, 2016, with the following changes:

The chapter, subchapter, part, appendix, or section...	titled...	was...	in <i>Postal Bulletin</i> issue number...	with an issue date of...
<b>Chapter 3, Hazardous Materials</b>				
325.4	Excepted Quantity Labels	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
336.1	Definition	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
336.2	Mailability	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
336.3	Additional Restrictions	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
336.4	Packaging and Marking	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
337	Excepted Quantity	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
337.1	Definition	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
337.2	Mailability	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16

<b>The chapter, subchapter, part, appendix, or section...</b>	<b>titled...</b>	<b>was...</b>	<b>in <i>Postal Bulletin</i> issue number...</b>	<b>with an issue date of...</b>
337.3	Additional Restrictions	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
337.4	Quantities	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
337.5	Packaging and Marking	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
338	Packaging Requirements for Hazardous Materials	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
338.1	DOT Packing Groups	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
338.2	Postal Service Packaging Instructions	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
339	Nonmailable Materials Found in the Mailstream	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
Exhibit 343.22	Combustible Liquids	revised to update DMM reference.	22444	6-23-16
346.322	Sharps Waste and Other Mailable Regulated Medical Waste	revised to update DMM reference.	22444	6-23-16
346.322a	Sharps Waste and Other Mailable Regulated Medical Waste	revised to update Pub 52 reference for address.	22444	6-23-16

<b>The chapter, subchapter, part, appendix, or section...</b>	<b>titled...</b>	<b>was...</b>	<b>in <i>Postal Bulletin</i> issue number...</b>	<b>with an issue date of...</b>
346.322c4	Sharps Waste and Other Mailable Regulated Medical Waste	revised to update DMM reference.	22444	6-23-16
348.22	Mailable Corrosives	revised to include specifics regarding the transportation of nickel-metal hydride batteries.	22444	6-23-16
<b>Chapter 4, Restricted Matter</b>				
432.1e	General	revised to provide uniformity regarding the mailing options for firearms.	22452	10-13-16
432.2b	Handguns	revised to include specifics regarding the mailing of handguns.	22444	6-23-16
432.2c	Handguns	revised to include specifics regarding the mailing of air guns.	22444	6-23-16
432.3	Rifles and Shotguns	revised to include specifics regarding the mailing of rifles and shotguns.	22444	6-23-16
432.3a.2	Rifles and Shotguns	revised to provide uniformity regarding the mailing options for firearms.	22452	10-13-16
432.3b.4	Rifles and Shotguns	revised to provide uniformity regarding the mailing options for firearms.	22452	10-13-16
432.3c. through 432.3e	Rifles and Shotguns	revised to provide uniformity regarding the mailing options for firearms.	22452	10-13-16
432.4	Indemnity Claims	revised to include specifics regarding indemnity claims for mailing firearms.	22444	6-23-16

<b>The chapter, subchapter, part, appendix, or section...</b>	<b>titled...</b>	<b>was...</b>	<b>in <i>Postal Bulletin</i> issue number...</b>	<b>with an issue date of...</b>
451.22	Cremated Remains	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
453.31c	Packaging and Marking	revised to update Federal Register reference.	22444	6-23-16
453.36	Return of Prescription Drugs	revised to update Federal Register reference.	22444	6-23-16
453.4b	Packaging and Marking	revised to include specifics regarding the mailing of drugs and medicines.	22444	6-23-16
453.4c	Packaging and Marking	revised to include specifics regarding the mailing of promotional samples.	22444	6-23-16
454.222	Restricted or Improperly Prepared Items	revised to update DMM reference.	22444	6-23-16
<b>Chapter 5, Perishable Matter</b>				
526.21	Mailability Requirements	revised to include specifics regarding the mailing of honeybees.	22444	6-23-16
<b>Appendix A, Hazardous Material Table: Postal Service Mailability Guide</b>				
Hazardous Materials Descriptions and Proper Shipping Names (a)	Batteries, nickel-metal hydride	revised to add mailability reference to Domestic Mail Surface (g) column.	22444	6-23-16
<b>Appendix C, USPS Packaging Instructions for Mailable Hazardous Materials</b>				
USPS Packaging Instruction	Introductory Paragraph	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16

<b>The chapter, subchapter, part, appendix, or section...</b>	<b>titled...</b>	<b>was...</b>	<b>in <i>Postal Bulletin</i> issue number...</b>	<b>with an issue date of...</b>
USPS Packaging Instruction	Table of Contents	revised to include new/updated sections.	22447	8-4-16
USPS Packaging Instruction 3B	For flashpoint above 140° F (60° C) but not more than 200° F (93° C)	revised to include specifics regarding surface transportation under subhead "Marking."	22444	6-23-16
USPS Packaging Instruction 3D	For content not more than 70% ethyl alcohol	revised to include specifics regarding ethyl alcohol under subhead "Marking."	22444	6-23-16
USPS Packaging Instruction 3D	For content more than 70% ethyl alcohol	revised to include specifics regarding ethyl alcohol under subhead "Marking."	22444	6-23-16
USPS Packaging Instruction 6D	Sharps Waste and Other Regulated Medical Waste	revised to include specifics regarding authorization and Pub 52 reference for address under subhead "Required Authorization."	22444	6-23-16
USPS Packaging Instruction 8B	Nonspillable Wet Battery (Intro)	revised to limit the marking requirements for properly prepared mailings of nonspillable wet batteries.	22454	11-10-16
USPS Packaging Instruction 8B	Nonspillable Wet Battery	revised to limit the marking requirements for properly prepared mailings of nonspillable wet batteries under subhead "Primary Receptacle."	22454	11-10-16
USPS Packaging Instruction 8B	Nonspillable Wet Battery	revised to delete obsolete information under subhead "Marking."	22444	6-23-16
USPS Packaging Instruction 8B	Nonspillable Wet Battery	revised to limit the marking requirements for properly prepared mailings of nonspillable wet batteries under subhead "Marking."	22454	11-10-16
USPS Packaging Instruction 8C	Manufactured Devices that Contain Small Amounts of Mercury	revised to update the first and third bullets under subhead "Primary Receptacle."	22444	6-23-16

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USPS Packaging Instruction 8C	Manufactured Devices that Contain Small Amounts of Mercury	revised to include specifics regarding mailing manufactured devices under subhead "Absorbent and Cushioning Material."	22444	6-23-16
USPS Packaging Instruction 8C	Manufactured Devices that Contain Small Amounts of Mercury	revised to delete obsolete information in subhead "Secondary Packaging Container."	22444	6-23-16
USPS Packaging Instruction 8C	Manufactured Devices that Contain Small Amounts of Mercury	revised to include specifics regarding mailing manufactured devices under subhead "Outer Shipping Container."	22444	6-23-16
USPS Packaging Instruction 10A	Small Quantity Provision	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
USPS Packaging Instruction 10B	Excepted Quantity Provision	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16
USPS Packaging Instruction 10C	Cremated Remains	revised to provide alternatives for mailers who meet specific criteria relating to the packaging of hazardous materials in the mail.	22447	8-4-16



## Hazardous, Restricted, and Perishable Mail

Publication 52

November 2016  
Transmittal Letter

- A. Purpose.** Publication 52, *Hazardous, Restricted, and Perishable Mail*, provides important information to help mailers determine what may be mailed and how certain items must be packaged to keep the mail safe. It also provides guidance to Postal Service™ employees accepting this mail.

Publication 52 is available on Postal Explorer® at <http://pe.usps.com>.

Customers may also consult their local postmaster or manager of business mail entry for additional information about hazardous materials in the mail.

- B. Effective Date.** This edition is effective November 2016. All previous issues of Publication 52 are obsolete.

**C. Availability.**

Public: The public can access Publication 52 in PDF and HTML formats on Postal Explorer at <http://pe.usps.com>.

Postal Service: Postal Service employees can access Publication 52 in PDF and HTML formats on the USPS Web site.

- D. How to Use This Book.** An introduction is located at the beginning of the book. It explains the purpose and scope of the book, as well as the need to protect Postal Service employees and customers from potentially dangerous materials in the mail. In the appendices, we have included a hazardous materials table, packaging instructions for mailable materials, and a glossary of terms.

- E. Comments.** Contact your local Post Office™, business mail entry office, or the Pricing and Classification Service Center (PCSC) with comments or questions about our mailing standards (see DMM 608.8.4 for addresses and telephone numbers of business mail entry offices and the PCSC).

A handwritten signature in cursive script that reads "Steven W. Monteith".

Steven W. Monteith  
Vice President  
Pricing





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# 1 Introduction

## 11 Purpose

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### 111 General

The purpose of this publication is to provide information and guidance when mailing potentially hazardous, restricted, or perishable matter to domestic and international destinations.

Certain potentially undesirable, harmful, or dangerous matter is nonmailable by statute or regulation. The standards for nonmailable articles and substances and the special conditions under which some of these articles and substances may be mailed can be found in this publication.

These regulations apply to the military postal system, its employees, and undelivered mail that is or has been in the official custody of this system and its employees.

The regulations for nonmailable matter in written, printed, or graphic form are covered in DMM 601.8.0, 508.9.0, and 508.10.0.

### 112 Use

This publication is designed for use by mailers and for employees in business mail entry, retail units, marketing, and other functional areas that are involved with providing mailability information to Postal Service customers.

Follow the standards contained in this publication when deciding whether and under what conditions hazardous materials, restricted matter, and perishable matter are permitted to be mailed.

The content of this publication is based on former DMM standards which have been incorporated into this publication, as well as regulations of federal agencies in effect at the time of publication. Future changes to the federal regulations may supplement, amend, or supersede the content of this publication.

### 113 Other Reference Sources

No single guide could provide all the details necessary for the safe acceptance and handling of every item that is classified as hazardous material, restricted matter, or perishable matter. This publication provides specific mailability requirements, where possible, for those categories of harmful materials that present significant danger or which are frequently presented for mailing.

Particular matter may be mailable under postal statutes and regulations, but customers may have responsibilities under nonpostal statutes and regulations concerned with possession, treatment, transmission, or transfer of such matter (e.g., 49 CFR 100-185 [Department of Transportation Regulations]; the Comprehensive Drug Abuse Prevention and Control Act of 1970 [Public Law 91-513], 21 U.S.C. 801, et seq.; and the Gun Control Act of 1968 [Public Law 90-618], 18 U.S.C. 921, et seq.).

In writing this publication, the following sources were used:

#### Postal Service

- *Mailing Standards of the United States Postal Service, Domestic Mail Manual (DMM).*
- *Mailing Standards of the United States Postal Service, International Mail Manual (IMM).*
- *Postal Operations Manual (POM).*
- *Administrative Support Manual (ASM).*
- Publication 14, *Prohibitions and Restrictions on Mailing Animals, Plants, and Related Matter.*
- Handbook EL-812, *Hazardous Materials and Spill Response.*
- *Aviation Mail Security, Management Instructions.*
- Notice 107, *Let's Keep the Mail Safe.*
- Poster 298, *DOT Hazardous Materials Warning Labels and Markings.*

#### Other Sources

- Title 18 of the United States Code (U.S.C.) 921, 1715, 1716 (18 U.S.C. 921, 1715, 1716).
- 39 U.S.C. 3001-3002a, 3005, 3008-3010, 3012, 3014, 3015, 3017, 3018.
- 21 U.S.C. 801-830 (drugs).
- 7 U.S.C. 7701 (plant pests).
- 7 U.S.C. 7760 (plants).
- Title 29 *Code of Federal Regulations* (29 CFR), Occupational Safety and Health Administration (OSHA), U.S. Department of Labor.
- 42 CFR, Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC).
- 49 CFR, Parts 100-185, U.S. Department of Transportation (DOT).
- International Civil Aviation Organization (ICAO), *Technical Instructions for the Safe Transport of Dangerous Goods by Air.*
- International Air Transport Association (IATA), *Dangerous Goods Regulations.*

Where appropriate, the names and addresses of agencies where more detailed information can be obtained are provided in this publication.

## 12 Scope

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### 121 **General**

The scope of this publication extends to all articles and materials that are nonmailable because they may harm people or property or that have mailing restrictions imposed upon them by the regulations of other governmental agencies.

Under 18 U.S.C. 1716 all matter that is outwardly or of its own force dangerous or injurious to life, health, or property is nonmailable. The knowing deposit of such matter in the mail is a crime punishable by fine, imprisonment, or other penalty. However, certain hazardous materials and otherwise restricted and perishable matter may be mailed under the conditions permitted in this publication.

### 122 **Hazardous, Restricted, and Perishable**

The following are examples of hazardous materials, restricted matter, and perishable matter. These are not complete lists, but they provide an idea of the types of articles included in each category.

- a. Hazardous materials (section 3) include:
  - (1) Corrosives.
  - (2) Explosives.
  - (3) Flammable liquids and solids, combustible liquids.
  - (4) Gases.
  - (5) Infectious substances, etiologic agents, clinical specimens, biological products, sharps, other used medical devices.
  - (6) Miscellaneous hazardous materials (e.g., dry ice, magnetized materials).
  - (7) ORM-D materials.
  - (8) Oxidizers, organic peroxides.
  - (9) Radioactive materials.
  - (10) Toxic substances (poisons).
- b. Restricted matter (section 4) includes:
  - (1) Abortive and contraceptive devices.
  - (2) Battery-powered devices.
  - (3) Building construction materials.
  - (4) Controlled substances and drug paraphernalia.
  - (5) Firearms.
  - (6) Intoxicating liquors.
  - (7) Liquids and powders.
  - (8) Matter emitting obnoxious odors.
  - (9) Motor vehicle master keys.
  - (10) Nonhazardous liquids and powders.

- (11) Sharp objects (knives, switchblades, stilettos).
- (12) Odd-shaped items in letter-size envelopes.
- c. Perishable matter (section 5) includes:
  - (1) Dead animals or parts of animals.
  - (2) Eggs.
  - (3) Live animals.
  - (4) Meat and meat products.
  - (5) Plants and plant products.

## 123 Mailability Premise

### 123.1 Basic Premise

The basic premise of the postal mailability statutes is that anything “which may kill or injure another, or injure the mails or other property...” is nonmailable. Several statutory exceptions to this rule permit mailings of otherwise nonmailable matter under specified conditions. Statutory exceptions apply to live scorpions, poisonous drugs and medicines, poisons for scientific use, switchblade knives, firearms, motor vehicle master keys, locksmithing devices, and abortive and contraceptive devices. The statutes also provide that the USPS may, by regulation, permit the mailing, under required conditions of preparation and packing, of potentially harmful matter not “outwardly or of [its] own force dangerous or injurious to life, health, or property.” The regulations in this publication summarize the statutory prohibitions and exceptions; detail the mailability standards that apply to perishable, hazardous, and restricted matter; contain information on the mailability of specific hazardous materials; and describe the conditions of preparation and packaging under which the USPS accepts for mailing potentially harmful matter that is otherwise nonmailable.

### 123.2 Restricted Matter — General

Restricted matter is an article or substance prohibited or limited by Title 18, U.S. Code (liquors, abortive and contraceptive devices, odd-shaped items in envelopes, motor vehicle master keys, and locksmithing devices). It also includes matter not otherwise described in this publication that is restricted by 18 U.S.C. 1716(a) because it may, under conditions encountered in the mail, be injurious to life, health, or property (obnoxious odors, liquids, powders, and battery-powered devices).

### 123.3 Harmful Matter — General

Except as provided in this publication, any article, composition, or material is nonmailable if it can kill or injure another or injure the mail or other property. Harmful matter includes, but is not limited to:

- a. All types and classes of poisons, including controlled substances.
- b. All poisonous animals except scorpions mailed for medical research purposes or for the manufacture of anti-venom (or antivenin or antivenene); all poisonous insects; all poisonous reptiles; and all types of snakes, turtles, and spiders.



- c. All disease germs or scabs.
- d. All explosives, flammable material, infernal machines, and mechanical, chemical, or other devices or compositions that may ignite or explode.

#### 123.4 **Hazardous Materials**

Harmful matter also includes regulated hazardous materials that are likely to harm USPS employees or to destroy, deface, or otherwise damage mail or postal equipment. This includes materials such as caustic poisons (acids and alkalis), oxidizers, or highly flammable liquids, gases, or solids; or materials that are likely, under conditions incident to transportation, to cause fires through friction, absorption of moisture, or spontaneous chemical changes or from retained heat from manufacturing or processing, including explosives or containers previously used for shipping high explosives with a liquid ingredient (such as dynamite), ammunition, fireworks, radioactive materials, matches, or articles emitting obnoxious odors.

#### 123.5 **Other Nonmailable Matter**

Matter is nonmailable also when it cannot be delivered because of an illegible, incorrect, or insufficient address, or when it does not meet USPS standards for mail preparation, classification, postage prices, size, or weight.

## 13 Additional Information

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Although the Postal Service makes every effort to inform its customers of the mailability of particular harmful matter via the DMM standards and the information in this and other publications, it is the responsibility of the mailer to fully meet all requirements prior to mailing. See [212](#) for more complete information on the responsibilities of mailers.

The authority of Postal Service personnel to decide whether particular articles or substances presented for mailing are nonmailable is stated in [213](#).

## 14 Safety

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The handling and transport of hazardous materials, restricted matter, and perishable matter involves added levels of risk. That risk can become even greater if a nonmailable material is mailed or if the packaging of a mailable material is not adequate to prevent damage or spillage during normal handling.

Under no circumstances may any nonmailable hazardous material, restricted matter, or perishable matter be deposited for mailing. Mailable items must be packaged and labeled as required in the applicable DMM standards and the regulations in this publication.

A Postmaster may take any step reasonable and necessary to protect USPS employees and equipment from potentially dangerous or injurious materials or substances found in the mail. USPS employees may refuse an article for mailing if the content of the article is described by the mailer or otherwise revealed to be nonmailable.

The Postal Service's primary purpose in requiring proper packaging, identification, and deposit of mailable hazardous materials, restricted matter, or perishable matter is to ensure the safety of our employees and the general public who may come into contact with these mailpieces. These requirements also are intended to ensure the safety of Postal Service equipment and facilities.

## 15 Protecting Personnel

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All reasonable and necessary steps must be taken to protect Postal Service personnel and equipment from the effects of potentially dangerous or injurious materials or substances found in the mail, as stated in ASM 223.4.

## 16 Military Postal System

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Unless excepted, standards in this publication apply to the military postal system, its personnel, and undelivered mail that is or has been in the official custody of that system and its personnel. References to the Inspection Service refer to the Postal Inspection Service and its authorized employees, not to military investigative services.

## 17 Statutory System

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18 U.S.C. 2510, et seq., constitutes a statutory system of regulating interception of wire, oral, or electronic communications. Any person contemplating the mailing of a device primarily useful for surreptitiously effecting such interception should consider the provisions of 18 U.S.C. 2510, et seq., particularly section 2512. This statute makes it a crime, except as otherwise provided in 18 U.S.C. 2510, et seq., for a person intentionally to send through the mail any device whose design that person knows, or has reason to know, renders the device primarily useful for surreptitious interception of wire, oral, or electronic communications. The statute does not declare that such a device in itself constitutes nonmailable matter but, as indicated, provides criminal penalties for the act of intentionally mailing it.

## 18 Trademarks of the USPS

### 181 Use of USPS Trademarks

USPS trademarks must be used in the form listed in this section. Proper use of any USPS trademarks may require capitalizing the initial letters, or all the letters of the acronym, to distinguish them from terms not used as trademarks. Words and phrases that are registered trademarks may also use the registration symbol ®; words and phrases that are not registered but are still USPS trademarks may use the ™ symbol. If the registration or ™ symbol is *not* used, a reference should be placed at the beginning or end of the document, indicating the marks that are used in the publication with the following notation: “The following marks are among the many marks belonging to the U.S. Postal Service and are not an exhaustive list”:

We list the marks in lieu of using the ® symbol throughout Publication 52.

1-800-Ask-USPS	FastForward	Parcel Select	Standard Mail
Air Mail	First-Class Mail	Parcel Select Lightweight	U.S. Postage Paid
Business Reply Mail	First-Class Mail International	PC Postage	The Postal Service
Certified Mail	Forever	PFS	The Postal Store
Click-N-Ship	Global Express Guaranteed	Pickup on Demand	U.S. Postal Service
Click-N-Ship for Business	GXG	Postal Explorer	United States Postal Service
Commercial Base	IMb	Premium Forwarding Service	USPS
Commercial Plus	IMb Tracing	Priority Mail	USPS Delivery Confirmation
Critical Mail	IMM	Priority Mail Express	USPS Electronic Postmark
DMM	Intelligent Mail	Priority Mail Flat Rate	USPS ePacket
EDDM	International Surface Air Lift	Priority Mail International	USPS Package Intercept
EDDM Retail	IPA	Priority Mail Open and Distribute	USPS Returns
ePacket	ISAL	Priority Mail Regional Rate	USPS Web Tools
EVS	Market Mail	Priority Mail Regional Rate Box	USPS.com
e-VS	Media Mail	Priority Mail Returns	ZIP
Express Mail International	MERLIN	Return to Sender	ZIP+4
FAST	Parcel Post	RIBBS	

## 182 Common Law Marks or USPS Marks with Pending Trademark Applications

The following is a list of Common Law Marks or USPS marks with pending trademark applications that appear throughout Publication 52. The <sup>TM</sup> may be used after these marks and the same trademark rules apply whenever these services or terms appear in the DMM. **Note:** this list changes frequently and some of these marks will become registered and require the <sup>®</sup>:

ACS	M-Bag	Priority Mail 3-Day Delivery	Registered Mail
Carrier Pickup	Open and Distribute	Priority Mail 3-Day Delivery Guaranteed	Signature Confirmation
CASS	Parcel Select Regional Ground	Priority Mail 3-Day	USPS Retail Ground
CASS Certified	P.O. Box	Priority Mail Express	U.S. Mail
Courtesy Reply Mail	PO Box	Priority Mail Express 1-Day	US Postage Paid
Delivery Confirmation	Post Office	Priority Mail Express 2-Day	US Postal Service
FCPIS	Post Office Box	Priority Mail Express 3-Day	USPS
First-Class	Postal Service	Priority Mail Express DPO	USPSCA
First-Class Package	Postmaster General	Priority Mail Express Flat Rate Box	USPS Corporate Account
First-Class Package International Service	POSTNET	Priority Mail Express International	USPS Picture Permit
First-Class Package Service	Priority Mail 1-Day Delivery	Priority Mail Express Military	USPS Tracking
IMb	Priority Mail 1-Day Delivery Guaranteed	Priority Mail Express Offshore	USPSCA
IMb Tracing	Priority Mail 1-Day	Priority Mail Express Open and Distribute	ZIP Code
IMRS	Priority Mail 2-Day Delivery	Priority Mail International	
International Business Reply	Priority Mail 2-Day Delivery Guaranteed	QBRM	
International Priority Airmail	Priority Mail 2-Day	Qualified Business Reply	

# 2 General Guidelines

## 21 Mailability

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### 211 General

Under 18 U.S.C. 1716, all matter that is outwardly or of its own force dangerous or injurious to life, health, or property is nonmailable. The knowing deposit of such matter in the mail is a crime punishable by fine, imprisonment, and/or other penalty.

For reasons of safety, most hazardous materials are nonmailable. However, some hazardous materials and otherwise restricted matter, or perishable matter are permitted to be mailed when the requirements in this publication are fully met.

Chapter [3](#), Appendix [A](#), and Appendix [C](#) of this publication provide detailed information about hazardous materials that are permitted to be mailed and the conditions that apply.

Chapters [4](#) and [5](#) of this publication provide information about restricted matter and perishable matter that either is nonmailable or that may be mailable under specified conditions, as applicable.

Chapter [6](#) specifies the mailing conditions that apply to hazardous materials, restricted matter, and perishable matter in international mail, including hazardous materials for delivery to overseas military and diplomatic Post Office (APO/FPO/DPO) addresses.

Chapter [7](#) contains information regarding mailability of hazardous materials, restricted matter, and perishable matter in domestic mail via air transportation.

Regardless of content, a mailpiece weighing more than 13 ounces bearing only postage stamps as postage may not be deposited into a collection box, Postal Service lobby drop, Postal Service dock, customer mailbox, or other unattended location. These mailpieces are also precluded from pickup service. The sender must present such items to an employee at a retail service counter in a Postal Service facility. Improperly presented items will be returned to the sender for proper entry and acceptance.

## 212 **Mailer Responsibility**

All mailers, including mail service providers and other mailer agents, must comply with applicable Postal Service laws and regulations governing mailability and preparation for mailing, as well as nonpostal laws and regulations on the shipment of particular matter.

The Postal Service disseminates information about mailing standards by publishing the DMM and IMM and by providing this and other publications that give additional guidance to mailers.

Mailers need to be aware of current or new regulations adopted by the Postal Service and other governmental agencies.

## 213 **Authority**

A Postmaster has the authority to decide whether articles and substances other than written, printed, or graphic matter are nonmailable and, where appropriate, is authorized to refuse to accept for mailing such matter determined to be nonmailable. Postmasters may consult with the Pricing and Classification Service Center (PCSC) in making these determinations.

PRICING AND CLASSIFICATION SERVICE CENTER  
90 CHURCH ST STE 3100  
NEW YORK NY 10007-2951  
TELEPHONE: (212) 330-5300 / FAX: (212) 330-5320

## 214 **Appeals**

A mailer who receives an adverse decision from a Postmaster may file a written appeal with the PCSC (see [213](#) for address), which issues the final agency decision. When an initial ruling is issued by the PCSC, the mailer may appeal to the manager, Product Classification, USPS Headquarters, Washington, DC, who has the authority to render a final decision on the appeal.

A mailer may file a written appeal of a final Postal Service agency decision with the USPS Recorder, Judicial Officer, under the rules of procedure in 39 CFR 953.

MANAGER, PRODUCT CLASSIFICATION  
U.S. POSTAL SERVICE  
475 L'ENFANT PLAZA SW RM 4446  
WASHINGTON DC 20260-5015

RECORDER  
JUDICIAL OFFICER  
U.S. POSTAL SERVICE  
2101 WILSON BLVD STE 600  
ARLINGTON VA 22201-3078

## 215 Requests for Rulings

### 215.1 General

Mailability decisions are based on Postal Service statutes and regulations in effect at the time the ruling is issued. Over time, some rulings may become obsolete or require modification to conform to changes in applicable laws and regulations. When rulings are issued, the requirements of other governmental agencies (e.g., U.S. Department of Transportation, Centers for Disease Control and Prevention) may be taken into consideration to the extent that they are consistent with Postal Service policy and authority.

Requests for rulings must contain specific items of critical information appropriate to the category of the material, as noted in [215.2](#), [215.3](#), and [324](#).

### 215.2 Hazardous Materials

Acceptability for mailing hazardous materials depends on many factors, such as the container fluid/vapor capacities, the ability of the complete mailpiece to contain the material, and the method of absorbing and containing the material in case of accidental leakage of the primary receptacle.

To determine mailability of a specific material, a mailer must submit a material safety data sheet (MSDS) (see Appendix [D](#)) and the following information to the PCSC (see [213](#) for address):

- a. Common and proper shipping name of the material, hazard class, and the assigned United Nations (UN) or North American (NA) identification number.
- b. Chemical composition by percentage of weight.
- c. Flashpoint.
- d. Toxic properties.
- e. Irritant action when inhaled, swallowed, or with contact to skin or eyes.
- f. Special precautions necessary to permit handling without harm to USPS employees or damage to property or other mail.
- g. Explanation of warning labels and shipping papers required by local, state, or federal regulations.
- h. Description of the proposed packaging method, including the addressing, required markings, and documentation.
- i. Volume of material per mailpiece, proposed number of pieces to be mailed, class of mail, and post office(s) of mailing.

The hazards present with chemicals and other types of hazardous materials may not be readily apparent. Materials classified under one hazard class can present additional or subsidiary hazards more commonly associated with a different hazard class. For example, swimming pool chemicals may cause fires or release poisonous fumes or be corrosive or poisonous. Therefore, it is essential when determining mailability to correctly identify the material based on the mailer-supplied documentation (i.e., the MSDS and other information) and never to assume a general designation using unsubstantiated information.

**215.3 Restricted Matter or Perishable Matter**

To obtain a ruling on the mailability of restricted or perishable matter, a mailer should provide the mailing office with following:

- a. Detailed description of the restricted or perishable matter.
- b. Special precautions necessary to permit handling without harm to Postal Service employees or damage to property.
- c. Proposed method of packaging.
- d. Explanation of any local, state, or federal regulations that apply to shipping such matter.
- e. Quantity per mailpiece and per mailing, frequency of mailing, and post office(s) of mailing.

When information about restricted or perishable matter is insufficient to make a mailability determination, or when there is doubt about the mailability of a particular item, contact the PCSC.

**216 Nonmailable Matter Found in the Mail**

Specific items, such as firearms, switchblade knives, controlled substances, motor vehicle master keys, and explosive or incendiary devices, generally are prohibited for mailing. When these types of nonmailable items are found in the mailstream, they must be handled in accordance with POM 139.117, by referring to the Postal Inspection Service.

Other materials found in the mail that are believed to be nonmailable must be treated under the applicable conditions in POM 139.117-18 and ASM 223.4.

## 22 Marking Requirements

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**221 General**

To avoid rejection of the mailpiece by Postal Service acceptance personnel or air carriers, mailers must ensure that their packages meet all applicable labeling, marking, and ancillary endorsement requirements.

**221.1 Address Side of Mailpiece**

Hazardous materials and restricted or perishable matter, unless specifically excepted in [222](#), must be clearly identified on the address side of the mailpiece. Other markings required by the Postal Service or other federal regulatory agencies also must appear on the address side of any mailpiece containing hazardous material, restricted matter, or perishable matter. Required markings must be applied with a nonsoluble material or other material that cannot be rubbed off or smeared.

**221.11 Return Address**

Except for diagnostic specimen mailpieces using a Business Reply Mail format, and nonregulated materials, a return address that includes the sender's name and address must appear on all packaging containing hazardous, restricted, or perishable mail.



**221.12 Content Markings**

When required, the contents also must be clearly identified on the address side. The contents must be disclosed to be mailable. A mailability determination may be required based on the mailer's disclosure concerning the contents at the time of mailing.

**221.2 Ancillary Endorsements**

A mailer endorsement may be used to request forwarding, return, or address correction service for items that are undeliverable as addressed (see DMM 507).

Standard Mail and Parcel Select Lightweight pieces containing hazardous materials must bear the endorsement "Address Service Requested," "Forwarding Service Requested," or "Return Service Requested."

First-Class Mail, First-Class Package Service, Priority Mail, Standard Mail, USPS Retail Ground, Package Services, or Parcel Select (including Parcel Select Lightweight) pieces containing hazardous materials cannot use "Change Service Requested."

**222 Matter Excepted From Markings**

If permitted to be mailed under Chapter 4, the following materials are excepted from the content requirements in [221](#) and must be mailed with no indication or identifying marking on the outside of the parcel:

- a. Controlled substances and drugs.
- b. Firearms.
- c. Motor vehicle master keys.
- d. Switchblade knives.

**223 Hazardous Materials Warning Labels and Markings**

Most mailable hazardous materials fall in the ORM-D (other regulated materials), consumer commodity, or mailable limited quantity categories. ORM-D materials (surface only) may include an ORM-D marking or a Department of Transportation (DOT) square-on-point marking. Most materials intended for air transportation must bear a DOT square-on-point marking, including the symbol "Y", and may require a specific DOT diamond-shaped hazardous materials warning label and other markings. See Chapter 3, [Exhibit 325.1](#), and [Exhibit 325.2a](#), for more specific information on hazardous materials warning labels and marking requirements.

**224 Tag 44 for Hazardous Materials**

Category B infectious substances are the only type of hazardous materials permitted to be placed in a sack or tub. All mailpieces must be properly marked with the proper shipping name "Biological Substance, Category B" and "UN3373" inside a diamond marking as outlined in 346.32a. A sack or tub containing Category B infectious substances must have attached Tag 44, *Sack Contents Warning*. The tag must be removed when the Category B infectious substances are no longer in the sack or tub. See Chapter 7 for more information.

## 225 Other Postal Service Labels and Tags

The Postal Service provides these labels and tags for affixing to the outside of mailpieces containing bees, live animals, or perishable matter:

- a. Label 27, *Bee Ware!*
- b. Label 28, *Live Animals*.
- c. Tag 9, *Perishable — Do Not Delay*.
- d. Label 127, *Surface Transportation Only*.

## 226 Package Orientation Markings

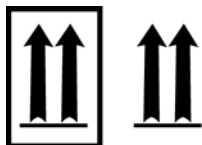
Outer packaging that contains a primary receptacle (and secondary packaging, when required) of a liquid or other spillable material must be packed with the closure of the primary receptacle positioned upward.

The outer packaging must be plainly and legibly marked on two opposite sides with a package orientation marking consisting of two underlined arrows that point in the correct upright position.

Optionally, the two arrows may be enclosed in a rectangle. Specifications for package orientation markings are in 49 CFR 172.312. See [Exhibit 226](#) for examples.

Exhibit 226

### Package Orientation Markings



**Note:** Either design is acceptable.

## 227 Old Markings

Under 49 CFR 173.29, a container that previously held a hazardous material is considered the same as a full container of the material. A container improperly identified by content is not acceptable for mailing. Some potentially hazardous, restricted, and prohibited matter is nonmailable by statute or regulation. Because of safety concerns and in compliance with laws governing the transportation of hazardous, restricted, and prohibited materials, as well as privacy statutes, the Postal Service must assume that all markings and labels on a package identify the actual content.

Reused packaging, boxes, and containers that bear inapplicable labels or markings associated with hazardous, prohibited, or restricted materials are prohibited in the mailstream, unless the labels or markings have been removed or completely obliterated. If the labels or markings can still be read or identified, they are not sufficiently obliterated. See [Exhibit 227](#).

Exhibit 227  
**Reused Packaging**



**Incorrect Procedure**



**Correct Procedure**

If labels or markings have not been sufficiently obliterated, the package must be handled as though it contains the indicated contents. Frequently, these types of packages must be handled as nonmailable hazardous materials and must be isolated and removed from the mailstream.

Examples of commonly reused boxes include cleaning supply boxes and liquor/wine/beer boxes. Some cleaning products are hazardous materials; although most alcoholic beverages are not hazardous materials, they are prohibited from mailing. Packages containing alcoholic beverages or with alcoholic beverage markings are prohibited in the mail.

Postal Service employees may not remove, cross out, or obliterate labels or markings, even if asked to do so by a mailer. Only the mailer or mailer's authorized representative may alter or obliterate the labels or markings.

228 **Shipping Papers**

Mailable hazardous materials eligible to be sent by Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service must be packaged, labeled, and appropriately documented for air transportation, as required by federal regulations and section [22](#).

Mailable hazardous materials sent via air transportation (except materials identified under [346.2](#)) must be accompanied with a shipper's declaration for dangerous goods (shipping paper) completed in triplicate and signed by the mailer.

Air carriers may reject mailpieces that are not accompanied by the required shipping papers. See [326](#) and [Exhibit 326](#) and Chapter [7](#) for more information.

## 23 Handling Hazardous Materials

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A potentially dangerous situation exists whenever hazardous materials, restricted matter, or perishable matter is being moved from one place to another. Careless handling can result in serious injury to the general public and Postal Service personnel, damage to other mail and Postal Service equipment, and delays in processing and delivery of mail.

The *Postal Operations Manual* (POM) provides additional instructions for handling hazardous materials in the mail.

## 24 Emergency Procedures

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### 241 General Requirements

Incidents involving the release of hazardous materials, restricted matter, or perishable matter may cause death, injury, and damage to property. Such incidents can be avoided or minimized if appropriate preventive measures are taken or correct emergency procedures are followed.

MI EL-810-2006-3, *Response to Hazardous Materials Releases*, and Handbook EL-812, *Hazardous Materials and Spill Response*, provide guidelines for responding to emergency situations. Postal Service employees involved in the flow of mailpieces containing harmful matter must follow these guidelines from the point of deposit to the point of delivery.

### 242 Hazard Duration

Frequently, the effects of exposure resulting from damage, spillage, or leakage of harmful matter are not obvious or readily apparent. For example, infectious substances, radioactive material, corrosives, and poisons can cause illness or injury that may become known to the victim gradually and long after the incident.

### 243 Precautions

During any spill or leak incident, or when damage is detected involving harmful items, Postal Service personnel must take every precaution to protect other personnel and property from visible and invisible effects of the material involved. These procedures are to be followed:

- a. Identify harmful properties of the material (based on the markings) and determine the precautions to be taken.
- b. Provide adequate personal protection to employees who must handle the materials.
- c. Contain and transport leaking containers for disposal.
- d. Clean and decontaminate facilities and machinery.

Refer to MI EL-810-2006-3, *Response to Hazardous Materials Releases*, and Handbook EL-812, *Hazardous Materials and Spill Response*, for specific instructions.

### 244 Procedures

During any incident involving harmful matter where there is actual or suspected damage to a mailpiece or its contents, Postal Service personnel must follow the specific procedures in Handbook EL-812, *Hazardous Materials and Spill Response*, and as outlined below:

- a. Isolate the damaged package immediately and restrict the area. If the incident occurs in a facility or on the equipment of an air carrier, immediately brief the carrier on the nature and quantity of the materials released.

- b. Contact the supervisor or designated qualified employee, who can take prompt and appropriate measures to protect life and prevent injury, loss, or damage. They will determine whether it is an incidental spill that can be handled by the facility spill and leak team or an emergency spill that will require implementation of the emergency action plan. If mail sealed against inspection must be opened for this purpose, act in accordance with ASM 274.
- c. Remove any injured or contaminated person from the area with as little physical contact as possible:
  - (1) Limit any first aid to what is absolutely necessary, until a qualified physician is present.
  - (2) Direct all personnel exposed to radioactive materials to wash all exposed body areas immediately with cold water and immediately report to a physician for an examination.
- d. If the spill is determined to be an emergency, contact the fire department, the police, a qualified physician, and/or the appropriate agencies equipped to handle specific situations.
- e. Avoid smoke, fumes, or dust. Segregate any clothing or tools used in fighting fires until they can be checked for contamination.
- f. Do not eat, smoke, or drink in the affected area.
- g. Do not place involved areas in service until the appropriate authorities have determined that the areas are free of all contamination.
- h. Notify the PCSC or Postal Service Inspection Service, as appropriate under POM 139.117–118 (see [216](#)). A report must be made for any incident that includes damage to mail or property, or injury to personnel. An online Mailpiece Incident Report (MIR) must be completed and filed in accordance with the instructions in the Safety Toolkit, based on the incident type.

## 245 Hazardous Chemical Emergencies

CHEMTREC (Chemical Transportation Emergency Center) is a service of the Chemical Manufacturers Association that provides immediate information and advice 24 hours a day, 7 days a week, for those at the scene of transportation emergencies involving chemicals.

Postal Service personnel are authorized to telephone CHEMTREC day or night, toll free, at 800-424-9300. For calls originating within the state of Virginia or outside the continental United States, telephone 703-527-3887. CHEMTREC usually can provide hazard guidance and information warnings when given only the name of the product and the nature of the problem. CHEMTREC also follows up by promptly contacting the shipper of the chemicals involved for more detailed assistance. CHEMTREC does not provide on-site emergency response.

CHEMTREC may request the following information in an emergency call:

- a. Caller's name, title and organization, and callback number at scene.
- b. Description of incident and actions taken.
- c. Type and number of injuries/exposures.

- d. Material involved, including:
  - (1) Name of the product(s), preferably a trade name.
  - (2) Shipper and point of destination.
  - (3) Consignee and destination (delivery address).
- e. Type or description and number of containers/packages.
- f. Specific information you need right away (MSDSs, medical help, etc.)
- g. Size of or amount of release.
- h. Location, time, weather at the scene

## 246 Emergency Telephone Numbers

Following are telephone numbers for use during normal business hours (unless otherwise noted) for the indicated types of emergencies:

CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)  
(for etiologic agents and biohazard materials) 404-633-5313

CHEMICAL TRANSPORTATION EMERGENCY CENTER  
(CHEMTREC)

(for Chemical Spills - 24 hours a day, 7 days a week)  
800-424-9300 (in continental United States; outside Virginia)  
703-527-3887 (within Virginia or outside the continental United States)

CROPLIFE AMERICA  
(for Herbicides, insecticides, Fungicides, and similar products)  
202-296-1585

U.S. DEPARTMENT OF TRANSPORTATION (DOT)  
NATIONAL RESPONSE CENTER  
(for Chemical and Oil Spills)  
202-267-2675 (within Washington DC)  
800-424-8802 (outside Washington DC)

## 25 Basic Guidelines for Acceptance and Dispatch

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### 251 Guidelines for Acceptance Personnel

Postal Service personnel may not open mail sealed against inspection except under the circumstances described in ASM 274. Accordingly, knowledge of the content of such mail may be obtained directly from the mailer (e.g., a mailer may ask questions about mailing requirements or mark the outside of the mailpiece to indicate the contents) or indirectly through leakage or other escape of the contents. Subject to the applicable restrictions, acceptance personnel must:

- a. Determine the mailability of all hazardous materials, perishable matter, or otherwise restricted matter offered for mailing at a retail unit or business mail entry unit (BMEU). This process must include a thorough inspection of all sides of the mailpiece for evidence of hazardous materials (e.g., markings). At retail units, mailers must be asked the question: "Does this parcel contain anything fragile, liquid, perishable, or potentially hazardous, including lithium batteries and perfume?"

- b. If the contents are mailable, determine the specific quantity limitations, labeling, and packaging requirements that apply.
- c. Refuse (as permitted in POM 139) to accept any material that does not meet the applicable requirements for mailing and refer the circumstances to your local Postmaster or PCSC for a mailability ruling under [213](#) or [215](#), as appropriate.
- d. If the parcel containing a diagnostic (clinical) specimen is in a sack or tub, PS Tag 44 must be attached to ensure that the sack will be emptied at the processing point. Dispatch all mailable hazardous materials as applicable to the class and content of each mailpiece.

See Chapter [7](#) for guidelines Postal Service acceptance personnel should follow when handling hazardous materials, restricted matter, or perishable matter to be transported by air.

## 252 Guidelines for Dispatch Personnel

The following guidelines for Postal Service dispatch personnel are general in nature. Specific dispatch procedures for Postal Service operational employees are in the POM and applicable to the class and content of the mailpiece.

- a. Make sure that the hazardous material, restricted matter, or perishable matter is given proper handling to avoid damage or danger.
- b. Tender to the air carrier only those mailpieces that are properly packaged and marked. Before a shipment is tendered to a carrier, make sure that:
  - (1) A proper and strong packaging method is used.
  - (2) A secure method of package closure is used, and there is no visual evidence of leakage or damage. (If damage is detected, isolate the damaged mailpiece and notify the appropriate personnel in case of accident or incident and for proper spill response.)
  - (3) The outer packaging bears all required markings and/or labels.
  - (4) A properly completed shipping paper is attached to the outside of the mailpiece and to the dispatch document. The shipping paper must include the information detailed in [326](#) and [Exhibit 326](#).
  - (5) If the mailpiece contains a material believed to be nonmailable, separate it from the rest of the mail to avoid introduction into the mailstream and treat it in accordance with POM 139.117-118, as appropriate.

See Chapter [7](#) for more information regarding the air transportation of mailable hazardous materials, restricted matter, or perishable matter.

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# 3 Hazardous Materials

## 31 Definition

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A hazardous material is any article or substance designated by the U.S. Department of Transportation as being capable of posing an unreasonable risk to health, safety, or property during transportation. In international commerce, hazardous materials are known as “dangerous goods.” For definitions of other terms that relate to hazardous materials, see Appendix [D](#).

## 32 General

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### 321 **U.S. Department of Transportation**

The U.S. Department of Transportation (DOT) is the federal agency responsible for regulating the carriage of hazardous materials within the United States via any mode of transportation (e.g., highway, rail, air, water). The federal regulations of the DOT are codified in Title 49 *Code of Federal Regulations* (49 CFR), which contains the DOT’s detailed specifications for packaging, marking, and labeling hazardous materials. Title 49 CFR also exempts or establishes other requirements for limited quantities and small quantities of hazardous materials. USPS mailing standards for hazardous materials generally adhere to 49 CFR, but also include many additional limitations and prohibitions.

### 322 **Postal Service**

The carriage of U.S. Mail by the Postal Service is regulated by Title 39 *Code of Federal Regulations* (39 CFR) and is not subject to the federal regulations in 49 CFR that apply to commercial carriers. Unlike commercial carriers, the Postal Service is subject to the restrictions in Title 18 *United States Code 1716* (18 U.S.C. 1716), which prohibits from mailing all matter that is outwardly or of its own force dangerous to life, health, or property (see [211](#)). As a result, most hazardous materials are nonmailable.

Accordingly, for legal and safety reasons, although mailing standards for hazardous materials in this publication closely adhere to 49 CFR, the standards also include many additional limitations and prohibitions and often are more restrictive than the requirements of other commercial carriers. For example, 49 CFR allows commercial shippers to send flammable materials by air, but the Postal Service prohibits the mailing of all flammable materials via air transportation.

The USPS standards generally limit the mailing of hazardous materials to ORM-D (permitted for surface transportation only until January 1, 2021), and consumer commodity or mailable limited quantity materials as defined in [332-336](#) that meet USPS quantity limitations and packaging requirements. This allowance is limited to the following:

- a. Toy propellant devices and safety fuses in Division 1.4S, as permitted in [341.22](#).
- b. Toxic substances in Division 6.1 that have an LD50 for oral toxicity of greater than 5 mg/kg but less than 50 mg/kg, as permitted in [346.231](#).
- c. Infectious substances (etiologic agents) and medical wastes in Division 6.2, as permitted in [346.23](#).
- d. Radioactive materials in Class 7 that fall within the specific activity limits permitted in [347](#) and [Exhibit 347.22](#).
- e. Dry ice and magnetized materials in Class 9, as permitted in [349](#).

### 323 Mailer Responsibility

Full responsibility rests with the mailer to comply with all Postal Service and non-Postal Service laws and regulations in the mailing of hazardous material. Anyone who mails, or causes to be mailed, a nonmailable or improperly packaged hazardous material can be subject to legal penalties (i.e., fines and/or imprisonment), including but not limited to, those specified in 18 U.S.C. The transport of hazardous materials prior to entry as U.S. Mail and after receipt from the Postal Service is subject to DOT regulations.

### 324 Mailability Rulings

For information on how to request a mailability ruling for a specific hazardous material, follow the procedures outlined in [215.2](#).

### 325 DOT Hazardous Materials Warning Labels

#### 325.1 Nonmailable Warning Labels

In commerce, packages containing hazardous materials (except those qualifying as ORM-D material or a limited quantity shipment) must display the appropriate DOT diamond-shaped hazardous materials warning label. Any mailpiece bearing, or required under 49 CFR to bear, one of the warning labels shown in [Exhibit 325.1](#) is prohibited from mailing.

(The labels shown in the exhibits are not shown to size. DOT warning labels must meet the size and color requirements in 49 CFR 172.407 through 172.446.)

**DOT Hazardous Materials Warning Labels: PROHIBITED IN THE MAIL**



### 325.2 Mailable Warning Labels

The warning labels shown in [Exhibit 325.2a](#) and [Exhibit 325.2b](#) and [Exhibit 325.3](#) may appear only on mailpieces containing mailable hazardous materials that require use of the label under Postal Service requirements.

Exhibit 325.2a

#### DOT Hazardous Materials Warning Labels: PERMITTED ON MAILABLE HAZARDOUS MATERIALS



Exhibit 325.2b

#### DOT Hazardous Material Warning Labels: PERMITTED FOR MAILABLE LIMITED QUANTITIES ONLY



(Must only be used in conjunction with DOT limited quantity markings and only when permitted for the applicable hazard class. See 34, Mailability by Hazard Class.)

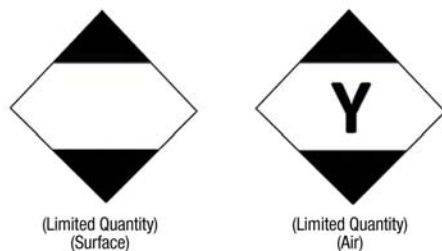
### 325.3 Limited Quantity Square-on-point Labels

Unless otherwise noted, each mailpiece containing a mailable hazardous material must be plainly and durably marked on the address side with the required shipping name and UN identification number. Mailpieces containing mailable air-eligible hazardous materials intended for air transportation must bear a DOT limited quantity square-on-point marking under [Exhibit 325.3](#). Mailpieces containing mailable hazardous materials intended for surface transportation may be entered and optionally marked under the ORM-D category until January 1, 2021. After this date, all parcels containing mailable

hazardous materials must bear the appropriate DOT square-on-point marking and other associated markings when required. The following also applies:

- a. The use of DOT limited quantity square-on-point markings are required for mailpieces intended for air transportation and optional for mailpieces intended for surface transportation. The plain square-on-point marking is used for shipments sent by surface transportation, and the square-on-point marking including the symbol “Y” superimposed in the center is used for shipments sent by air transportation. The following also applies:
  - (1) Markings must be durable, legible, and readily visible.
  - (2) The marking must be applied on at least one side or one end of the outer packaging. The border forming the square-on-point must be at least 2 mm (0.08 inch) in width and the minimum dimension of each side must be 100 mm (3.94 inches), unless the package size requires a reduced size marking of no less than 50 mm (1.97 inches) on each side.
  - (3) For surface transportation, the top and bottom portions of the square-on-point and the border forming the square-on-point must be black and the center must be white or of a suitable contrasting background. Surface shipments containing qualifying ORM-D materials and bearing the square-on-point limited quantity marking are not required to be marked with the shipping name and identification number.
  - (4) For transportation by aircraft, the top and bottom portions of the square-on-point and the border forming the square-on-point must be black and the center must be white or of a suitable contrasting background. The symbol “Y” must be black and located in the center of the square-on-point and be clearly visible. Mailpieces intended for transport by air must also be marked with the proper shipping name, identification number, and must also display the appropriate DOT hazardous material warning label (only when required for the hazard class shipped) in accordance with this publication.
- b. The UN identification number is not required on mailpieces containing ORM-D materials and intended for surface transportation. A mailable ORM-D material must be marked on the address side with “ORM-D” (or marked under [325.3a.](#)) immediately following, or below the proper shipping name. The proper shipping name for a mailable ORM-D material is “consumer commodity.” The designation “ORM-D” must be placed within a rectangle that is approximately 6.3 mm (1/4 inch) larger on each side than the applicable designation. Mailpieces containing ORM-D materials sent as Standard Mail, USPS Retail Ground, Parcel Select, or Package Services must also be marked on the address side as “Surface Only” or “Surface Mail Only.”

Exhibit 325.3

**DOT Hazardous Material Warning Labels: PERMITTED FOR LIMITED QUANTITY SQUARE-ON-POINT****325.4 Excepted Quantity Labels**

Hazardous materials eligible to be shipped under the excepted quantity provision, as described in 49 CFR 173.4a and 337.2, must be prepared following Packaging Instruction 10B in Appendix C. Each mailpiece must bear a DOT-approved excepted quantity marking, shown in Exhibit 325.4, under the following conditions:

- a. The “\*” must be replaced by the primary hazard class, or when assigned, the division of each of the hazardous materials contained in the package.
- b. The “\*\*\*” must be replaced by the name of the mail owner or mail service provider if not shown elsewhere on the package.
- c. The marking must be located on the address side of the mailpiece, not be less than 3.9 inches (100 mm) by 3.9 inches (100 mm), and must be durable and clearly visible.

Exhibit 325.4

**Excepted Quantity Marking****326 Shipping Papers**

A shipping paper is defined as a shipping order, bill of lading, waybill, manifest, or any other document used to identify a hazardous material being offered for transport. A shipper's declaration for dangerous goods (shipping paper) prepared under 49 CFR 172.200 through 172.205 is required for certain types of hazardous materials when mailed. A sample form is shown in [Exhibit 326](#). The shipping paper must be completed and signed in triplicate by the mailer. It must be affixed to the outside of the mailpiece within an envelope or similar carrier that can be easily opened and resealed to allow viewing of the document. Shipping papers are required as follows:



- a. *Air Transportation.* Most mailable hazardous materials must be accompanied by a shipper's declaration for dangerous goods (shipping paper). To determine which mailable hazardous materials require a shipping paper when sent via air transportation, refer to the appropriate sections in this chapter and the appropriate Packaging Instruction in Appendix [C](#).
- b. *Surface Transportation.* Certain mailable hazardous material other than an ORM-D, consumer commodity, or mailable limited quantity material may require a properly prepared shipping paper. To determine which mailable hazardous materials require a shipping paper when sent via surface transportation, refer to the appropriate sections in this chapter, the appropriate Packaging Instruction in Appendix [C](#).

Neither DOT nor the Postal Service makes blank shipper's declaration forms available to shippers of hazardous materials. It is the responsibility of the shipper to obtain forms meeting the format specifications in 49 CFR from commercial printers, vendors, or internet retailers. The shipper is also responsible for properly completing the form prior to mailing.

## Exhibit 326

## Shipper's Declaration for Dangerous Goods (Sample Form)

SHIPPER'S DECLARATION FOR DANGEROUS GOODS					(Provide at least two copies to the airline.)																							
Shipper				Air Waybill No.  Page      of      Pages Shipper's Reference Number <small>(optional)</small>																								
Consignee																												
<p><i>Two completed and signed copies of this Declaration must be handed to the operator</i></p> <div style="border: 1px solid black; padding: 5px;"> <p><b>TRANSPORT DETAILS</b></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>This shipment is within the limitations prescribed for: <small>(delete non-applicable)</small></p> <div style="display: flex; border: 1px solid black; padding: 2px;"> <div style="width: 50%; text-align: center; font-size: 0.8em;">PASSENGER AND CARGO AIRCRAFT</div> <div style="width: 50%; text-align: center; font-size: 0.8em;">CARGO AIRCRAFT ONLY</div> </div> </div> <div style="width: 35%;"> <p>Airport of Departure</p> </div> </div> </div>				<p><b>WARNING</b></p> <p>Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties. This Declaration must not, in any circumstances, be completed and/or signed by a consolidator, a forwarder or an IATA cargo agent.</p>																								
<p>Airport of Destination:</p>				<p>Shipment type: <small>(delete non-applicable)</small></p> <div style="display: flex; border: 1px solid black; padding: 2px;"> <span style="border: 1px solid black; padding: 0 5px;">NON-RADIOACTIVE</span> <span style="border: 1px solid black; padding: 0 5px;">RADIOACTIVE</span> </div>																								
<p><b>NATURE AND QUANTITY OF DANGEROUS GOODS</b></p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="5" style="padding: 5px;">Dangerous Goods Identification</th> <th rowspan="2" style="padding: 5px;">Quantity and Type of packing</th> <th rowspan="2" style="padding: 5px;">Packing Inst.</th> <th rowspan="2" style="padding: 5px;">Authorization</th> </tr> <tr> <th style="padding: 5px;">Proper Shipping Name</th> <th style="padding: 5px;">Class or Division</th> <th style="padding: 5px;">UN or ID No.</th> <th style="padding: 5px;">Packing Group</th> <th style="padding: 5px;">Subsidiary Risk</th> </tr> </thead> <tbody> <tr> <td style="height: 150px;"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>								Dangerous Goods Identification					Quantity and Type of packing	Packing Inst.	Authorization	Proper Shipping Name	Class or Division	UN or ID No.	Packing Group	Subsidiary Risk								
Dangerous Goods Identification					Quantity and Type of packing	Packing Inst.	Authorization																					
Proper Shipping Name	Class or Division	UN or ID No.	Packing Group	Subsidiary Risk																								
<p>Additional Handling Information</p>																												
<p style="text-align: right; font-size: 0.8em;">24 hr. Emergency Contact Tel. No. _____</p>																												
<p>I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.</p>						<p>Name/Title of Signatory</p> <p>Place and Date</p> <p>Signature <small>(see warning above)</small></p>																						



## 327 Transportation Requirements

### 327.1 General

- a. *Air Transportation.* Mailable hazardous materials eligible for air transportation must be sent as Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service, as permitted. Mailpieces must be prepared to meet all requirements that apply to air transportation. Mailpieces must be properly packaged and labeled within DMM requirements and the operator variations of the air carrier. When required, a shipper's declaration for dangerous goods must be affixed to the outside of the mailpiece. Refer to the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* of the International Civil Aviation Organization (ICAO) for air carrier operator variations.

**Note:** Mailable hazardous materials that are prohibited from air transportation may not be sent as Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service.

- b. *Surface Transportation.* All mailable hazardous materials eligible to be sent as Standard Mail, USPS Retail Ground, Parcel Select, or Package Services must be prepared under the requirements that apply to surface transportation. A mailpiece containing mailable hazardous material with postage paid at Standard Mail, USPS Retail Ground, Parcel Select, or Package Services prices must not, under any circumstance, be transported on air transportation.

### 327.2 Air Transportation Prohibitions

All mailable hazardous materials sent as Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service, must meet the requirements for air transportation. The following types of hazardous materials are always prohibited on air transportation regardless of class of mail:

- a. Explosives.
- b. Anything susceptible to damage or that can become harmful because of changes in temperature or atmospheric pressures unless protected against the effects of such changes.
- c. Magnetic material that has a field strength sufficient to cause a compass deviation at a distance of 7 feet or more from any point on the outer packaging.
- d. Flammable materials (gases, liquids, and solids).
- e. Radioactive materials.
- f. Materials excluded from air shipment by DOT regulations (49 CFR 100-185) or of the applicable state (country) or air carrier operator variations.

## 328 **Postal Service Hazardous Materials Table**

Appendix [A](#), “[Hazardous Materials Table: Postal Service Mailability Guide](#),” contains a modified version of the DOT Hazardous Materials Table found in 49 CFR 172.101. Appendix [A](#) lists the hazardous materials from 49 CFR and identifies eligibility for mailing in the domestic mail via air and surface transportation. The table can be used to determine the mailability of a hazardous material if the proper shipping name of the material is known. When only the UN number is known, Appendix [B](#), “[Numerical Listing of Proper Shipping Names by Identification \(ID\) Number](#),” can be used to locate a proper shipping name for cross referencing back to Appendix [A](#).

The mailability information in Appendix [A](#) is based on the Department of Transportation requirements in this publication and past Postal Service mailability rulings. The table does not include specific information for international mail because almost all hazardous materials are prohibited in international mail. See Chapter [6](#) for the specific requirements that apply to international mail.

## 33 Hazard Classes

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### 331 **Nine Classes**

Every hazardous material is assigned to one of nine hazard classes as defined in 49 CFR 172.101 and 173. The nine hazard classes are as follows:

- a. Class 1: Explosives.
- b. Class 2: Gases.
- c. Class 3: Flammable and Combustible Liquids.
- d. Class 4: Flammable Solids.
- e. Class 5: Oxidizing Substances, Organic Peroxides.
- f. Class 6: Toxic Substances and Infectious Substances.
- g. Class 7: Radioactive Materials.
- h. Class 8: Corrosives.
- i. Class 9: Miscellaneous Hazardous Materials.

Some of the nine hazard classes are further separated into divisions based on their physical or chemical properties. For postal purposes, [Exhibit 331](#) summarizes the mailability of hazardous materials by hazard class.

## Exhibit 331

**DOT Hazard Classes and Postal Mailability**

Class	Name of Hazard Class (and Division when applicable)	Domestic Mail		International Mail and APO/FPO/DPO Mail
		Air Transportation	Surface Transportation	
<b>1</b>	<b>Explosives</b>			
	Division 1.1: Mass Explosive Hazard	Prohibited	Prohibited	Prohibited
	Division 1.2: Projection Hazard	Prohibited	Prohibited	Prohibited
	Division 1.3: Fire and/or Minor Blast/ Minor Projection Hazard	Prohibited	Prohibited	Prohibited
	Division 1.4: Minor Explosion Hazard	Prohibited	Only with prior HQ approval per 341.2c	Prohibited
	Division 1.5: Very Insensitive With Mass Explosion Hazard	Prohibited	Prohibited	Prohibited
	Division 1.6: Extremely Insensitive; No Mass Explosion Hazard	Prohibited	Prohibited	Prohibited
<b>2</b>	<b>Gases</b>			
	Division 2.1: Flammable Gases	Prohibited	Only ORM-D material per 342	Prohibited
	Division 2.2: Nonflammable Gases	Only Consumer Commodity material per 342	Only ORM-D material per 342	Prohibited
	Division 2.3: Toxic Gases	Prohibited	Prohibited	Prohibited
<b>3</b>	<b>Flammable and Combustible Liquids</b>			
	All Flammable Liquids	Prohibited	Only ORM-D material per 343	Prohibited
	All Combustible Liquids	Only Consumer Commodity material per 343	Only ORM-D material per 343	Prohibited
<b>4</b>	<b>Flammable Solids</b>			
	Division 4.1: Flammable Solids	Prohibited	Only ORM-D material per 344	Prohibited
	Division 4.2: Spontaneously Combustible	Prohibited	Only ORM-D material per 344	Prohibited
	Division 4.3: Dangerous When Wet	Prohibited	Only ORM-D material per 344	Prohibited
<b>5</b>	<b>Oxidizing Substances, Organic Peroxides</b>			
	Division 5.1: Oxidizing Substances	Only Mailable Limited Quantity material per 345	Only ORM-D material per 345	Prohibited
	Division 5.2: Organic Peroxides	Only Mailable Limited Quantity material per 345	Only ORM-D material per 345	Prohibited

## Exhibit 331

**DOT Hazard Classes and Postal Mailability**

Class	Name of Hazard Class (and Division when applicable)	Domestic Mail		International Mail and APO/FPO/DPO Mail
		Air Transportation	Surface Transportation	
<b>6</b>	<b>Toxic Substances and Infectious Substances</b>			
	Division 6.1: Toxic Substances	Consumer Commodity material per 346; other poisons as permitted in 346.231	ORM-D material per 346; other poisons as permitted in 346.231	Prohibited
	Division 6.2: Infectious Substances	Only as permitted in 346	Only as permitted in 346	Only First-Class Package International Service with Registered Mail service per 622
<b>7</b>	<b>Radioactive Material</b>	Prohibited	Only per 347	Only First-Class Package International Service with Registered Mail service per 622
<b>8</b>	<b>Corrosives (Liquids And Solids)</b>	Only Mailable Limited Quantity material per 348	Only ORM-D material per 348	Prohibited
<b>9</b>	<b>Miscellaneous Hazardous Materials</b> ID8000 materials, UN3077, UN3082, UN3334, or UN3335 materials	Consumer Commodity material and other materials as permitted in 349	ORM-D material and other materials as permitted in 349	Prohibited, except for magnetized materials per 349 and 622.4

**332 Limited Quantity**

A *limited quantity* of a hazardous material is the maximum amount of a specific hazardous material exempted from DOT labeling or packaging requirements in 49 CFR. To be eligible to be shipped under DOT's limited quantity provision, a hazardous material must be authorized an exemption in column 8A of the Hazardous Materials Table in 49 CFR 172.101. *Not every hazardous material is eligible to be shipped as a limited quantity.* Almost all limited quantity materials are nonmailable.

Under Postal Service standards, a material meeting the eligibility criteria for shipment as a limited quantity is mailable only if it can be further reclassified as a Consumer Commodity, Mailable Limited Quantity, or ORM-D (surface only) material (see [333](#)). Most hazardous material permitted to be shipped as a limited quantity does not qualify under the Consumer Commodity, Mailable Limited Quantity, or ORM-D categories. Except as specifically permitted in this publication, materials that cannot be reclassified under the Consumer Commodity, Mailable Limited Quantity, or ORM-D categories are not eligible for mailing.

**333 Consumer Commodity**

Consumer commodity is a hazardous material that is packaged and distributed in a quantity and form intended or suitable for retail sale and designed for consumption by individuals for their personal care or household uses. This term can also include certain drugs or medicines. Not all hazardous material permitted to be shipped as a limited quantity can qualify as a consumer commodity. The consumer commodity category does not apply to materials, intended for air transportation, in hazard Classes 4, 5, and 8, and portions of hazard Class 9. It is the responsibility of the mailer to know the correct DOT hazard class of a hazardous material before mailing (see [323](#)). The Consumer Commodity category is unique to the United States, and its use is prohibited with international shipments.

When assistance is needed to determine eligibility for mailing, the mailer may request a ruling from the PCSC as outlined in [215](#).

**334 Mailable Limited Quantity**

Mailable Limited Quantity is a hazardous material in hazard Classes 4, 5, 8, or portions of 9 that presents a limited hazard during transportation (specifically air transport), and is mailable in USPS air networks under certain conditions and in limited quantities. The Mailable Limited Quantity category is unique to the United States, and its use is prohibited with international shipments.

It is the responsibility of the mailer to know the correct DOT hazard class of a hazardous material before mailing (see [323](#)).

When assistance is needed to determine eligibility for mailing, the mailer may request a ruling from the PCSC as outlined in [215](#).

**335 ORM-D Materials**

*ORM-D (Other Regulated Material) material* is a limited quantity of a hazardous material that presents a limited hazard during transportation due to its form, quantity, and packaging. Not all hazardous materials permitted to be shipped as a limited quantity can qualify as an ORM-D material. Some of the hazardous materials that qualify under the limited quantity provision are permitted a further exemption in 49 CFR 172.101 (column 8A) to be reclassified as an ORM-D material under 49 CFR 173.144 and renamed with the proper shipping name "Consumer Commodity," which is defined in Appendix D. Effective January 1, 2021, the ORM-D category will be eliminated for materials intended for surface transportation. After this date, the mailability of materials previously fitting the description of ORM-D must be evaluated based on its eligibility under the applicable consumer commodity or mailable limited quantity categories.

The ORM-D category is only applicable for materials intended for surface transportation and is unique to the United States. Its use is prohibited in international mail.

It is the responsibility of the mailer to know the correct DOT hazard class of a hazardous material before mailing (see [323](#)).

When assistance is needed to determine eligibility for mailing, the mailer may request a ruling from the PCSC as outlined in [215](#).

## 336 **Small Quantity**

### 336.1 **Definition**

A *small quantity* is the maximum amount of a specific hazardous material that when transported by domestic surface transportation is not subject to any DOT requirements (e.g., packaging, marking, labeling, etc.) other than those in 49 CFR 173.4. Not every hazardous material is eligible to be shipped as a small quantity. Additionally, for Postal Service purposes, Class 1, Class 2, Division 6.2, and Class 7 materials are not permitted to be sent as a small quantity.

The small quantity provision is applicable to domestic mail only, and its use is prohibited for international shipments or APO/FPO/DPO mail. The small quantity provision can be used only for domestic surface transportation (highway or rail).

### 336.2 **Mailability**

Hazardous materials in Class 3, Division 4.1, Division 4.2 (Packing Groups II and III only), Division 4.3 (Packing Groups II and III only), Division 5.1, Division 5.2, Division 6.1 (Packing Group III only), Class 8, and Class 9 are eligible to be sent in domestic mail under the small quantity provision, via a USPS ground product (e.g. USPS Retail Ground, Parcel Select, Parcel Select Lightweight) only when each primary receptacle is limited to the following quantity, as applicable:

- a. 30 ml (1 oz.) or less for liquids.
- b. 30 g (1 oz.) or less for solids.

### 336.3 **Additional Restrictions**

Materials identified in Appendix A as prohibited under column E, *USPS Mailability*, are ineligible for mailing under the small quantity provision without regard to their hazard class, division, or packing group.

### 336.4 **Packaging and Marking**

Hazardous materials eligible to be shipped under the small quantity provision permitted in 49 CFR and [336.2](#) must be prepared following Packaging Instruction 10A in Appendix [C](#). Each mailpiece that qualifies to be sent under the small quantity provision must be clearly marked on the address side with the following words: “This package conforms to 49 CFR 173.4 for domestic highway or rail transport only.”

## 337 **Excepted Quantity**

### 337.1 **Definition**

An *excepted quantity* is a defined amount of a specific hazardous material, eligible for transport aboard passenger aircraft, which is not subject to any DOT requirements (e.g., packaging, marking, labeling, etc.) other than those in 49 CFR 173.4a. *Very few hazardous materials can be shipped under the*

*excepted quantity provision.* Additionally, for Postal Service purposes, Class 1, Class 2, Class 4, Division 6.2, and Class 7 materials are not permitted to be sent as an excepted quantity. The excepted quantity provision is applicable to domestic mail only, and its use is prohibited for international shipments or APO/FPO/DPO mail. The excepted quantity provision can be used in domestic air or surface transportation (highway, rail, or vessel).

### 337.2 **Mailability**

Only materials authorized for transport aboard passenger aircraft in accordance with 49 CFR 172.101 and appropriately classed within one of the following hazard classes or divisions may be mailed as an excepted quantity:

- a. Class 3, Packing Groups II and III;
- b. Division 5.1, Packing Groups II and III;
- c. Division 5.2 materials, only when contained in a chemical kit, first aid kit, or polyester resin kit;
- d. Division 6.1, Packing Group III only;
- e. Class 8, Packing Groups II and III only, except for UN2803, *Gallium* and UN2809, *Mercury*; and
- f. Class 9, except for UN1845, *Carbon dioxide, solid, or Dry ice*, and lithium batteries.

### 337.3 **Additional Restrictions**

Materials identified in Appendix A as prohibited under column E, *USPS Mailability*, are ineligible for mailing under the excepted quantity provision without regard to their hazard class, division, or packing group.

### 337.4 **Quantities**

The maximum quantity of hazardous materials in each inner (primary) packaging is limited to 30 g (1 ounce) or 30 ml (1 ounce) for solids or liquids. The maximum aggregate quantity of hazardous material in any mailpiece cannot exceed:

1. For Class 3 (Packing Group II), Class 9, and other Packing Group II materials, 500 g (1.1 lbs.) for solids or 500 ml (.1 gallon) for liquids.
2. For Packing Group III materials, 1 kg (2.2 lbs.) for solids or 1 liter (0.2 gallon) for liquids.
3. For Division 5.2 materials, 500 g (1.1 lbs.) for solids or 500 ml (.1 gallon) for liquids.

### 337.5 **Packaging and Marking**

Hazardous materials eligible to be shipped under the excepted quantity provision, as described in 49 CFR 173.4a and 337.2, must be prepared following Packaging Instruction 10B in Appendix C. Mailers entering mailpieces under the USPS excepted quantity provision must meet the requirements for packaging materials, and mailpieces must be in compliance with the package tests regulations in 49 CFR 173.4a. Each mailpiece must bear a DOT-approved excepted quantity marking (see 325.4) on the address side of the mailpiece, and if applicable, include documentation as provided in 49 CFR 173.4a.

## 338 Packaging Requirements for Hazardous Materials

### 338.1 DOT Packing Groups

Hazardous materials in Classes 3, 4, 5, Division 6.1, Class 8 and some Class 9 substances are assigned to a DOT packing group based on the degree of danger presented by the material during transport. The packing group assigned to a hazardous material is listed in column 5 of the Hazardous Material Table in 49 CFR 172.101 and in column (d) of Appendix A. Packaging Group designators are always written in Roman numerals, for example PG II. Packing Group I indicates a great danger, Packing Group II a medium danger, and Packing Group III a minor danger.

### 338.2 Postal Service Packaging Instructions

For mailing purposes, the packaging of a mailable hazardous material must follow the appropriate Packaging Instruction in Appendix C. The correct Packaging Instruction to use for a specific hazardous material can be determined using Appendix A.

Mailers may not package or combine hazardous materials assigned to different hazard classes within a single mailpiece unless permitted by Postal Service standard.

## 339 Nonmailable Materials Found in the Mailstream

When any mailpiece containing a nonmailable hazardous material is found in the mailstream, the procedures in POM 139.117 must be followed if the materials present an immediate threat to persons or property. When there is not immediate threat to persons or property, follow the procedures in POM 139.118.

# 34 Mailability by Hazard Class

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## 341 Explosives (Hazard Class 1)

### 341.1 Definition

An *explosive* is any substance or article, including a device, that is designed to function by explosion (an extremely rapid release of gas and heat) or that, by chemical reaction within itself, is able to function in a similar manner even if not designed to function by explosion, unless the substance or article is otherwise classed under the provisions in 49 CFR.

### 341.11 Class 1 Divisions

Hazard Class 1 has six divisions as follows:

- a. *Division 1.1* consists of explosives that have a mass explosion hazard. Examples are black powder, nitroglycerine (desensitized), dynamite, most types of torpedoes, and mercury fulminate.
- b. *Division 1.2* consists of explosives that have a projection hazard but not a mass explosion hazard. Examples are certain types of fireworks, some types of detonating fuses, and some types of ammunition.



- c. *Division 1.3* consists of explosives that have a fire hazard and either a minor blast or minor projection hazard or both, but not a mass explosion hazard. Examples are sodium picramate, some liquid and solid propellants, and some rocket motors.
- d. *Division 1.4* consists of explosives that present a minor blast hazard. Examples are common fireworks, toy caps, empty primed grenades, and some small arms ammunition.
- e. *Division 1.5* consists of very insensitive explosives that have a mass explosion hazard. Examples are type E blasting agents, some type B blasting agents, and very insensitive explosive substances.
- f. *Division 1.6* consists of extremely insensitive articles that do not have a mass explosion hazard.

#### 341.12 **Class 1 Compatibility Codes**

Each division in Class 1 is further assigned a compatibility group code. The compatibility code consists of one letter (A–H, J–L, N, or S) that is positioned after the division number (e.g., 1.1A, 1.2C, 1.4S) and refers to the transportation and storage controls necessary to prevent potential hazards. See 49 CFR 173.52 for a more detailed description of the Class 1 compatibility codes.

#### 341.2 **Mailability, Packaging, and Marking**

Explosives are generally prohibited from mailing under 18 U.S.C. 1716. The following conditions apply to the mailing of explosives:

- a. *International Mail*. All explosives are prohibited.
- b. *Domestic Mail via Air Transportation*. All explosives are prohibited.
- c. *Domestic Mail via Surface Transportation*. Generally, explosives are prohibited. The only exceptions are for Division 1.4S toy propellant devices and safety fuses that have been approved by the manager, Product Classification, USPS Headquarters, Washington, DC, prior to mailing as stated in [341](#). A shipping paper is required.

#### 341.21 **Nonmailable Explosives**

Nonmailable explosives found in the mailstream must be immediately reported in accordance with POM 139.117.

Nonmailable explosives include, but are not limited to, the following:

- a. *Common Fireworks*. Fireworks are classified as Division 1.1, 1.2, 1.3, or 1.4 explosives depending on the degree of hazard. Fireworks include roman candles, skyrockets, helicopter-type rockets, cylindrical and cone fountains, pyrotechnic wheels, illuminating torches, firecrackers, salutes, and combinations of items that are designed to produce any of the aforementioned types of effects. All types of fireworks are prohibited from mailing.
- b. *Fuses*. Fuses are classified as Division 1.3 or 1.4 explosives depending on the degree of hazard. All types of fuses (except safety fuses as permitted under [341.22](#)) are prohibited from mailing.

- c. *Small Arms Ammunition.* Ammunition is classified as a Division 1.1, 1.2, 1.3, or 1.4 explosive, depending on the degree of hazard. Ammunition that is regulated as a Class 1 explosive and designed to be fired from a pistol, revolver, rifle, or shotgun, as well as associated primers and blank cartridges (including those designed for tools) and propellant powder for use in any firearm, is prohibited from mailing.

#### 341.22 **Mailable Explosives**

The following specific types of explosives may be mailed only when the applicable conditions are met. Full responsibility rests with the mailer to comply with Bureau of Alcohol, Tobacco, Firearms and Explosives (BATFE) regulations before mailing.

- a. *Toy Propellant Devices.* The proper shipping name for a toy propellant device is “model rocket motor” or “igniters.” A toy propellant device assigned UN0454 or NA0323 and classed as a Division 1.4S explosive is eligible for mailing in domestic mail via surface transportation only when prior written permission has been obtained from the manager, Product Classification, USPS Headquarters, Washington, DC. A device approved for mailing is subject to the following conditions:
  - (1) Each device must be ignitable by electrical means only; contain no more than 30 g (1.07 oz) of propellant; and produce less than 80 newton seconds of total impulse with thrust duration not less than 0.050 second.
  - (2) Each device must be constructed so that all chemical ingredients are preloaded into a cylindrical paper or similarly constructed nonmetallic tube that does not fragment into sharp, hard pieces; must be designed so that it will not burst under normal conditions of use; must be incapable of spontaneous ignition under 500° F; and must not contain any type of explosive or pyrotechnic warhead other than a small, activation-charge, parachute-recovery system.
  - (3) Each mailpiece containing approved devices must be prepared for mailing following Packaging Instruction 1A in Appendix [C](#). A shipper’s declaration for dangerous goods is required.
- b. *Safety Fuses (UN0105).* Safety fuses consist of a core of black powder over-spun with yarns, waterproofing compounds, and/or tapes. Safety fuses assigned UN0105 as a Division 1.4S explosive may be mailed in domestic mail via surface transportation only when prior written approval has been granted by the manager, Product Classification, USPS Headquarters, Washington, DC. Mailable safety fuses must be prepared using Packaging Instruction 1B in Appendix [C](#). A shipper’s declaration for dangerous goods is required.

**Note:** “Safety Fuses” are not to be confused with “fusees.” Fusees are rail and highway distress signals that are nonmailable Class 4 flammable solids.

- c. *Shotgun Hulls, Empty Casings, Nonmetallic Shotgun Hulls, or Casings Without Primers.* These articles are not classified as explosives or hazardous materials under 49 CFR and, therefore, are mailable subject to the applicable mailing rules (see [227](#)).

## 342 Gases (Hazard Class 2)

### 342.1 Definition

Hazard Class 2 consists of three divisions:

- a. *Division 2.1, Flammable Gases.* A material that is a gas at 68° F (20° C) or less and 14.7 psi (101.3 kPa) of pressure. Flammable gases also include materials that have a boiling point of 68° F (20° C) or less at 14.7 psi (101.3 kPa) and that are ignitable at 14.7 psi (101.3 kPa) when in a mixture of 13 percent or less by volume with air or that have a flammable range at 14.7 psi (101.3 kPa) with air of at least 12 percent regardless of the lower limit. These conditions must be established in accordance with ASTM E681–85, *Standard Test Method for Concentration Limits of Flammability of Chemicals*, or other approved equivalent method. The flammability of aerosols must be determined using the tests specified in 49 CFR 173.306(i).
- b. *Division 2.2, Nonflammable, Nontoxic Gases.* A material that does not meet the definition of Division 2.1 or 2.3 and exerts in its packaging an absolute pressure of 40.6 psia (280 kPa) or greater at 68° F (20° C).
- c. *Division 2.3, Toxic Gases.* A material that is poisonous by inhalation and is a gas at 68° F (20° C) or less and a pressure of 14.7 psi (101.3 kPa), or a material that has a boiling point of 68° F (20° C) or less at 14.7 psi (101.3 kPa).

### 342.2 Mailability

The following conditions apply to the mailing of gases:

- a. *International Mail.* All gases are prohibited.
- b. *Domestic Mail via Air Transportation.* Flammable gases in Division 2.1 and toxic gases in Division 2.3 are prohibited. Nonflammable gases in Division 2.2 are generally permitted if the material can qualify as a consumer commodity material and meet the quantity limitations and packaging requirements in [342.3](#) and [342.4](#).
- c. *Domestic Mail via Surface Transportation.* Toxic gases in Division 2.3 are prohibited. Flammable gases in Division 2.1 and nonflammable gases in Division 2.2 are generally permitted if the material can qualify as an ORM-D material and meet the quantity limitations and packaging requirements in [342.3](#) and [342.4](#).

### 342.21 Nonmailable Gases

When any gas that is nonmailable is discovered in the mailstream, the procedures in POM 139.117 must be followed if the materials present an immediate threat to persons or property. The procedures in POM 139.118 are followed when there is no immediate threat to persons or property.

The following are some specific types of nonmailable gases:

- a. *Cigarette Lighters (NA1057)*. Generally, lighters charged with fuel and having an ignition system or any similar heating, lighting, or ignition device are a Class 3 flammable liquid and are nonmailable. However, if an approval number is obtained from DOT, consideration for mailing may be requested from the manager, PCSC under the provisions in [343.25](#).
- b. *Oxygen, Refrigerated Liquid*. Liquid oxygen (UN1073) is prohibited from mailing under any circumstances.
- c. *Fire Extinguishers*. Fire extinguishers (UN0275, UN0276, UN0323, or UN0381) that contain propellant explosives are prohibited from mailing.  
**Note:** See [342.22](#) for mailable types of fire extinguishers.
- d. *Toxic Gases*. All Division 2.3 toxic gases are prohibited from mailing.

### 342.22 Mailable Gases

The following are examples of mailable gases:

- a. *Butane*. Butane (UN1011) and Receptacles, small (UN2037) with butane or butane mixtures are Division 2.1 flammable gases. Butane gases that can qualify as ORM-D materials are acceptable only in domestic mail via surface transportation when properly prepared under [342.3](#) and Packaging Instruction 2A in Appendix [C](#).
- b. *Oxygen, Compressed*. Oxygen (UN1072) is a Division 2.2 nonflammable gas and is acceptable in domestic mail only if it can be reclassified as a consumer commodity material (for air or surface), or ORM-D (for surface only). The requirements in [342.3](#) and Packaging Instruction 2B in Appendix [C](#) must be followed.
- c. *Propane*. Propane is a Division 2.1 flammable gas and is acceptable in domestic mail via surface transportation only if it can be reclassified as an ORM-D material. The requirements in [342.3](#) and Packaging Instruction 2A in Appendix [C](#) must be followed. Propane is nonmailable in domestic mail via air transportation.
- d. *Fire Extinguishers*. Extinguishers that contain a Division 2.2 nonflammable compressed gas and are assigned UN1044 are mailable if they do not contain methyl bromide gas mixtures and the contents are held in DOT specification 2P or 2Q containers. Only one extinguisher per mailpiece is permitted, and the compressed gas contained within the fire extinguisher must be nonflammable, nonpoisonous, or noncorrosive as required under 49 CFR 173.309(a). The requirements in Packaging Instruction 2B in Appendix [C](#) must be followed.  
**Note:** Fire extinguishers assigned UN1774 are mailable as Class 8 corrosives subject to the limitations for corrosives in [348](#).
- e. *Empty Compressed Gas Containers*. Empty used containers of compressed gas are mailable subject to the same restrictions that applied when the container was filled (because residual amounts of the hazardous material might remain present). Empty, unused (i.e., new) containers are mailable without restriction.

- f. *Aerosol Paint Products*. Aerosol paint products that are defined as flammable compressed gases are acceptable in the domestic mail via surface transportation only if they can qualify as ORM-D materials and meet the quantity limitations and applicable packaging requirements in [342.3](#) and [342.4](#).
- g. *Other Mailable Gases*. Materials whose contents are under pressure, such as carbonated beverages, biological/medical products, cosmetics, foodstuffs and soaps, electronic tubes, and audible fire alarm systems (except for any that may contain poisonous gases or others that may be specifically excluded by 49 CFR 173.306), are acceptable in the domestic mail as follows:
  - (1) *Carbonated Beverages*. These items are not regulated as hazardous materials and are acceptable without restriction. Carbonated beverages must be properly packaged under DMM 601.1-7.
  - (2) *Biological Products or Medical Preparations*. A product or preparation in a nonrefillable metal primary receptacle charged with a nonflammable solution (containing a biological product or a medical preparation that heat could deteriorate) may be accepted for domestic surface mail only, provided the conditions in Packaging Instruction 2F in Appendix [C](#) are followed.
  - (3) *Foodstuffs and Soaps*. These materials are mailable provided the conditions in Packaging Instruction 2D in Appendix [C](#) are met.
  - (4) *Electronic Tubes*. These materials are mailable without restriction if the volume is 30 cubic inches or less and the tube is charged with gas to a pressure of 35 psig or less. Such tubes must be packed in a strong outer container and meet the general packaging requirements in DMM 601.1-7.
  - (5) *Audible Fire Alarm Systems*. An audible fire alarm system powered by a compressed gas is acceptable in the domestic mail via surface transportation provided the conditions in Packaging Instruction 2E in Appendix [C](#) are followed.

### 342.3 Packaging

Mailable compressed gases must be packaged to protect valves and fittings and to ensure integrity of the primary receptacle during transport. Containers must use recessed valves, screw thread caps, tap closures, or other means to prevent accidental discharge.

The following conditions apply:

- a. *Nonmetal Containers*. A mailable gas is acceptable in an other-than-metal primary receptacle if the water capacity is 4 fluid ounces (7.22 cubic inches) or less. Packaging Instruction 2A or 2B, as applicable, must be followed.
- b. *Metal Containers*. Mailable nonflammable and flammable compressed gases are acceptable in metal primary receptacles that have a water capacity up to 33.8 fluid ounces (1 liter or 61.0 cubic inches). The liquid

content of the material and the gas must not completely fill the primary receptacle at 130° F (55° C). Additionally, the following apply:

- (1) A DOT 2P container must be used if the internal pressure is from 140 psig to 160 psig at 130° F (55° C).
  - (2) A DOT 2Q container must be used if the pressure is from 161 psig to 180 psig at 130° F (55° C).
  - (3) Packaging Instruction 2A or 2B, as applicable, must be followed.
- c. A container with an internal pressure over 180 psig at 130° F (55° C) is prohibited from mailing.
  - d. *Flammable Gases*. A mailable flammable compressed gas is restricted to 4 fluid ounces in a nonmetal primary receptacle or 33.8 fluid ounces (1 liter) in a metal primary receptacle per mailpiece Packaging Instruction 2A must be followed.
  - e. *Nonflammable Gases*. A mailable nonflammable gas is permitted in individual 4 fluid ounce nonmetal primary receptacles or 33.8 fluid ounce (1 liter) metal primary receptacles. Multiple primary receptacles may be securely packed within a single, strong outer packaging. Each mailpiece must not exceed a total weight of 25 pounds. Packaging Instruction 2B must be followed.

#### 342.4 **Marking and Documentation**

Parcels containing mailable gases must be marked as follows:

- a. For air transportation, parcels must bear the DOT square-on-point marking. The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. The symbol “Y” must be black, located in the center of the square-on-point, and clearly visible. Mailpieces must also be marked with the proper shipping name “Consumer Commodity” and identification number “ID8000.” Each mailpiece must also bear an approved DOT Class 9 hazardous material warning label (see [Exhibit 325.2b](#)). A properly completed shipper’s declaration for dangerous goods prepared in triplicate must be affixed to the outside of the mailpiece.
- b. For surface transportation, parcels must be plainly and durably marked on the address side with “Surface Only” or “Surface Mail Only” and “ORM-D,” immediately following or below the proper shipping name (e.g., Consumer Commodity). Optionally, mailpieces may be marked with an approved DOT limited quantity square-on-point marking (see [Exhibit 325.3](#)). The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. Surface shipments containing qualifying ORM-D material bearing the square-on-point limited quantity marking are not required to be marked with the shipping name and identification number. A shipper’s declaration for dangerous goods is not required for mailable gases sent via surface transportation.

- c. Markings must be durable, legible, and readily visible, and must be applied on at least one side or one end of the outer packaging. The border forming the square-on-point must be at least 2 mm in width, and the minimum dimension of each side must be 100 mm, unless the package size requires a reduced size marking of no less than 50 mm on each side.

#### 342.5 **Mailability Rulings**

In addition to the information required in [215.2](#) and [324](#), requests for mailability rulings on gases and products containing compressed gases need to include the following information:

- a. Documentation indicating whether or not the contents are a flammable mixture when dispersed.
- b. The internal pressure within the primary receptacle at 70° F (21° C) and 130° F (55° C).
- c. Documentation as to whether or not the liquid contents completely fill the container at 70° F (21° C) and 130° F (55° C).
- d. The bursting strength of the primary receptacle.
- e. The capacity of the primary receptacle and the number of primary receptacles proposed to be packed within a single mailpiece.
- f. The design methods intended to prevent accidental discharge of the contents.

### 343 **Flammable and Combustible Liquids (Hazard Class 3)**

#### 343.1 **Definition**

The terms used in the standards that apply to Hazard Class 3 are defined as follows:

- a. *Flammable Liquid* means a liquid that has a flashpoint of not more than 140° F (60° C), or any material in a liquid phase that has a flashpoint at or above 100° F (38° C).
- b. *Combustible Liquid* means any liquid that does not meet the definition of any other hazard class and has a flashpoint above 140° F (60° C) and below 200° F (93° C). A flammable liquid with a flashpoint at or above 100° F (38° C) that does not meet the definition of any other hazard class may be reclassified as a combustible liquid per 49 CFR 173.120(b).

**Note:** A liquid with a flashpoint above 200° F (93° C) is not regulated as a hazardous material and may be mailed subject to the general packaging requirements in DMM 601.1-7, provided it possesses no characteristics of another hazard class.



## 343.2 Mailability and Packaging

### 343.21 Requirements for Flammable Liquids

The following conditions apply:

- a. *International Mail*. Flammable liquid is prohibited.
- b. *Domestic Mail via Air Transportation*. Flammable liquid is prohibited.
- c. *Domestic Mail via Surface Transportation*. Flammable liquid with a flashpoint of 20° F (-7° C) or below is prohibited. Other flammable liquid is permitted if the material can qualify as an ORM-D material and meet the criteria in [Exhibit 343.21](#). A mailable flammable liquid must be prepared according to Packaging Instruction 3A in Appendix [C](#), as applicable.

Exhibit 343.21

#### Flammable Liquids

Flashpoint	Mailability
20° F (-7° C) or below	Not acceptable for mailing.
Above 20° F (-7° C) but not more than 73° F (23° C)	Acceptable (with restrictions) for domestic mail via surface transportation only. Follow requirements for Packaging Instruction 3A in Appendix <a href="#">C</a> , as applicable.
Above 73° F (23° C) but less than 100° F (38° C)	Acceptable (with restrictions) for domestic mail via surface transportation only. Follow requirements for Packaging Instruction 3A in Appendix <a href="#">C</a> , as applicable.
100° F (38° C) and up to 140° F (60° C)	Acceptable (with restrictions) for domestic mail via surface transportation only. Follow requirements for Packaging Instruction 3A or 3B in Appendix <a href="#">C</a> , as applicable. <b>Note:</b> If the flashpoint is between 100° F (38° C) and 140° F (60° C), the liquid may be eligible to be reclassified as a combustible liquid.
Over 140° F (60° C)	See combustible liquids in <a href="#">343.22</a> . Follow requirements for Packaging Instruction 3A in Appendix <a href="#">C</a> .

### 343.22 Requirements for Combustible Liquids

The following conditions apply:

- a. *International Mail*. Combustible liquid is prohibited.
- b. *Domestic Mail via Air Transportation*. Combustible liquid is permitted if the material can qualify as a consumer commodity material and meet the criteria in [Exhibit 343.22](#). Packaging Instruction 3B in Appendix [C](#) must be followed, as applicable.
- c. *Domestic Mail via Surface Transportation*. Combustible liquid is permitted if the material can qualify as a consumer commodity material (for air or surface), or ORM-D (for surface only), and meet the criteria in [Exhibit 343.22](#). Packaging Instruction 3B in Appendix [C](#) must be followed, as applicable.



## Exhibit 343.22

**Combustible Liquids**

Flashpoint	Mailability
Below 100° F (38° C)	Not a combustible liquid. See flammable liquids in <a href="#">343.21</a> .
100° F (38° C) but not more than 140° F (60° C)	A flammable liquid that may be eligible to be reclassified as a combustible liquid under 49 CFR 173.120(b). See <a href="#">343.1</a> . Acceptable (with restrictions) in domestic mail via surface transportation only. Follow requirements for Packaging Instruction 3B in Appendix <a href="#">C</a> , as applicable.
Above 140° F (60° C) but not more than 200° F (93° C)	Acceptable (with restrictions) for domestic mail via air transportation or surface transportation. Follow requirements for Packaging Instruction 3B in Appendix <a href="#">C</a> , as applicable.
Above 200° F (93° C)	The material is not regulated as a hazardous material. Such nonregulated materials must be properly and securely packaged to prevent leakage under the general packaging requirements in DMM 601.3.4.

**343.23 Nonmailable Flammable and Combustible Liquids**

When flammable liquids and combustible liquids that are nonmailable under [343.21](#) or [343.22](#) are found in the mailstream, the procedures in POM 139.117 must be followed if the materials present an immediate threat to persons or property.

The following materials are nonmailable:

- All flammable liquids having a flashpoint of 20° F (-7° C) or below are prohibited from mailing.
- Gasoline* (UN1203) is a flammable liquid that normally has a flashpoint of -50° F. Gasoline is nonmailable under any circumstances.

**343.24 Mailable Flammable and Combustible Liquids**

The following are mailable:

- Paint* or a related item (UN1263) classified as a flammable or combustible liquid is generally acceptable for mailing provided the material can qualify as a consumer commodity material, or ORM-D (for surface only), and is sent within the quantity limitations and packaging requirements stated in [343.21](#) or [343.22](#), as applicable. Also see [343.26](#). Mailpieces must be prepared following Packaging Instruction 3A or 3B in Appendix [C](#), as applicable.
- Latex Paint* or a similar water-based paint product that is not flammable or combustible is not regulated as a hazardous material, and therefore is not restricted. Also see [343.26](#). Mailpieces must be properly packaged under DMM 601.1-7.
- Canned Heat (Sterno)* is a flammable liquid that normally has a flashpoint from 40° F (4° C) to 80° F (27° C). It is permitted if the material can qualify as a consumer commodity material or ORM-D (for

surface only), and is sent within the quantity limitations and packaging requirements stated in [343.21](#). Mailpieces must be prepared following Packaging Instruction 3A in Appendix [C](#).

- d. *Cigarette Lighter Fluid* is a flammable liquid that normally has a flashpoint between 20° F (-7° C) and 55° F (13° C). It is permitted only in domestic mail via surface transportation provided the fluid can qualify as a consumer commodity material or ORM-D, and is sent within the quantity limitations and packaging requirements stated in [343.21](#). Mailpieces must be prepared following Packaging Instruction 3A in Appendix [C](#).
- e. *Diesel Fuel* (NA1993) is a combustible liquid that normally has a flashpoint between 110° F (43° C) and 190° F (88° C). It is acceptable for mailing provided the fluid can qualify as a consumer commodity material or ORM-D (for surface only), and the liquid is sent within the conditions in [343.22](#). Mailpieces must be prepared following Packaging Instruction 3B in Appendix [C](#).
- f. *Fuel Oil* (NA1993) is a flammable liquid that normally has a flashpoint below 100° F (38° C). The specific flashpoint must be accurately identified by the mailer before a mailability determination can be made. Fuel oil is acceptable if the material can qualify as a consumer commodity material or ORM-D, and is sent within the quantity limitations and packaging requirements stated in [343.21](#) or [343.22](#), as applicable. Mailpieces must be prepared following Packaging Instruction 3A in Appendix [C](#).
- g. *Adhesives and Cements* (UN1133) that are classified as flammable or combustible liquids are mailable only if the material can qualify as a consumer commodity material or ORM-D (for surface only), and the applicable conditions in [343.21](#) or [343.22](#) are met. Mailpieces must be prepared following Packaging Instruction 3A or 3B in Appendix [C](#), as applicable.

**Note:** Some adhesives and cements are extremely toxic and may be classified as Division 6.1 toxic substances. Division 6.1 materials are mailable only as permitted in [346.21](#).

- h. *Cleaning Agents and Solvents* that are classified as flammable liquids are mailable only if the material can qualify as a consumer commodity material or ORM-D (for surface only), and the applicable conditions in [343.21](#) can be met. Mailpieces must be prepared following Packaging Instruction 3A in Appendix [C](#).

**Note:** Some cleaning agents and solvents are extremely toxic or corrosive and may be classified as either a Division 6.1 toxic substance or a Class 8 corrosive. Division 6.1 toxic materials and Class 8 corrosives are permitted only within the conditions of [346.21](#) and [348.2](#) respectively.

- i. *Model Fuel* (for glow-plug engines) is a flammable liquid that has a flashpoint ranging from 65° F to 75° F. It is acceptable if the material can qualify as a consumer commodity material or ORM-D (for surface

only), is sent within the quantity limitations, and meets the packaging requirements stated in [343.21](#). Mailpieces must be prepared following Packaging Instruction 3A in Appendix [C](#).

- j. *Waxes and Polishes* have a wide range of flashpoints. The flashpoint and toxicity must be accurately identified by the mailer before mailability can be determined. Any waxes or polishes that are flammable or combustible liquids are permitted to be mailed, provided the material can qualify as a consumer commodity material or ORM-D (for surface only) and the applicable conditions in [343.21](#) and [343.22](#) are met. Mailpieces must be prepared following Packaging Instruction 3A or 3B in Appendix [C](#), as applicable.

#### 343.25 **Cigarette Lighters**

A cigarette lighter equipped with an ignition element and containing fuel is classified as a Class 3 flammable liquid. A cigarette lighter containing a flammable gas is classed as a Division 2.1 flammable gas. A cigarette lighter that contains either flammable liquid or flammable gas is permitted only in the domestic mail via surface transportation with prior written approval and within these conditions:

- a. The design of the lighter and its packaging are approved by the DOT Associate Administrator for Hazardous Materials Safety, per 49 CFR 173.21(i) and 173.308, and a DOT Approval Number (LAA\*\*\*\*) is issued.
- b. The prospective mailer of the lighter submits to the PCSC manager a written request for authorization to mail the lighter, accompanied by a legible photocopy of the official DOT notice conveying the approval described in [343.25a](#), along with a specimen of the actual lighter, the packaging materials in which each lighter is to be mailed, and the number of mailpieces and mailing location; the mailer receives from the PCSC manager a letter approving the requested authorization for mailing.
- c. The packaging must be designed to protect the lighter's sparking mechanism from accidental ignition caused by friction or external pressure during transport. Packaging Instruction 3C in Appendix [C](#) must be followed.
- d. When presented for mailing, the address side of the mailpiece must prominently display the proper shipping name "Lighter(s)" or "Lighter(s) for Cigarette" followed by the DOT Approval Number (LAA\*\*\*\*) and the marking "Surface Only" or "Surface Mail Only," all preparation and packaging requirements in the PCSC manager's approval letter must be met. A legible photocopy of the PCSC manager's approval must accompany the mailing at the time of deposit.
- e. A shipper's declaration for dangerous goods is not required.

**343.26 Paints, Paint-Related Materials, and Inks**

The following definitions apply:

- a. *Paint* (UN1263) is the proper shipping name and description for paint, lacquer, enamel, stain, shellac, varnish, liquid aluminum, liquid bronze, liquid gold, liquid wood filler, and liquid lacquer base. *Paint-related material* (UN1263) is the proper shipping name and description for a paint-thinning, paint-drying, paint-reducing, or paint-removing compound. See [343.24a](#) and [343.24b](#) for mailability.
- b. *Inks* are defined as colored liquids used for writing, drawing, etc., and liquids and pastes used in printing. Printing inks usually are mixtures of finely divided pigments, such as carbon black suspended in a drying oil. Inks having hazardous characteristics are generally classified as combustible or flammable liquids and are mailable, provided they can qualify as a consumer commodity material or ORM-D (for surface only), and meet the applicable requirements in [343.21](#) or [343.22](#). Mailpieces must be prepared using Packaging Instruction 3A or 3B in Appendix [C](#), as applicable. In addition, the following conditions apply:
  - (1) Regardless of the size or type of container, the primary receptacle(s) containing inks must be cushioned with sufficient absorbent material to take up all liquid contents in case of leakage.
  - (2) The primary receptacle(s) and the absorbent cushioning material must be packed within a sealed, leakproof outer packaging.
  - (3) Inks that are flammable or combustible liquids must meet the quantity restrictions, packaging requirements, and air or surface transportation conditions that apply under [343.2](#).

**Note:** Inks that do not possess any hazardous characteristics are not regulated as hazardous materials and are mailable if properly prepared under the standards for packaging liquids in [451.3](#) and DMM 601.3.4.

**343.27 Authorization to Mail Ethanol-Based Flammable Liquids or Solids**

Flammable liquids or solids that contain ethyl alcohol are eligible to be mailed via domestic air transportation only with prior written authorization.

Mailers must submit a letter of request to the manager, Product Classification (see 214 for address). The request must include a list of each specific product to be mailed under the authorization, an MSDS for each product, the office of mailing, and expected frequency and quantity of mailings.

Approvals are initially provided for the duration of one year. Subsequent approvals are performance-based and will be extended in one- to three-year increments.

If approved, the mailer must:

- a. Present a copy of their authorization letter from the manager, Product Classification (to be kept on file at the office of mailing) at the time of their first mailing at any given Postal Service facility. Mailings not supported by an authorization letter will be refused.

- b. For content containing *not more than 70%* ethyl alcohol by volume, tender only parcels weighing 25 pounds or less. Each *non-glass* primary receptacle must not exceed 16 ounces of flammable liquid or 1 pound of solids. Each *glass* primary receptacle must not exceed 8 ounces of flammable liquid or 1/2 pound of solids. Total volume of flammable material per mailpiece must not exceed 96 ounces for flammable liquids or 16 pounds for flammable solids.
- c. For content containing *more than 70%* ethyl alcohol by volume, tender only parcels weighing 16 pounds or less. Each primary package receptacle must not exceed 8 ounces of flammable liquid or 1/2 pound of solids. Total volume of flammable material per mailpiece must not exceed 48 ounces for flammable liquids or 8 pounds for flammable solids.
- d. Enter parcels using Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service.
- e. Label each parcel on the address side with the mailer's company name and return address.
- f. Label each parcel on the address side with the marking "Contains Air-Eligible Ethyl Alcohol — Authorization Number #," using at least 14-point type.
- g. Ensure that the addressee of each parcel is notified that the addressee is not authorized to re-mail the contents of the parcel via air transportation. The mailer must include the following written notice:  
"Flammable liquids or solids contained in these packages may be mailed only by consumers (the addressee) via surface transportation in accordance with USPS Publication 52, section 343. Full responsibility rests with the mailer to comply with all postal and nonpostal statutes and regulations regarding mail. Information regarding postal statutes, regulations, and mailing requirements is available from your local Postmaster or district manager, Business Mail Entry, and at the Postal Service's mailing standards website, Postal Explorer, at [pe.usps.com](http://pe.usps.com)."
- h. Comply with the warning and labeling requirements set forth in 21 CFR 700, 701.3, and 740.1 when mailing each parcel.
- i. Comply with all quantity, packaging, and marking requirements in Packaging Instruction 3D in Appendix C.

### 343.3 Marking and Documentation

Parcels containing mailable flammable or combustible liquids must be marked as follows:

- a. For air transportation, parcels containing mailable Class 3 materials must bear the DOT square-on-point marking. The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. The symbol "Y" must be black, located in the center of the square-on-point, and clearly visible. Mailpieces must also be marked with the proper shipping name "Consumer Commodity" and identification number "ID8000." Each mailpiece must also bear an

approved DOT Class 9 hazardous material warning label (see [Exhibit 325.2b](#)). A properly completed shipper's declaration for dangerous goods prepared in triplicate must be affixed to the outside of the mailpiece.

- b. For surface transportation, parcels containing mailable Class 3 materials must be plainly and durably marked on the address side with "Surface Only" or "Surface Mail Only" and "ORM-D," immediately following or below the proper shipping name (e.g., Consumer Commodity). Optionally, mailpieces may be marked with an approved DOT limited quantity square-on-point marking (see [Exhibit 325.2a](#)). The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. Surface shipments containing qualifying ORM-D material bearing the square-on-point limited quantity marking are not required to be marked with the shipping name and identification number. A shipper's declaration for dangerous goods is not required for mailable Class 3 materials sent via surface transportation.
- c. Markings must be durable, legible, and readily visible, and must be applied on at least one side or one end of the outer packaging. The border forming the square-on-point must be at least 2 mm in width, and the minimum dimension of each side must be 100 mm, unless the package size requires a reduced size marking of no less than 50 mm on each side.
- d. Cigarette lighters must be marked as specified in [343.25](#).

## 344 Flammable Solids (Hazard Class 4)

### 344.1 Definition

Hazard Class 4 consists of three divisions:

- a. *Division 4.1, Flammable Solids.* Any solid material other than one classed as an explosive that, under conditions normally incident to transportation, is likely to cause fires through friction or retained heat from manufacturing or processing, or that can be ignited readily and, when ignited, burns so vigorously and persistently as to create a serious transportation hazard.
- b. *Division 4.2, Spontaneously Combustible.* A liquid or solid pyrophoric material that even in small amounts and without an external ignition source can ignite within 5 minutes after coming in contact with air, or a self-heating material that when in contact with air and without an energy supply is liable to self heat.
- c. *Division 4.3, Dangerous When Wet.* A material that, by contact with water, is likely to become spontaneously flammable or to give off flammable or toxic gas at a rate greater than 1 liter per kilogram of the material per hour.

Examples of flammable solids include certain metallic hydrides, metallic sodium and potassium, oily fabrics, processed metals, matches, and nitrocellulose products.

**344.2 Mailability**

The following conditions apply:

- a. *International Mail*. All flammable solids are prohibited.
- b. *Domestic Mail via Air Transportation*. All flammable solids are prohibited.
- c. *Domestic Mail via Surface Transportation*. A flammable solid that can qualify as an ORM-D material is permitted.

**344.21 Nonmailable Flammable Solids**

When flammable solids that are nonmailable under [344](#) are found in the mailstream, the procedures in POM 139.117 must be followed if the materials present an immediate threat to persons or property.

Strike-anywhere matches are nonmailable in international mail and domestic mail. Safety matches (book, card, or strike-on-box) are nonmailable in international and domestic mail via air transportation.

**344.22 Mailable Flammable Solids**

The following are mailable:

- a. Flammable solids that are eligible to be reclassified as mailable limited quantity or ORM-D materials are permitted in the domestic mail via surface transportation.
- b. Safety matches (book, card, or strike-on-box) are permitted only in domestic mail via surface transportation.

**344.3 Packaging, Marking, and Documentation**

The following conditions apply:

- a. *Mailable Flammable Solids*. The conditions in Packaging Instruction 4A in Appendix [C](#) must be followed. Mailpieces containing mailable Class 4 materials must be plainly and durably marked on the address side with “ORM-D” immediately following or below the proper shipping name (i.e., Consumer Commodity). Optionally, mailpieces may be marked with an approved DOT limited quantity square-on-point marking (see [Exhibit 325.2a](#)). The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. Surface shipments containing qualifying ORM-D material bearing the square-on-point limited quantity marking are not required to be marked with the shipping name and identification number. A shipper’s declaration for dangerous goods is not required for mailable Class 4 materials sent via surface transportation. When DOT square-on-point markings are used, markings must be durable, legible, and readily visible, and must be applied on at least one side or one end of the outer packaging. The border forming the square-on-point must be at least 2 mm in width, and the minimum dimension of each side must be 100 mm, unless the package size requires a reduced size marking of no less than 50 mm on each side.



- b. *Safety Matches.* The conditions in Packaging Instruction 4B in Appendix [C](#) must be followed. Mailpieces must be plainly and durable marked on the address side with “Surface Only” or “Surface Mail Only” and, as applicable, “Book Matches,” “Strike-on-Card Matches,” or “Card Matches.” A shipper’s declaration for dangerous goods is not required.

## 345 **Oxidizing Substances, Organic Peroxides (Hazard Class 5)**

### 345.1 **Definition**

Hazard Class 5 consists of two divisions:

- a. *Division 5.1, Oxidizing Substances.* A material that may, generally by yielding oxygen, cause or enhance the combustion of other materials.
- b. *Division 5.2, Organic Peroxides.* Any organic compound that contains oxygen in the bivalent structure and that may be considered a derivative of hydrogen peroxide, where one or more of the hydrogen atoms have been replaced by organic radicals.

Examples of Class 5 materials (not all of which are mailable) include ferric nitrate, hydrogen peroxide, lead perchlorate, lithium nitrate, organic peroxide solids or liquids, and some swimming-pool chemicals.

### 345.2 **Mailability**

The following conditions apply:

- a. *International Mail.* All oxidizing substances and organic peroxides are prohibited.
- b. *Domestic Mail via Air or Surface Transportation.* An oxidizing substance or an organic peroxide that can qualify as mailable limited quantity material or ORM-D material (for surface only) is permitted.

### 345.21 **Nonmailable Class 5 Materials**

When nonmailable Class 5 materials are found in the mailstream, the procedures in POM 139.117 must be followed if the materials present an immediate threat to persons or property. The procedures in POM 139.118 are followed when there is no immediate threat to persons or property.

The following Class 5 materials are nonmailable:

- a. *Division 5.1, Oxidizing Substances.*
  - (1) Chlorine dioxide hydrate, frozen.
  - (2) Hydrogen peroxide solution (more than 20 percent).
  - (3) Perchloric acid.
  - (4) Potassium peroxide.
  - (5) Sodium chlorite.
  - (6) Tetranitromethane.
  - (7) Zinc ammonium nitrate.



- b. *Division 5.2, Organic Peroxides.* Organic peroxides are nonmailable unless they can qualify as mailable limited quantity materials or ORM-D materials (for surface only).

#### 345.22 **Mailable Class 5 Materials**

The following Class 5 materials are mailable:

- a. *Mailable limited quantity or ORM-D Material.* A division 5.1 or 5.2 material that can be reclassified as mailable limited quantity material or ORM-D material (for surface only) is mailable within the requirements in [345.2b](#).
- b. *Hydrogen Peroxide.* There are no restrictions on Division 5.1 hydrogen peroxide solutions up to 8 percent. Solutions of hydrogen peroxide exceeding 8 percent and up to 20 percent are permitted if they can qualify as mailable limited quantity material or ORM-D material (for surface only).

#### 345.3 **Packaging, Marking, and Documentation**

Parcels containing mailable oxidizing substances or organic peroxides must be marked as follows:

- a. All mailable Division 5.1 and 5.2 materials must be prepared following the conditions for Packaging Instruction 5A in Appendix [C](#).
- b. For air transportation, parcels containing mailable Division 5.1 or 5.2 materials must bear the DOT square-on-point marking. The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. The symbol “Y” must be black, located in the center of the square-on-point, and clearly visible. Mailpieces must also be marked with the proper shipping name and identification number. Each mailpiece must also bear an approved DOT Class 5.1 or 5.2 hazardous material warning label (see [Exhibit 325.2b](#)). A properly completed shipper’s declaration for dangerous goods prepared in triplicate must be affixed to the outside of the mailpiece.
- c. For surface transportation, parcels containing mailable Division 5.1 or 5.2 materials must be plainly and durably marked on the address side with “Surface Only” or “Surface Mail Only” and “ORM-D,” immediately following or below the proper shipping name (e.g., mailable limited quantity). Optionally, mailpieces may be marked with an approved DOT limited quantity square-on-point marking (see [Exhibit 325.2a](#)). The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. Surface shipments containing qualifying ORM-D material bearing the square-on-point limited quantity marking are not required to be marked with the shipping name and identification number. A shipper’s declaration for dangerous goods is not required for mailable Division 5.1 or 5.2 materials sent via surface transportation.

- d. When DOT square-on-point markings are used, markings must be durable, legible, and readily visible, and must be applied on at least one side or one end of the outer packaging. The border forming the square-on-point must be at least 2 mm in width, and the minimum dimension of each side must be 100 mm, unless the package size requires a reduced size marking of no less than 50 mm on each side.

## 346 **Toxic Substances and Infectious Substances (Hazard Class 6)**

### 346.1 **Definitions**

Hazard Class 6 consists of two divisions:

- a. Division 6.1 includes toxic substances, poisons, and irritating material. Examples of Division 6.1 materials (not all of which are mailable) include bromobenzyl cyanide, methyl bromide, motor fuel anti-knock mixtures, and tear gas.
- b. Division 6.2 includes infectious substances. Examples of Division 6.2 materials include infectious substances, biological products, regulated medical waste, sharps medical waste, used health care products, and forensic materials.

#### 346.11 **Division 6.1**

The following terms are used in the standards for Division 6.1 materials:

- a. *Toxic Substance* is a poisonous material, other than a gas, that is known to be so toxic to humans as to cause death, injury, or harm to human health if swallowed, inhaled, or brought into contact with skin.
- b. *Oral Toxicity* refers to a liquid with a lethal dose (LD<sub>50</sub>) for acute oral toxicity of not more than 500 mg/kg or a solid with an LD<sub>50</sub> for acute oral toxicity of not more than 200 mg/kg that, when administered by mouth, is likely to cause death within 14 days in half of the test animals.
- c. *Dermal Toxicity* refers to a material with an LD<sub>50</sub> for acute dermal toxicity of not more than 1,000 mg/kg that, when administered by continuous contact with bare skin, is likely to cause death within 14 days in half of the test animals.
- d. *Inhalation Toxicity* applies to a dust or mist with a lethal concentration (LC<sub>50</sub>) for acute inhalation toxicity of not more than 10 mg/L, or a saturated vapor concentration in air at 68° F (20° C) of more than one-fifth of the LC<sub>50</sub> for acute toxicity on inhalation of vapors and with an LC<sub>50</sub> for acute inhalation toxicity of vapors of not more than 5,000 ml/m<sup>3</sup> that, when administered by continuous inhalation for 1 hour, is likely to cause death within 14 days in half of the test animals.
- e. *Irritating Material* is any liquid or solid substance (such as tear gas) that gives off intense fumes and causes extreme but reversible localized irritant effects on the eyes, nose, and throat, temporarily impairing a person's ability to function.

**346.12 Division 6.2, Infectious Substances**

Division 6.2 materials include infectious substances, biological products, regulated medical waste, sharps medical waste, used health care products, and forensic materials. Division 6.2 materials are not permitted in international mail or domestic mail, except when they are intended for medical or veterinary use, research, or laboratory certification related to the public health; and only when such materials are properly prepared for mailing to withstand shocks, pressure changes, and other conditions related to ordinary handling in transit. Unless otherwise noted, all mailable Division 6.2 materials must meet the mail preparation requirements for air transportation. The following terms are used in the standards for Division 6.2 materials:

- a. *Infectious substance* means a material known or reasonably expected to contain a pathogen. A pathogen is a microorganism that can cause disease in humans or animals. Examples of pathogens include bacteria, viruses, fungi, and other infectious agents. An infectious substance must be assigned to one of the following two packaging categories:
  - (1) *Category A*: An infectious substance transported in a form capable of causing permanent disability or life-threatening or fatal disease in otherwise healthy humans or animals when exposure occurs. Category A infectious substances are nonmailable. A Category A infectious substance is assigned the identification number UN2814 or UN2900, based on the known medical history or symptoms of the source patient or animal, endemic local conditions, or professional judgment concerning the individual circumstances of the source human or animal.
  - (2) *Category B*: An infectious substance that does not meet the criteria for inclusion in Category A. A mailpiece known or suspected to contain a Category B infectious substance must bear the proper shipping name “Biological Substance, Category B” on the address side of the mailpiece and must be assigned to and marked with identification number UN3373 (as shown in [Exhibit 346.12a2](#) 7or, for regulated medical waste and sharps medical waste, identification number UN3291.

Exhibit 346.12a2

**Mailpiece Symbol and Marking for Mailpieces Containing Biological Substance, Category B Substances**

- b. *Biological product* means a virus, therapeutic serum, toxin, antitoxin, vaccine, blood, blood component or derivative, allergenic product, or analogous product or arsphenamine or derivative of arsphenamine (or any other trivalent arsenic compound) intended to prevent, treat, or cure a disease or condition of humans or animals. A biological product includes a material subject to regulation under 42 U.S.C. 262 or 21 U.S.C. 151–159. Unless otherwise excepted, mark these mailpieces with identification number UN3373 (as shown in [Exhibit 346.12a2](#)) when they contain a biological product known or reasonably expected to contain a pathogen that meets the definition of a Category B infectious substance.
- c. *Cultures* are infectious substances that result from a process by which pathogens are intentionally propagated. This definition does not include a human or animal patient specimen as defined in [346.12e](#).
- d. *Exempt human or animal specimen* means a human or animal sample (including, but not limited to, secret, excreta, blood and its components, tissue and tissue fluids, and body parts) transported for routine testing not related to the diagnosis of an infectious disease. Typically, exempt human specimens are specimens for which there is a low probability that the sample is infectious, such as specimens for drug or alcohol testing; cholesterol testing; blood glucose level testing; prostate-specific antigens (PSA) testing; testing to monitor heart, kidney, or liver function; pregnancy testing; and testing for diagnosis of noninfectious diseases such as cancer biopsies. Exempt human or animal specimens are not subject to regulation as hazardous materials but must be packaged according to [346.326](#).
- e. *Patient specimen* means material that is collected directly from humans or animals and transported for purposes such as diagnosis and research. Patient specimens include excreta, secret, blood and its components, tissue and tissue swabs, body parts, and specimens in transport media (such as transwabs, culture media, and blood culture bottles).
- f. *Regulated medical waste*, for USPS purposes, means a soft waste material (other than a sharp) derived from the medical treatment, diagnosis, immunization, or biomedical research of a human or animal. Soft medical waste includes items such as used rubber gloves, swabs, gauze, tongue depressors, and other similar material. Mark these mailpieces with identification number UN3291.
- g. *Sharps medical waste*, for USPS purposes, means a medical waste object that is capable of cutting or penetrating skin or packaging material and that is contaminated with a pathogen or may become contaminated with a pathogen derived from the medical treatment, diagnosis, immunization, or biomedical research of a human or animal. Sharps include used medical waste such as needles, syringes, scalpels, broken glass, culture slides, culture dishes, broken capillary tubes, broken rigid plastic, and exposed ends of dental wires. Mark these mailpieces with identification number UN3291.

- h. *Toxin* means a Division 6.1 material from a plant, animal, or bacterial source. A toxin containing an infectious substance or a toxin contained in an infectious substance must be classed as Division 6.2, described as an infectious substance, and assigned to UN2814, UN2900, or UN3373, as appropriate. A toxin known or suspected to contain a Category A infectious substance is nonmailable. A toxin known or suspected to contain a Category B infectious substance must be marked UN3373 and packaged under [346.321](#). Toxins from plant, animal, or bacterial sources that do not contain an infectious substance and are not contained in an infectious substance may be considered for classification as Division 6.1 toxic substances under [346](#).
- i. *Used health care product* means a medical, diagnostic, or research device or piece of equipment, or a personal care product used by consumers, medical professionals, or pharmaceutical providers, that does not meet the definition of a diagnostic specimen, biological product, regulated medical waste, or sharps waste, is contaminated with potentially infectious body fluids or materials, and is not decontaminated or disinfected to remove or mitigate the infectious hazard prior to transport.

346.2 **Mailability**

346.21 **General**

346.211 **Division 6.1, Toxic Substances**

The following conditions apply:

- a. *International Mail*. Division 6.1 toxic substances or poisons and irritating materials are prohibited.
- b. *Domestic Mail via Air or Surface Transportation*. A Division 6.1 toxic substance or poison that can qualify as a consumer commodity material or ORM-D (for surface only) is permitted when packaged under the applicable requirements in Appendix [C](#) (Packaging Instruction 6A). Certain other poisonous materials are permitted to be mailed only between authorized parties under specific conditions as specified in [346.231b](#).

346.212 **Division 6.2, Infectious Substances**

- a. *International Mail*. Category A infectious substances are nonmailable. A material that is classified as a Category B infectious substance and that meets the definition in [346.12a2](#) is permitted in international mail only when sent by First-Class Package International Service or the Priority Mail International Small Flat Rate Priced Boxes using Registered Mail service; when intended for medical or veterinary use, research, or laboratory certification related to the public health; and when materials are properly prepared for mailing. The mailer must receive written approval from the USPS manager, Product Classification (see [214](#) for address). See Chapter [6](#) and IMM 135 for specific requirements.
- b. *Domestic Mail*. Infectious substances are permitted only when they are intended for medical or veterinary use, research, or laboratory certification related to public health, and when properly prepared for

mailing to withstand shocks, pressure changes, and other conditions incident to ordinary handling in transit. The following substances are mailable subject to the corresponding packaging requirements:

- (1) Category B infectious substance via First-Class Mail, Priority Mail, or Priority Mail Express service.
- (2) Sharps and other mailable regulated medical waste via First-Class Mail or Priority Mail service using merchandise return service.
- (3) Used health care products via First-Class Mail, Priority Mail, or Priority Mail Express service.
- (4) Forensic materials via First-Class Mail, Priority Mail, or Priority Mail Express service.
- (5) Nonregulated materials via First-Class Mail, Priority Mail, Priority Mail Express, or Package Services.
- (6) Exempt human or animal specimens via First-Class Mail, Priority Mail, Priority Mail Express, or Package Services.

#### 346.22 **Nonmailable Class 6 Materials**

When hazardous materials that are nonmailable under [346.2](#) are found in the mailstream, the procedures in POM 139.117 must be followed if the materials present an immediate threat to persons or property. The procedures in POM 139.118 are followed when there is no immediate threat to persons or property.

#### 346.221 **Division 6.1, Toxic Substances**

The following Division 6.1 materials are nonmailable:

- a. *Toxic Substances.* Any toxic material having an LD<sub>50</sub> for oral toxicity of 50 mg/kg or less is nonmailable, except when sent between authorized parties under the conditions permitted in [346.231b](#). Examples of nonmailable toxic materials include, but are not limited to, the following:
  - (1) Aniline oil (UN1547).
  - (2) Bromoacetone (UN1569).
  - (3) 3-Chloro-4-methylphenyl isocyanate (UN2236).
  - (4) Chloropicrin (UN1580).
  - (5) Cyanogen bromide (UN1889).
  - (6) Hexaethyl tetraphosphate, liquid or solid (UN1611).
  - (7) Hydrocyanic acid aqueous solutions (UN1613).
  - (8) Methyl bromide (UN1062).
  - (9) Methyl parathion, liquid (NA3018).
  - (10) Motor fuel antiknock mixtures (UN1649).
  - (11) Organic phosphate compound (NA1955).
  - (12) Parathion (NA1967).
  - (13) Phenylcarbylamine chloride (UN1672).
  - (14) Tetraethyl dithiopyrophosphate (UN1704).

- (15) Tetraethyl lead, liquid (NA1649).
- (16) Tetraethyl pyrophosphate, liquid (NA3018).
- (17) Thiophosgene (UN2474).

b. *Irritating Materials.* All irritating materials are nonmailable. Examples include the following:

- (1) Bromobenzyl cyanide (UN1694).
- (2) Chloroacetophenone (UN1697).
- (3) Diphenylamine chloroarsine (UN1698).
- (4) Diphenylchloroarsine (UN1699).
- (5) Tear gas (UN1700, NA1693, and UN1693), except for those containing oleoresin capsicum.

#### 346.222 **Division 6.2, Infectious Substances**

The following Division 6.2 materials are nonmailable:

- a. Blood collected for the purpose of blood transfusion known or suspected to contain a Category A infectious substance.
- b. A biological product, culture, stock, or other biological specimen known or suspected to contain a Category A infectious substance. Mailpieces that exceed 4 liters (1 gallon) for liquids or 4 kg. (8.8 pounds) for solids are nonmailable.
- c. A toxin known or suspected to contain a Category A infectious substance.
- d. Sharps medical waste and regulated medical waste that contain a Category A infectious substance.
- e. Used healthcare products that contain a Category A infectious substance.

#### 346.23 **Mailable Class 6 Materials**

In addition to the mailable types of Division 6.1 and 6.2 materials cited in [346.21](#), the following materials are permitted to be mailed only within the conditions noted.

#### 346.231 **Division 6.1, Toxic Substances**

- a. *Consumer Commodity or ORM-D Materials.* A Division 6.1 toxic substance that can qualify as a consumer commodity material or ORM-D material (for surface only) is mailable when all applicable conditions are met.
- b. *Toxic Substances with LD<sub>50</sub> Oral Toxicity of 50 mg/kg or Less.* A Division 6.1 toxic substance having an LD<sub>50</sub> for oral toxicity of greater than 5 mg/kg but less than or equal to 50 mg/kg is mailable only when sent between the following authorized parties and under the specified conditions:
  - (1) Toxic substances for scientific use (not outwardly or of their own force dangerous or injurious to life, health, or property) may be sent only between manufacturers, dealers, bona fide research or experimental scientific laboratories, and employees of federal, state, or local governments who have official use for such

poisons and are designated by the agency head to receive or send such poisons. For domestic air transportation, a shipping paper is required.

- (2) Poisonous drugs and medicines may be sent only from the manufacturer or dealer of the drugs and medicines to licensed physicians, surgeons, dentists, pharmacists, druggists, cosmetologists, barbers, and veterinarians (18 U.S.C. 1716). In limited circumstances, when the mailing is initiated by a drug manufacturer or the manufacturer's registered agent, customers may return prescription drugs to the manufacturer or its registered agent as indicated in [453.36](#).

346.232 **Other Nonregulated Toxic Materials**

Liquids and solids such as pesticides, insecticides, and herbicides that are not regulated as hazardous materials under 49 CFR are mailable subject to Postal Service quantity restrictions that are based on the toxicity of the material.

- a. *Liquids*. Restrictions are as follows, subject to the general packaging requirements in DMM 601.1-7:
  - (1) A nonregulated toxic liquid having an LD<sub>50</sub> of 50 to 500 mg/kg is permitted up to 16 fluid ounces per mailpiece.
  - (2) A nonregulated toxic liquid having an LD<sub>50</sub> of 500 to 2,500 mg/kg is permitted up to 32 fluid ounces in a glass primary receptacle, or up to 1 gallon in a non-glass primary receptacle. Only one primary receptacle is permitted per mailpiece.
  - (3) A nonregulated toxic liquid having an LD<sub>50</sub> of 2,500 to 5,000 mg/kg is permitted up to 1 gallon in a glass primary receptacle, or up to 2 gallons in a non-glass primary receptacle. Only one primary receptacle is permitted per mailpiece.
  - (4) A nonregulated toxic liquid having an LD<sub>50</sub> of greater than 5,000 mg/kg is permitted with no quantity restriction.
  - (5) External markings specifying the contents and shipping papers are not required for nonregulated toxic liquids.
- b. *Solids*. Restrictions are as follows:
  - (1) A nonregulated toxic solid for which an LD<sub>50</sub> rate equivalent to liquids can be established is mailable under the same quantity restrictions for Division 6.1 toxic substances specified in Packaging Instruction 6A in Appendix [C](#).
  - (2) Packaging requirements for a nonregulated toxic solid are the same as those for Division 6.1 toxic substance (see Packaging Instruction 6A in Appendix [C](#)), except that up to 5 pounds may be contained in a single primary receptacle. Only one primary receptacle is permitted per mailpiece.
  - (3) External markings specifying the contents and shipping papers are not required for nonregulated toxic solids.



**346.233 Division 6.2, Infectious Substances**

Infectious substances, biological products, cultures and stocks, exempt human or animal specimens, patient specimens, regulated medical waste, sharps medical waste, toxins, and used health care products are permitted to be mailed within specific quantity limits and packaging conditions specified in [346.3](#).

**346.234 Nonregulated Materials**

The following materials are not subject to regulation as Division 6.2 hazardous materials and are mailable when the packaging requirements specified in Packaging Instruction 6G in Appendix [C](#) are met:

- a. A biological product, including an experimental or investigational product or component of a product, subject to federal approval, permit, review, or licensing requirements, such as those required by the Food and Drug Administration of the U.S. Department of Health and Human Services or the U.S. Department of Agriculture. A biological product known or suspected to contain a Category B infectious substance must be marked UN3373 (as shown in [Exhibit 346.12a2](#)) and packaged under [346.321](#). A biological product known or suspected to contain a Category A infectious substance is nonmailable.
- b. Blood collected for the purpose of blood transfusion or the preparation of blood products; blood products; plasma; plasma derivatives; blood components; tissues or organs intended for use in transplant operations; and human cell, tissue, and cellular and tissue-based products regulated under the Public Health Service Act (42 U.S.C. 264-272) or the Food, Drug, and Cosmetic Act (21 U.S.C. 332 et seq.).
- c. Blood, blood plasma, and blood components collected for the purpose of blood transfusion or the preparation of blood products and sent for testing as part of the collection process, except when the person collecting the blood has reason to believe it contains a Category B infectious substance, in which case the test sample must be shipped as a Category B infectious substance. Materials known or suspected to contain a Category A infectious substance are nonmailable.
- d. Dried blood spots, collected by applying a drop of blood to absorbent material, or dried specimens for fecal occult blood detection. (These materials are not classified as exempt human or animal specimens.)
- e. Forensic material containing a biological material, such as tissue, body fluid, excreta, or secretions, not expected to contain a Category A or Category B infectious substance and transported on behalf of a federal, state, local, or Indian tribal government agency. A forensic material known or suspected to contain a Category B infectious substance must be shipped as a Category B infectious substance. A forensic material known or suspected to contain a Category A infectious substance is nonmailable.

**346.3 Packaging, Marking, Labeling, and Documentation****346.31 Division 6.1, Toxic Substances**

Mailable toxic substances must be prepared as follows:

- a. *Consumer Commodity or ORM-D Materials.* In all cases, the applicable requirements specified in [346.211](#) and [346.231](#) must be met. Packaging Instruction 6A in Appendix [C](#) must be followed.
- b. Toxic Substances with LD<sub>50</sub> Oral Toxicity of 50 mg/kg or Less. The applicable requirements specified in [346.211](#) and [346.231](#) must be met. Packaging Instruction 6B in Appendix [C](#) must be followed. Each mailpiece must be plainly and durably marked on the address side with the proper shipping name and UN number of the material (unless exempted by [453.4](#)).
- c. *For air transportation*, parcels containing mailable Class 6 materials must bear the DOT square-on-point marking. The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. The symbol “Y” must be black, located in the center of the square-on-point, and clearly visible. Mailpieces must also be marked with the proper shipping name “Consumer Commodity” and identification number “ID8000.” Each mailpiece must also bear an approved DOT Class 9 hazardous material warning label (see [Exhibit 325.2b](#)). A properly completed shipper’s declaration for dangerous goods prepared in triplicate must be affixed to the outside of the mailpiece.
- d. *For surface transportation*, parcels must be plainly and durably marked on the address side with “Surface Only” or “Surface Mail Only” and “ORM-D,” immediately following or below the proper shipping name (e.g., Consumer Commodity). Optionally, mailpieces may be marked with an approved DOT limited quantity square-on-point marking (see [Exhibit 325.2a](#)). The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. Surface shipments containing qualifying ORM-D material bearing the square-on-point limited quantity marking are not required to be marked with the shipping name and identification number. Each mailpiece must bear a shipping paper.
- e. When the DOT square-on-point markings are used, markings must be durable, legible, and readily visible, and must be applied on at least one side or one end of the outer packaging. The border forming the square-on-point must be at least 2 mm in width, and the minimum dimension of each side must be 100 mm, unless the package size requires a reduced size marking of no less than 50 mm on each side.

**346.32 Division 6.2, Infectious Substances**

The proper packaging, marking, labeling, and documentation for mailable Division 6.2 materials are described in the following sections.

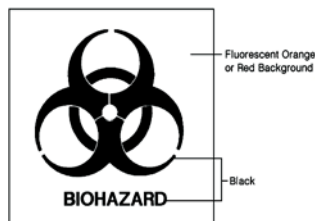
**346.321 Category B Infectious Substances**

**Note:** See Packaging Instruction 6C in Appendix [C](#).

Regulated medical waste and sharps medical waste known or suspected to contain a Category A infectious substance is not mailable. A material that is classified as a Category B infectious substance and that meets the definition in [346.12a2](#) must be triple-packaged, meeting the packaging requirements in 49 CFR 173.199, and sent with First-Class Mail, Priority Mail, or Priority Mail Express service. Each primary receptacle containing a liquid must be leakproof and surrounded by absorbent material sufficient to protect the primary receptacle and absorb the total amount of liquid should the primary receptacle leak or break. Each primary receptacle containing a solid must be siftproof. Secondary containers for liquids must be leakproof. Secondary containers for solids must be siftproof. The primary and secondary packaging must be enclosed in a rigid outer shipping container. A single primary receptacle must not contain more than 1 liter (34 ounces) of a liquid specimen or 4 kg (8.8 pounds) of a solid specimen. Two or more primary receptacles whose combined volume does not exceed 4 liters (1 gallon) for liquids or 4 kg (8.8 pounds) for solids may be enclosed in a single secondary container. In addition:

- a. The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#).
- b. The primary receptacle or secondary packaging must be capable of withstanding, without leakage, an internal pressure producing a pressure differential of not less than 95 kPa (0.95 bar, 14 psi) in the range of -40°F to 130°F (-40°C to 55°C).
- c. All mailpieces sent under 346.321 must be marked on the address side with the shipping name “Biological Substance, Category B” and “UN3373” (as shown in [Exhibit 346.12a2](#)) and as outlined in 49 CFR 173.199(a)(5). Regulated medical waste and sharps medical waste as defined in [346.12f](#) and [346.12g](#) must be marked UN3291. See [346.322](#).
- d. Orientation arrows are not required on these mailpieces but may be used.
- e. The outer packaging must show the name and telephone number of a person who is knowledgeable about the material shipped and has comprehensive emergency response and incident mitigation information, or of someone who has immediate access to the person with such knowledge and information.

Exhibit 346.321

**International Biohazard Symbol**

**346.322 Sharps Waste and Other Mailable Regulated Medical Waste**

**Note:** See Packaging Instructions 6D in Appendix [C](#).

Regulated medical waste and sharps medical waste known or suspected to contain a Category A infectious substance is not mailable. Regulated medical waste and sharps medical waste as defined in [346.12f](#) and [346.12g](#) and containing materials classified as Category B infectious substances must be marked UN3291 and are permitted for mailing only using merchandise return service (see DMM 503.0) with First-Class Mail or Priority Mail service, subject to the following requirements:

- a. *Authorization.* Each vendor of a complete regulated medical waste or sharps waste mailing container system (including all component parts required to safely mail such waste to a storage or disposal facility) must obtain authorization from the Postal Service prior to mailing. Before applying for authorization, each type of mailing container system must be tested and certified under the standards in [346.322d](#) by an independent testing facility. The vendor in whose name the authorization is being sought must submit a written request to the manager of Product Classification at Postal Service Headquarters (see 214 for address). The request for authorization must contain the following:
  - (1) An irrevocable \$50,000 surety bond or letter of credit as proof of sufficient financial responsibility to cover disposal costs if the vendor ceases doing business before all its waste container systems are disposed of or to cover cleanup costs if spills occur while the containers are in Postal Service possession. The surety bond or letter of credit must be issued in the name of the vendor seeking the authorization and must name the Postal Service as the beneficiary or obligee. Vendors that market their containers to distributors are responsible for disposal and cleanup costs attributed to those containers. In addition, vendors must provide a list of distributors, including firm names, addresses, and telephone numbers, to the Postal Service on request.
  - (2) Address of the headquarters or general business office of the vendor seeking the authorization.
  - (3) Name, address, and phone number of each storage and disposal site.
  - (4) List of all types of mailing container systems to be covered by the request, a complete sample of each mailing container system, and proof of package testing certifications performed by the independent testing facility that subjected the packaging materials to the testing requirements in [346.322d](#).
  - (5) Copy of the proposed waste shipping paper to be used with each mailing container system.
  - (6) 24-hour toll-free telephone number for emergencies.
  - (7) List of the types of waste to be mailed for disposal in each mailing container system.

- (8) Copy of the merchandise return service label to be used with each mailing container system and verification that the merchandise return service permit fee and accounting fee have been paid.
  - (9) Address of the Post Office or postage-due unit where the containers are delivered.
- b. *Packaging.* Regulated medical waste and sharps medical waste that also meet the definition of a Category A infectious substance are nonmailable, except for medical professional packages identified in [346.322b7](#), which may not weigh more than 35 pounds. A medical waste material treated by steam sterilization, chemical disinfections, or other appropriate method so that it no longer contains a Category A or Category B infectious substance must be packaged under [346.325](#). The packaging for regulated medical waste and sharps medical waste containing or suspected of containing a Category B infectious substance is subject to the following standards:
- (1) Regulated medical waste and sharps medical waste meeting the definitions in [346.12f](#) and [346.12g](#) must be collected in a rigid, securely sealed, and leakproof primary receptacle. For sharps waste, the primary receptacle must also be puncture-resistant and may not have a maximum capacity that exceeds 3 gallons in volume. For regulated medical waste, the primary receptacle may not have a maximum capacity that exceeds 5 gallons in volume. Each primary receptacle may not contain more than 50 ml (1.66 ounces) of residual waste liquid. Each primary receptacle must display the international biohazard symbol shown in [Exhibit 346.321](#). Package testing results must show that the contents did not penetrate through the primary container during package testing and that the primary container can maintain its integrity at temperatures as low as 0°F and as high as 120°F (−18°C to 49°C).
  - (2) The primary receptacle must be packaged within a watertight secondary container or containment system. The secondary container may consist of more than one component. If one of the components is a plastic bag, the bag must be at least 4 mil in thickness and must be used in conjunction with a fiberboard box. A plastic bag by itself does not meet the requirement for a secondary container. Several primary receptacles may be enclosed in a secondary container. The primary receptacle(s) must fit securely and snugly within the secondary container to prevent breakage during ordinary processing.
  - (3) The secondary container must be enclosed in a strong outer shipping container constructed of 200-pound grade corrugated fiberboard. The joints and flaps of the outer shipping container must be securely taped, glued, or stitched to maintain the integrity of the container. When tape or glue is used to secure an outer shipping container, the material must be water-resistant. Fiberboard boxes with interlock bottom flaps (i.e., easy-fold) are not permitted as outer shipping containers unless reinforced with

water-resistant tape. The secondary container must fit securely and snugly within the outer shipping container to prevent breakage during ordinary processing.

- (4) There must be enough material within the primary receptacle to absorb and retain three times the total liquid allowed within the primary receptacle (150 ml per primary receptacle) in case of leakage.
- (5) Each mailpiece must not weigh more than 25 pounds. Medical Professional Packages, as identified in [346.322b7](#), may not weigh more than 35 pounds. The container's maximum allowable weight must be printed on the outside of the box and on the assembly and closure instructions included with each mailpiece. The mailpiece must be tested at the maximum allowable weight identified by the vendor.
- (6) In each mailing container system, the authorized vendor must include a step-by-step instruction sheet that clearly details the proper sequence and method of container system assembly prior to mailing to prevent package failure during transport due to improper assembly. The instruction sheet must also include a customer service telephone number, or provide specific information on where such a telephone number is located elsewhere on the container system, for third-party end users to contact if they have assembly questions or find a component part is missing.
- (7) Medical professional packages are intended for use by small medical offices, but they are not limited to use by medical offices only. One primary receptacle larger than 5 gallons in volume may be used for mailing pre-primary sharps receptacles (sharps receptacles normally used in doctors' offices) and other regulated medical waste under the following conditions:
  - (a) The mailpiece must meet all the requirements in [346.32](#) except for the primary receptacle capacity limits of [346.322b1](#).
  - (b) Only rigid, securely closed, puncture- and leak-resistant pre-primary sharps receptacles that meet or exceed Occupational Safety and Health Administration (OSHA) standards as identified in 29 CFR 1910.1030 may be placed inside the primary receptacle. Each pre-primary sharps container may contain no more than 50 ml (1.66 ounces) of residual waste liquid. Several pre-primary sharps receptacles may be enclosed in the single primary receptacle.
  - (c) Multiple tie-closed plastic bags of regulated medical waste may be placed inside the single primary receptacle.
  - (d) The primary receptacle must be lined with a plastic bag at least 4 mil in thickness and must include sufficient absorbent material within the liner to absorb all residual liquid in the primary receptacle.

- (e) The mailpiece must not weigh more than 35 pounds.
- c. *Mailpiece Labeling, Marking, and Documentation.* Regulated medical waste and sharps waste must meet the following requirements:
  - (1) Each primary receptacle and outer shipping container must bear a label, which cannot be detached intact, showing the following:
    - (a) The company name of the vendor to which the mailing authorization is issued.
    - (b) The USPS Authorization Number.
    - (c) The container ID number (or unique model number) signifying that the packaging material is certified and that the vendor obtained the authorization required by [346.322a](#).

Place the label on the top or on a side of the container.

- (2) The primary receptacle(s) and the outer shipping container must bear the international biohazard symbol in black with either a fluorescent orange or fluorescent red background as shown in [Exhibit 346.321](#). The symbol on the outer shipping container must be at least 3 inches high and 4 inches wide.
- (3) Each mailpiece must have a four-part waste shipping paper. The shipping paper must be affixed to the outside of the mailpiece in an envelope or similar carrier that can be easily opened and resealed to allow review of the document. The shipping paper must comply with all applicable requirements imposed by the laws of the state from which the container system is mailed. At a minimum, the information in [Exhibit 346.322c3](#) must be on the shipping paper.
- (4) The outer shipping container must bear a properly prepared merchandise return service label (see DMM 503.0). The merchandise return service permit must be held in the same name as that of the authorized medical waste vendor.
- (5) The outer shipping container must be marked on two opposite side walls with the package orientation marking in 49 CFR 173.312 to identify the proper upright position of the mailpiece during handling.
- (6) Mailpieces containing regulated medical waste or sharps waste must be marked on the address side with the correct UN number and proper shipping name (e.g., “Regulated Medical Waste, UN3291” or “Regulated Medical Waste-Sharps, UN3291”).
- (7) Vendors must retrieve mailpieces held at processing facilities due to improper labeling, such as no return address, or due to improperly completed shipping papers.
- (8) For medical professional packages, the additional marking “Medical Professional Packaging” must be clearly printed in lettering at least 2 inches high on the address side of the outer shipping container.

Exhibit 346.322c3

**Shipping Paper for Regulated Medical Waste and Sharps Waste Containers**

<b>Section</b>	<b>Information Required</b>
1. Generator (Mailer)	<ul style="list-style-type: none"> <li>a. Name.</li> <li>b. Complete address (not a Post Office box).</li> <li>c. Telephone number.</li> <li>d. Description of contents of mailing container. "Regulated Medical Waste" or "Regulated Medical Waste-Sharps" is required as appropriate.</li> <li>e. Date container was mailed.</li> <li>f. State permit number of approved facility in which contents are to be disposed of.</li> </ul>
2. Destination Facility (Disposal Site)	Complete address (not a Post Office box).
3. Generator's (Mailer's) Certification	<p>The following certification statement must be printed on the shipping paper:</p> <p>"I certify that this container has been approved for the mailing of [insert either "regulated medical waste" or "sharps waste," as appropriate], has been prepared for mailing in accordance with the directions for that purpose, and does not contain excess liquid or nonmailable material in violation of the applicable Postal Service regulations. I AM AWARE THAT FULL RESPONSIBILITY RESTS WITH THE GENERATOR (MAILER) FOR ANY VIOLATION OF 18 U.S.C. 1716 WHICH MAY RESULT FROM PLACING IMPROPERLY PACKAGED ITEMS IN THE MAIL. I also certify that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and in proper condition for carriage by air according to the national governmental regulations."</p> <p>This statement must be followed by printed or typewritten name of generator (mailer), signature of generator, and date signed.</p>
4. Destination Facility (Storage or Disposal Site)	<p>The following certification statement of receipt, treatment, and disposal must be printed on the shipping paper:</p> <p>"I certify that the contents of this container have been received, treated, and disposed of in accordance with all local, state, and federal regulations."</p> <p>This statement must be followed by printed or typewritten name of an authorized recipient at destination facility, signature of authorized recipient, and date signed.</p>
5. Transporter Intermediate Handler Other Than the Postal Service (If Different From Destination Facility)	<ul style="list-style-type: none"> <li>a. Name.</li> <li>b. Complete address (not a Post Office box).</li> <li>c. Printed or typewritten name of transporter or intermediate handler.</li> <li>d. Signature of transporter or intermediate handler and date signed.</li> </ul>
6. Serialized Waste Shipping Papers	Each waste shipping paper or mail disposal service shipping record must be serialized using a unique numbering system for identification purposes.
7. Comment Area	Each shipping paper must contain an area designated for entering comments or noting discrepancies.
8. Completion and Distribution of Waste Shipping Paper	<p>Each shipping paper must contain instructions for properly completing the four-part form. Copies of the form must be distributed as follows:</p> <ul style="list-style-type: none"> <li>a. One copy must be kept by generator (mailer).</li> <li>b. One copy must be kept by transporter or intermediate handler for 90 days.</li> <li>c. One copy must be kept by destination facility for 90 days.</li> <li>d. One copy must be mailed to generator by destination facility.</li> </ul>
9. Emergency Telephone Number	<p>Each shipping paper must bear the following statement with appropriate information:</p> <p>"IN CASE OF EMERGENCY, OR THE DISCOVERY OF DAMAGE OR LEAKAGE, CALL 1-800-###-####."</p>



- d. *Package Testing.* Vendors must submit to the manager, Product Classification (see [214](#) for address) package testing results from an independent testing facility for each package for which the vendor is requesting authorization. In addition, vendors must submit package testing results from an independent testing facility when the design of a container system changes or every 24 months, whichever occurs first. The test results must show that, if every mailpiece prepared for mailing were subject to the environmental and test conditions in 49 CFR and the additional test requirements in [346.322e](#), no contents would be released into the environment and the effectiveness of the packaging would not be significantly reduced. The Postal Service may require proof of accreditation or other documentation to support the credentials of an independent testing facility.

Packages tested for approval as medical professional packages may not be tested using pre-primary containers that are currently or have previously been approved as Postal Service primary containers. In addition, test reports must identify by brand name the pre-primary containers that were used during testing.

- e. *Testing Criteria.* Each mailpiece must pass each of the tests described below:
- (1) *Leakproof Test.* The test must be conducted on one primary receptacle with the lid in place, without the secondary and outer packaging. The test duration must be at least 5 minutes and must be conducted at 20 kPa (3 psi). The pass/fail criterion is as follows: no air leakage from anywhere other than the closure of the primary receptacle. Air leakage at the closure is not considered a failure if the primary receptacle passes the test for watertightness as determined by placing 50 ml of deionized water into the primary receptacle, securing the closure, and then turning the container on its side and observing for any evidence of leakage. Any evidence of water leaking from the primary receptacle is a failure.
  - (2) *Stacking Test.* One mailpiece must withstand the test in 49 CFR 178.606. The dynamic compression test must be conducted on the empty, unsealed mailpiece assembled for mailing, without the primary receptacle(s). The test mass is the vendor-identified maximum weight, not to exceed 25 pounds, as indicated on the outer shipping container and on the assembly and closing instructions. A compensation factor of 1.5 must be used to compute the test load, based on the vendor-identified weight. The pass/fail criteria are as follows: no buckling of the sidewalls sufficient to cause damage to the contents in the primary receptacle, and in no case does the deflection exceed 1 inch.
  - (3) *Vibration Test.* One mailpiece filled with sharps or other regulated medical waste must withstand the test in 49 CFR 178.608. The test mailpiece is filled with sharps or other regulated medical waste to the vendor-identified maximum weight, not to exceed 25 pounds, as indicated on the outer shipping container and on

the assembly and closing instructions. The test sample is prepared as it would be for mailing. The pass/fail criterion is as follows: no rupture, cracking, or splitting of any primary receptacle.

- (4) *Wet Drop Test.* Five mailpieces filled with sharps or other regulated medical waste must withstand the test in 49 CFR 178.609e. Each test mailpiece is filled with sharps or other regulated medical waste to the vendor-identified maximum weight, not to exceed 25 pounds, as indicated on the outer shipping container and on the assembly and closing instructions included with each mailpiece. Each mailpiece is prepared as it would be for mailing and subjected to a water spray as described in the test. A separate, untested mailpiece is used for each drop orientation: top, longest side, shortest side, and corner. The pass/fail criteria are as follows: no rupture, cracking, or splitting of any primary receptacle, and no contents may penetrate into or through the body or lid of any primary receptacle.
- (5) *Cold Drop Test.* Five mailpieces filled with sharps or other regulated medical waste must withstand the test in 49 CFR 178.609f. Each test mailpiece is filled with sharps or other regulated medical waste to the vendor-identified maximum weight, not to exceed 25 pounds, as indicated on the outer shipping container and on the assembly and closing instructions included with each mailpiece. Each mailpiece is prepared as it would be for mailing and chilled as described in the test. A separate, untested mailpiece is used for each drop orientation: top, longest side, shortest side, and corner. The pass/fail criteria are as follows: no rupture, cracking, or splitting of any primary receptacle, and no contents may penetrate into or through the body or lid of any primary receptacle.
- (6) *Impact Test.* One mailpiece filled with sharps or other regulated medical waste must withstand the test in 49 CFR 178.609h. The test mailpiece is filled with sharps or other regulated medical waste to the vendor-identified maximum weight, not to exceed 25 pounds, as indicated on the outer shipping container and on the assembly and closing instructions included with each mailpiece. The mailpiece is prepared as it would be for mailing. The pass/fail criteria are as follows: no rupture, cracking, or splitting of any primary receptacle, and no contents may penetrate into or through the body or lid of any primary receptacle.
- (7) *Puncture-Resistant Test.* Package testing results must show that, during all of the previous tests, the contents did not penetrate through the primary receptacle.
- (8) *Temperature Test.* Package testing results must show that each primary receptacle maintained its integrity when exposed to temperatures as low as 0°F and as high as 120°F (–18°C to 49°C).

- (9) *Absorbency Test.* Package testing results must show that the primary receptacle(s) contain enough absorbent material to absorb three times the total liquid allowed within the primary receptacle in case of leakage. Absorbency is determined by pouring 150 ml of deionized water into the primary receptacle(s), then turning the receptacle(s) upside down and observing for any evidence of free liquid not absorbed on contact. Any evidence of free liquid is a failure.
  - (10) *Watertight Test.* Package testing results must show that no leakage occurred when 50 ml of deionized water was placed into the secondary containment system and the entire system was turned upside down for 5 minutes.
- f. *Suspension of Authorization.* The Postal Service may suspend a vendor's authorization based on information that a mailpiece no longer meets the standards for mailing sharps medical waste and regulated medical waste containers, or that the mailpiece poses an unreasonable safety risk to Postal Service employees or the public. The suspension can be made immediately, making the mailpiece nonmailable immediately. The vendor may contest a decision to suspend authorization by writing to the manager, Product Classification (see [214](#) for address) within 7 days from the date of the letter of suspension. The appeal should provide evidence demonstrating why the decision should be reconsidered. Any order suspending authorization remains in effect during an appeal or other challenge. When a vendor is notified that its authorization to mail sharps or other regulated medical waste containers has been suspended, the vendor must immediately do the following:
- (1) Recall all identified containers.
  - (2) Notify all customers that they cannot mail the identified containers.
  - (3) Suspend sales and distribution of all identified containers.
  - (4) Collect the identified containers from distributors, consumers, and the Postal Service without using the mail and in accordance with all federal and state regulations.

#### 346.323 **Used Health Care Products**

**Note:** See Packaging Instruction 6E in Appendix [C](#).

A used health care product known or reasonably suspected to contain a Category A material is nonmailable. A used health care product not suspected to contain an infectious material, or that is known or suspected to contain a Category B infectious substance and is being returned to the manufacturer or manufacturer's designee is mailable with First-Class Mail, Priority Mail, or Priority Mail Express service subject to the following packaging requirements:

- a. Each used health care product must be drained of liquid to the extent possible and placed in a watertight primary receptacle designed and constructed to ensure that it remains intact under normal conditions of transport. For a used health care product capable of cutting or penetrating skin or packaging material, the primary receptacle must be

capable of retaining the product without puncture of the packaging under normal conditions of transport. The primary receptacle must be marked with the international biohazard symbol shown in [Exhibit 346.321](#).

- b. Each primary receptacle must be placed inside a watertight secondary container designed and constructed to ensure that it remains intact under normal conditions of transport. The secondary container must also be marked with the international biohazard symbol shown in [Exhibit 346.321](#).
- c. The secondary container must be placed inside an outer shipping container with sufficient cushioning material to prevent movement between the secondary container and the outer shipping container. An itemized list of the contents of the primary receptacle and information concerning possible contamination with a Division 6.2 material, including its possible location on the product, must be placed between the secondary container and the outer shipping container. A shipping paper and a content marking on the outer shipping container are not required.

346.324 **Forensic Material in Category B**

**Note:** See Packaging Instruction 6F in Appendix [C](#).

Forensic material containing a biological material, such as tissue, body fluid, excreta, or secretions, and sent on behalf of a federal, state, local, or Indian tribal government agency must be packaged under [346.325](#) when it is not known or suspected to contain a Category A or Category B infectious substance. Forensic material known or suspected to contain a Category A infectious substance is nonmailable. Forensic material known or suspected to contain a Category B infectious substance as identified in [346.321](#) is mailable with First-Class Mail, Priority Mail, or Priority Mail Express service when triple-packaged in a primary receptacle, secondary container, and a rigid outer shipping container as follows:

- a. The forensic material must be held within a securely sealed primary receptacle. The primary receptacle must be surrounded by sufficient absorbent material (for liquids) and cushioning material to protect the primary container from breakage. The absorbent material must be capable of taking up the entire liquid contents of the primary receptacle in case of leakage. The primary receptacle must be marked with the international biohazard symbol shown in [Exhibit 346.321](#).
- b. The primary receptacle and the absorbent and cushioning material must be enclosed in a watertight and securely sealed secondary container. The secondary container must also display the international biohazard symbol shown in [Exhibit 346.321](#).
- c. The secondary container must be firmly and snugly packed within a strong outer shipping container that is securely sealed. A shipping paper and a content marking on the outer shipping container are not required.

**346.325 Nonregulated Materials**

**Note:** See Packaging Instruction 6G in Appendix C.

Nonregulated materials as defined in [346.234](#) are not subject to regulation as hazardous materials but must be properly packaged when presented for mailing. Regulated medical waste and sharps medical waste must be packaged and mailed under [346.322](#), and used health care products must be packaged and mailed under [346.323](#). Exempt human and animal specimens must be packaged under [346.326](#). Nonregulated materials are mailable as Priority Mail Express, Priority Mail, First-Class Mail, First-Class Package Service, Parcel Select, or USPS Retail Ground. Such materials must be held within a securely sealed primary receptacle. The primary receptacle must be surrounded by sufficient absorbent material (for liquids) and cushioning material to protect the primary receptacle from breakage. The absorbent material must be capable of taking up the entire liquid contents of the primary receptacle in case of leakage. Either the primary receptacle or the inner packaging must be marked with the international biohazard symbol shown in [Exhibit 346.321](#). The primary receptacle and the absorbent and cushioning material must be snugly enclosed in a rigid outer shipping container that is securely sealed. A shipping paper and a content marking on the outer shipping container are not required. Nonregulated material specimens and biological products are subject to the following packaging standards:

- a. *Liquid Patient Specimens and Biological Products.* Mailers must package a liquid nonregulated patient specimen, a forensic specimen, or a biological product (such as polio vaccine) as follows:
  - (1) *Not exceeding 50 ml.* A patient specimen or biological product consisting of 50 ml or less per mailpiece must be packaged in a securely sealed primary receptacle. Two or more primary receptacles whose combined volume does not exceed 50 ml may be enclosed within a single mailpiece. Sufficient absorbent material and cushioning material to withstand shock and pressure changes must surround the primary receptacle(s), or be otherwise configured to take up the entire liquid contents in case of leakage. The primary receptacle(s) and the absorbent cushioning must be enclosed in a secondary container with a leakproof barrier that can prevent failure of the secondary container if the primary receptacle(s) should leak during transport. The secondary container must be securely sealed, and it may serve as the outer shipping container if it has sufficient strength to withstand ordinary postal processing. The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#), except when the secondary container also serves as the outer shipping container. In that case, the biohazard symbol must appear on the inner packaging or on the primary container. A shipping paper and a content marking on the outer shipping container are not required.
  - (2) *Exceeding 50 ml.* A liquid patient specimen, forensic material, or biological product that exceeds 50 ml must be packaged in a securely sealed primary receptacle. A single primary receptacle

must not contain more than 500 ml of specimen. Two or more primary receptacles whose combined volume does not exceed 500 ml may be enclosed in a single secondary container. Sufficient absorbent material and cushioning material to withstand shock and pressure changes must surround the primary receptacle(s), or be otherwise configured to take up the entire liquid contents in case of leakage. The primary receptacle(s) and the absorbent cushioning must be enclosed in a secondary container with a leakproof barrier that can prevent failure of the secondary container if the primary receptacle(s) should leak during transport. The secondary container cannot serve as the outer shipping container. The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#). The secondary container must be securely and snugly enclosed in a fiberboard box or container of equivalent strength that serves as the outer shipping container. A shipping paper and a content marking on the outer shipping container are not required.

- b. *Solid or Dry Specimen.* A solid or dry specimen, such as a saliva swab, blood spot, fecal smear, culture or stock, or forensic material, must be completely dried before packaging in a mailing container or envelope. Cushioning material to withstand shock and pressure changes is required only if the dry specimen is placed in a breakable primary receptacle. When required, the cushioning material must surround the primary receptacle. The primary receptacle (and cushioning material, if required) must be enclosed in a secondary container with a siftproof barrier that can prevent failure of the secondary container if the primary receptacle breaks during shipment. The secondary container must be securely sealed, and it may serve as the outer shipping container if it has sufficient strength to withstand ordinary postal processing. The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#), except when the secondary container also serves as the outer shipping container. In that case, the biohazard symbol must appear either on the inner packaging or on the primary receptacle. A shipping paper and a content marking on the outer shipping container are not required.

346.326 **Exempt Human or Animal Specimens**

**Note:** See Packaging Instruction 6H in Appendix [C](#).

Exempt human or animal specimens as defined in [346.12d](#) are not subject to regulation as hazardous materials but when presented for mailing must be triple-packaged in leakproof (for liquids) or siftproof (for solids) primary receptacles. Sufficient cushioning and absorbent materials must surround each primary receptacle containing liquid. Secondary containers for liquids must be leakproof. Secondary containers for solids must be siftproof. The primary and secondary packaging must be enclosed in a rigid outer shipping container. A single primary receptacle must not contain more than 500 ml of a liquid specimen or 500 grams of a solid specimen. Two or more primary receptacles whose combined volume does not exceed 500 ml (for liquids) or 500 grams (for solids) may be enclosed in a single secondary container. The

secondary container cannot serve as the outer shipping container. The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#). The secondary container must be securely and snugly enclosed in a fiberboard box or container of equivalent strength that serves as the outer shipping container. A shipping paper is not required. The outer shipping container must be marked on the address side with the words “Exempt human specimen” or “Exempt animal specimen,” as appropriate. In addition, at least one surface of the outer packaging must have a minimum dimension of 3.9 inches by 3.9 inches (100 mm by 100 mm). Exempt human and animal specimens are mailable as Priority Mail Express, Priority Mail, First-Class Mail, First-Class Package Service, Parcel Select, or USPS Retail Ground.

**346.327 Proper Packaging of Mailable Materials**

All mailable materials as identified in [346.212](#) must be properly packaged. [Exhibit 346.327](#) lists the specific reference in [346](#) under which each type of mailable material must be packaged.

Exhibit 346.327

**Packaging References for Mailable Materials, Infectious Substances (Hazard Class 6, Division 6.2)**

Material Being Mailed	Packaging Standards <sup>1</sup>		
	Nonregulated	Category A	Category B
Blood for Transfusion	346.325	nm	346.321
Biological Product	346.325	nm	346.321
Culture or Stock	346.325	nm	346.321
Patient Specimen	346.325	nm	346.321
Exempt Human or Animal Specimen	346.326	n/a	n/a
Forensic Material	346.325	nm	346.324
Regulated Medical Waste	346.322	nm	346.322
Sharps Waste	346.322	nm	346.322
Toxin <sup>2</sup>	346.31	nm	346.321
Treated Medical Waste	346.325	n/a	n/a
Used Health Care Product	346.323	nm	346.323

1. nm = Nonmailable.

n/a = Not applicable.

2. Toxin means a Division 6.1 material from a plant, animal, or bacterial source. A toxin containing an infectious substance or a toxin contained in an infectious substance must be classified as Division 6.2; described as an infectious substance; and assigned to UN2814, UN2900, or UN3373, as appropriate. A Division 6.1 toxin that can qualify as an ORM-D material is permitted when packaged under [346.231](#) or [346.31](#).

**346.4 Damaged Parcels**

If a mailpiece containing a Class 6 material is found to be damaged or leaking during Postal Service handling, the incident must be reported in accordance with POM 139.117 and 139.118 and Handbook EL-812, *Hazardous Materials and Spill Response* (in Part VII, “Response to Hazardous Material Incidents and Emergencies,” see the section titled “Hazardous Materials Incident Reports”), as appropriate. The local Postal Service safety officer (or designee) must immediately initiate the spill response procedures in Handbook EL-812. For spills involving infectious substances (etiologic agents), the following containment and cleanup steps must also be followed:

- a. Wear rubber gloves throughout the spill cleanup procedure.
- b. Surround the leaking package with absorbent material.
- c. Place the leaking package in another box and seal the box.
- d. Place the sealed box in a plastic bag and seal the bag.
- e. Flood affected surfaces and rinse rubber gloves with household chlorine bleach, diluted 1 ounce to 1 gallon of water, and let stand for 5 minutes. Use caution with the chlorine bleach because it is a mildly corrosive oxidizer. Wipe surfaces dry with an absorbent material, place the absorbent material in a plastic bag, and incinerate.
- f. Report the damaged parcel to the Centers for Disease Control and Prevention (CDC) at the telephone number listed in [246](#).
- g. Never dispose of etiologic agents in the trash. Contact the area environmental compliance specialist for specific information on the appropriate disposal procedures.

**347 Radioactive Materials (Hazard Class 7)****347.1 Definition**

Radioactive material is defined in 49 CFR 173.403 as any material containing radionuclides where both the activity concentration and the total activity in the consignment exceed the values specified in the table in 49 CFR 173.436 or values derived according to the instructions in 49 CFR 173.433.

**347.2 Mailability**

The following conditions apply:

- a. *International Mail.* Radioactive material is prohibited in international mail if required to bear a Class 7 Radioactive White-I, Radioactive Yellow-II, or Radioactive Yellow-III hazardous materials warning label (see [Exhibit 325.1](#)). See IMM 135.5 for the specific admissibility requirements that are applicable to international shipments of radioactive material. Mailable radioactive materials shipments may be sent only via First-Class Package International Service with Registered Mail service.
- b. *Domestic Mail via Air Transportation.* All radioactive material is prohibited in domestic air transportation.



- c. *Domestic Mail via Surface Transportation.* Radioactive material is prohibited if it is required to bear a Class 7 Radioactive White-I, Radioactive Yellow-II, Radioactive Yellow-III hazardous materials warning label, or the Fissile label (see [Exhibit 325.1](#)). Mailable radioactive materials may not have an activity content that exceeds the limits in [Exhibit 347.22](#) (which are one-tenth of the values specified in 49 CFR 173.425), and must be one of the following materials (proper shipping names and/or UN identification numbers in 49 CFR 172.101):
- (1) A radioactive material eligible to be shipped as a limited quantity under 49 CFR 172.101, Radioactive material, excepted package — Limited quantity of material, UN2910.
  - (2) An excepted instrument, article, or device including an instrument and manufactured article (such as a clock, electronic tube, or apparatus) or a similar device that has a radioactive material in gaseous or nondispersible solid form as a component part, Radioactive material, excepted package — instruments or articles, UN2911.
  - (3) An excepted article containing natural uranium or thorium, including manufactured articles in which the sole radioactive material is natural or depleted uranium or natural thorium, Radioactive material, excepted package — articles manufactured from natural uranium or depleted uranium or natural thorium, UN2909.

347.21 **Nonmailable Radioactive Materials**

Any package bearing, or required to bear, one of the Class 7 hazardous materials warning labels for radioactive materials shown in [Exhibit 325.1](#) is nonmailable under any conditions. Report nonmailable materials found in the mailstream to the appropriate officials in accordance with POM 139.117 and 139.118, as applicable. See 347.5 for emergency procedures.

347.22 **Mailable Radioactive Materials**

As stated in [347.2](#), the only categories of radioactive material that are mailable in international mail or in domestic mail via surface transportation are those that do not have an activity level exceeding the limits in [Exhibit 347.22](#) and are eligible under 49 CFR to be shipped as excepted packages for limited quantities; excepted packages for instruments and articles; and excepted packages for articles containing natural uranium or thorium. The mailer must provide accurate documentation of the activity limits, which must not exceed those specified in [Exhibit 347.22](#).

Exhibit 347.22

**Activity Limits for Mailable Instruments, Articles, and Limited Quantity Radioactive Materials**

Nature of Contents	Instruments and articles		Materials Package Limits <sup>1</sup>
	Limits for Each Instrument or Article <sup>1</sup>	Package Limits <sup>1</sup>	
Solids:			
Special form	10 <sup>-2</sup> A <sub>1</sub>	A <sub>1</sub>	10 <sup>-3</sup> A <sub>1</sub>
Normal form	10 <sup>-2</sup> A <sub>2</sub>	A <sub>2</sub>	10 <sup>-3</sup> A <sub>2</sub>
Liquids:			
Tritiated water:			
<0.0037 TBq/liter (0.1 Ci/L)	10 <sup>-3</sup> A <sub>2</sub>	10 <sup>-1</sup> A <sub>2</sub>	37 TBq (1000 Ci)
0.0037 TBq to 0.037 TBq/L (0.1 Ci to 1.0 Ci/L)			3.7 TBq (100 Ci)
>0.037 TBq/L (1.0 Ci/L)			0.037 TBq (1.0 Ci)
Other Liquids:	10 <sup>-3</sup> A <sub>2</sub>	10 <sup>-1</sup> A <sub>2</sub>	10 <sup>-4</sup> A <sub>2</sub>
Gases:			
Tritium <sup>2</sup>	2 x 10 <sup>-2</sup> A <sub>2</sub>	2 x 10 <sup>-1</sup> A <sub>2</sub>	2 x 10 <sup>-2</sup> A <sub>2</sub>
Special form	10 <sup>-3</sup> A <sub>1</sub>	10 <sup>-2</sup> A <sub>1</sub>	10 <sup>-3</sup> A <sub>1</sub>
Other form	10 <sup>-3</sup> A <sub>2</sub>	10 <sup>-2</sup> A <sub>2</sub>	10 <sup>-3</sup> A <sub>2</sub>

1. For mixture of radionuclides, see 49 CFR 173.433(d).

2. These values also apply to tritium in activated luminous paint and tritium adsorbed on solid carriers.

**347.3 Packaging**

The following packaging requirements apply:

- a. *Limited Quantities* (49 CFR 173.421). Radioactive materials whose activity per package does not exceed the limits specified in [Exhibit 347.22](#) are excepted from specification packaging, marking, and labeling requirements. All applicable conditions for Packaging Instruction 7A in Appendix [C](#) must be met.
- b. *Instruments and Articles* (49 CFR 173.424). Instruments and manufactured articles (including clocks, electronic tubes, or apparatus) or similar devices having radioactive materials in gaseous or nondispersible solid form as a component part (whose activity level does not exceed the limits specified in [Exhibit 347.22](#)) are excepted from specification packaging, marking, and labeling requirements. All applicable conditions for Packaging Instruction 7A in Appendix [C](#) must be met.
- c. *Excepted Articles Containing Uranium or Thorium* (49 CFR 173.426). Manufactured articles in which the sole radioactive material is natural or depleted uranium or natural thorium (whose activity level does not exceed the limits specified in [Exhibit 347.22](#)) are excepted from specification packaging, marking, and labeling requirements. All applicable conditions for Packaging Instruction 7A in Appendix [C](#) must be met.

- d. For mailpieces intended for domestic transportation, the radiation level at any point on the external surface of the mailpiece must not exceed 0.5 millirem per hour.

#### 347.4 **Marking**

The outside of the inner receptacle or the outside of the secondary packaging must be marked "Radioactive." The address side of the mailpiece must clearly and prominently display one of the following markings, as applicable:

- a. *Mailable Limited Quantity Shipments.* "This package conforms to the conditions and limitations specified in 49 CFR 173.421 for radioactive material, excepted package—limited quantity of material, UN2910, and is within Postal Service activity limits for mailing."
- b. *Mailable Instruments and Articles.* "This package conforms to the conditions and limitations specified in 49 CFR 173.424 for radioactive material, excepted package—instruments or articles, UN2911, and is within Postal Service activity limits for mailing."
- c. *Mailable Excepted Articles Containing Uranium or Thorium.* "This package conforms to the conditions and limitations specified in 49 CFR 173.426 for radioactive material, excepted package—articles manufactured from natural uranium (or natural thorium), UN2909, and is within Postal Service activity limits for mailing."

#### 347.5 **Emergency Procedures**

When a nonmailable package of radioactive material is discovered intact in the mailstream, the following procedures must be immediately followed:

- a. Place the parcel at least 15 feet from other mail or personnel. Under no circumstances may the package be dispatched.
- b. Report the mailpiece to the appropriate officials in accordance with POM 139.117 and 139.118, as applicable.
- c. If a package of radioactive material is damaged or is leaking, immediately contact the facility safety officer (or designee). The safety officer will:
  - Follow the appropriate spill-response procedures.
  - Isolate the area around the damaged package to prevent contact with people.
  - Isolate any conveyor, belt, chute, or other equipment or conveyance, including mailbags, in which the radioactive material has leaked or may have leaked.
  - Rope off or guard the isolated area whenever practical.
  - Place a temporary sign indicating the presence of radioactive materials and bearing a warning to stay beyond the edge of the roped area.

The local postmaster or facility manager must immediately request the assistance of qualified persons to check radiation hazards and to supervise the salvage and decontamination. This assistance may be received from the mailer (if known) or from one of the following contacts:

- (1) Nearest office of the Department of Energy (DOE) as listed in [Exhibit 347.5c\(1\)](#) or DOE's national emergency number and website are:

DEPARTMENT OF ENERGY (DOE)  
EMERGENCY OPERATIONS CENTER

Telephone: 202-586-8100

[www.doe.gov](http://www.doe.gov)

- (2) Local health, fire, or police departments.
- (3) Local civil defense authorities.
- (4) Nearby military installations.
- (5) Nearby scientific laboratories.
- (6) The Nuclear Regulatory Commission, the Environmental Protection Agency, and the Federal Emergency Management Agency, whose national emergency numbers and websites are as follows:

NUCLEAR REGULATORY COMMISSION (NRC)

Telephone: 301-816-5100

[www.nrc.gov](http://www.nrc.gov)

ENVIRONMENTAL PROTECTION AGENCY (EPA)  
NATIONAL RESPONSE CENTER

Telephone: 800-424-8802

[www.epa.gov](http://www.epa.gov)

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)  
NATIONAL EMERGENCY COORDINATION CENTER

Telephone: 202-646-2400

[www.fema.gov](http://www.fema.gov)

Exhibit 347.5c(1)

**DOE Regional Coordinating Offices**

<b>Department of Energy</b>		
Regional Coordinating Offices for Geographical Areas of Responsibility		
<b>Regional Coordinating Office</b>	<b>Telephone for Assistance</b>	<b>Areas Served</b>
1. Brookhaven, NY	631-344-2200	Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont
2. Oak Ridge, TN	865-576-1005	Arkansas, Kentucky, Louisiana, Mississippi, Missouri, Tennessee, Virginia, West Virginia (includes Puerto Rico and the Virgin Islands)
3. Savannah River, SC	803-725-3333	Alabama, Florida, Georgia, North Carolina, South Carolina
4. Albuquerque, NM	505-845-4667	Arizona, Kansas, New Mexico, Oklahoma, Texas
5. Chicago, IL	630-252-4800	Illinois, Indiana, Iowa, Michigan, Minnesota, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin
6. Idaho Falls, ID	208-526-1515	Colorado, Idaho, Montana, Utah, Wyoming
7. Oakland, CA	925-422-8951	California, Hawaii, Nevada
8. Richland, WA	509-373-3800	Alaska, Oregon, Washington
Headquarters – Washington, DC	202-586-8100	

348 **Corrosives (Hazard Class 8)**348.1 **Definition**

A *corrosive* is any liquid or solid that causes visible destruction or irreversible alteration in human skin tissue at the site of contact, or a liquid that has a severe corrosion rate on steel. The term “corrosive” includes all items commonly referred to as acids, as well as most batteries.

348.2 **Mailability**

- a. *International Mail.* All corrosives are prohibited.
- b. *Domestic Mail.* A corrosive that can qualify as an air-eligible mailable limited quantity is permitted via air (or ground) transportation. An ORM-D material that can be renamed with the proper shipping name, “Consumer Commodity”, is permitted via surface transportation only. Mailable corrosives are also subject to the following:
  - (1) A liquid mixture must be 1 pint (16 oz) or less and must contain 15 percent or less corrosive material, with the remainder of the mixture not being a hazardous material, unless otherwise specified in [348.22](#) for a specific corrosive material.
  - (2) A solid mixture must be 10 pounds or less per primary receptacle and must contain 10 percent or less corrosive material, with the remainder of the mixture not being a hazardous material, unless otherwise specified for a specific corrosive solid.

**348.21 Nonmailable Corrosives**

Nonmailable corrosives include the following:

- a. *Batteries* (UN2794, UN2795) with liquid electrolyte (such as automobile lead acid batteries), except for the nonspillable type allowed under [348.22](#).
- b. *Nitric Acid* (UN2031, UN2032).
- c. *Fuming and Spent Sulfuric Acids* (UN1831, UN1832).
- d. *Hydrofluoric Acid* (UN1790).
- e. Except as provided in [348.22g](#), mercury, and items containing mercury, including thermometers.

**348.22 Mailable Corrosives**

As a rule, liquid corrosives are limited to 15 percent solution or less as stated in [348.2](#), unless otherwise specified below. Mailable corrosives include the following:

- a. *Acetic Acid* (UN2790). Acceptable in solutions that qualify as mailable limited quantity material, or an ORM-D material (for surface only), and contain less than 80 percent acid and do not exceed 1 pint. Packaging Instruction 8A must be followed.
- b. *Batteries*. Mailable batteries include:
  - (1) Common household dry-cell batteries such as sizes AA, AAA, C, D, etc. are generally not regulated as hazardous materials and are therefore mailable. For nickel-metal hydride batteries in sea transportation, see 49 CFR 122.102, Special Provision 130. Packaging requirements in DMM 601.1-7 apply.
  - (2) A nonspillable wet battery containing liquid electrolyte is permitted to be mailed only if the battery casing is completely sealed to prevent the liquid corrosive from spilling during Postal Service handling. Nonspillable batteries with UN2800 are prohibited in international mail but may be sent as domestic mail via air or surface transportation when prepared within the conditions of Packaging Instruction 8B in Appendix [C](#).
  - (3) For lithium and lithium-ion batteries, see [349.22](#).
- c. *Hydrochloric Acid* (UN1789). Acceptable only in solutions not exceeding 10 percent acid that can qualify as a mailable limited quantity material, or an ORM-D material (for surface only). Packaging Instruction 8A in Appendix [C](#) must be followed.
- d. *Sulfuric Acid* (UN2796). Acceptable only in solutions less than 25 percent acid that can qualify as a mailable limited quantity material, or an ORM-D material (for surface only). Packaging Instruction 8A in Appendix [C](#) must be followed.
- e. *Dyes* (UN2801, UN3147). Acceptable if the dyes can qualify as a mailable limited quantity material, or an ORM-D material (for surface only). Mailable dyes must be packaged as required in [348.3](#) and Packaging Instruction 8A in Appendix [C](#).

- f. *Photographic Mixtures*. Acceptable if the corrosive liquid solutions for preparing photographic processing mixtures can qualify as a mailable limited quantity material, or an ORM-D material (for surface only). Packaging Instruction 8A in Appendix [C](#) must be followed. When these liquids are in securely closed and sealed bottles that are properly cushioned, they may be packed in the same outside shipping container with required amounts of packaged dry chemicals not classified as hazardous materials (provided no dangerous reaction would occur should the contents of the bottles be mixed with the dry chemicals).
- g. *Manufactured devices that contain small amounts of mercury* (UN3506). Compact Fluorescent Lamps (CFL) and similar consumer devices containing minute amounts of mercury are mailable by air or surface when each device, article, or apparatus contains 100 milligrams (mg) (0.0035 ounce) or less of mercury and each mailpiece contains no more than 1 gram (g) (0.035 ounce) of mercury. Packaging Instruction 8C in Appendix [C](#) must be followed. Devices must be separated and cushioned to prevent movement and breakage, and must be enclosed inside rigid outer packaging. Each mailpiece must bear the marking “Manufactured Devices Containing Less Than 100 mg Mercury.”

#### 348.3 **Packaging**

Mailable corrosives, both liquids and solids, must meet the applicable requirements in 348.2b and be prepared as required in Packaging Instruction 8A in Appendix [C](#), or as permitted in [348.22](#).

#### 348.4 **Marking and Documentation**

Parcels containing mailable corrosive material must be marked as follows:

- a. For air transportation, a mailpiece containing a mailable corrosive material must bear the DOT square-on-point marking. The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. The symbol “Y” must be black, located in the center of the square-on-point, and clearly visible. Mailpieces must also bear the appropriate approved DOT Class 8 hazardous material warning label, the identification number, and the proper shipping name. A properly completed shipper’s declaration for dangerous goods must be affixed to the outside of the mailpiece.
- b. For surface transportation, parcels containing mailable Class 8 materials must be plainly and durably marked on the address side with “Surface Only” or “Surface Mail Only” and “ORM-D,” immediately following or below the proper shipping name (e.g., Consumer Commodity). Optionally, mailpieces may be marked with an approved DOT limited quantity square-on-point marking (see [Exhibit 325.2a](#)). The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. Surface shipments containing qualifying ORM-D material bearing the square-on-point limited quantity marking are not required to be marked with the shipping name and

identification number. A shipper's declaration for dangerous goods is not required for mailable Class 8 corrosives sent via surface transportation.

- c. When the DOT square-on-point markings are used, markings must be durable, legible, and readily visible, and must be applied on at least one side or one end of the outer packaging. The border forming the square-on-point must be at least 2 mm in width, and the minimum dimension of each side must be 100 mm, unless the package size requires a reduced size marking of no less than 50 mm on each side.

## 349 **Miscellaneous Hazardous Materials (Hazard Class 9)**

### 349.1 **Definition**

A miscellaneous hazardous material is a substance or article that presents a hazard during transportation, but does not meet the definition of any other hazard class. Examples of miscellaneous hazardous materials (not all of which are mailable) include solid dry ice, lithium batteries, magnetized materials, elevated temperature substances, environmentally hazardous substances, life-saving appliances (i.e., automobile air-bags, self-inflating life vests), and asbestos. Miscellaneous hazardous materials include:

- a. Any material that has an anesthetic, noxious, or other similar property that could cause extreme annoyance or discomfort to a flight crew member.
- b. Any elevated temperature material, hazardous substance, hazardous waste (other than Division 6.2 medical waste), or marine pollutant.

### 349.11 **Lithium Battery — Classifications:**

- a. *Lithium-ion cell or battery* means a rechargeable electrochemical cell or battery in which the positive and negative electrodes are both lithium compounds constructed with no metallic lithium in either electrode. These batteries are also referred to as secondary or rechargeable lithium cells or batteries, and are typically used in cell phones and laptop computers.
- b. *Lithium-ion polymer cell or battery* means a rechargeable cell or battery that uses lithium-ion chemistries and is regulated as a lithium-ion cell or battery.
- c. *Lithium metal cell or battery* means an electrochemical cell or battery utilizing lithium metal or lithium alloys as the anode. The lithium content of a lithium metal or lithium alloy cell or battery is measured when the cell or battery is in an undischarged state. The lithium content of a lithium metal or lithium alloy battery is the sum of the grams of lithium content contained in the component cells of the battery. These batteries are also referred to as primary or nonrechargeable lithium cells or batteries, and are often used in consumer products such as cameras and flashlights.



- d. *Button cell battery* means a small single cell round battery with the overall height less than the diameter. Button cells are used to power small portable electronic devices such as wrist watches, pocket calculators, and hearing aids, and are often installed in electronic devices as auxiliary power sources. For the purposes of mailability as button cell batteries, lithium metal batteries must contain no more than 0.3 gram of lithium content and lithium-ion batteries must be 2.7 watt-hours or less.
- e. *Lithium cell* means a single encased electrochemical unit with a single positive electrode (anode) and single negative electrode (cathode), which exhibits a voltage differential across its terminals. For the purpose of mailability, marking, and documentation requirements, a single cell lithium battery is classified as a lithium cell.
- f. *Lithium battery* means one or more lithium cells which are electrically connected together by a permanent means, including case, terminals, and markings.

#### 349.12 **Lithium Battery – Definitions**

- a. *Equipment* means the device or apparatus for which the lithium cells or batteries will provide electrical power for its operation.
- b. *Short circuit* means a direct connection between positive and negative terminals of a cell or battery that provides an abnormally low resistance path for current flow.
- c. *Watt-hour (Wh)* means a unit of energy equivalent to one watt (1 W) of work acting for one hour (1 h) of time. The watt-hour rating of a lithium-ion cell or battery is determined by multiplying the rated capacity of a cell or battery in ampere-hours, by its nominal voltage. Therefore, watt-hour (Wh) = ampere-hour (Ah) x volts (V).

#### 349.2 **Mailability**

- a. *International Mail.* All miscellaneous hazardous materials are prohibited, except for certain magnetized materials as permitted in [349.242a](#) and IMM 136.1g, and small consumer-type lithium batteries (installed in the equipment they operate) as permitted in [622.5](#) and IMM 135.6.
- b. *Domestic Mail.* A miscellaneous hazardous material that can qualify as a mailable air-eligible consumer commodity material (ID8000) when intended for air transportation, or an ORM-D material when intended for ground transportation, is permitted for domestic mail, subject to the applicable 49 CFR requirements. Only UN3077, UN3082, UN3175, UN3334, and UN3335 Class 9 materials are mailable by air transportation; mailpieces including eligible quantities of these materials must be marked with the proper shipping name “Consumer Commodity.” Additionally, lithium batteries, dry ice, and magnetized materials are permitted within the specific limits provided in [349.221](#), [349.222](#), [349.23](#), and [349.24](#).

**349.21 Nonmailable Class 9 Materials**

The following materials are prohibited:

- a. All Class 9 materials that cannot qualify as a consumer commodity material (or an ORM-D material, for surface transportation only) except dry ice, lithium batteries, and magnetized materials.
- b. All magnetized materials that have a measurable magnetic field strength greater than 0.00525 gauss at 15 feet.
- c. For air transportation, all magnetized materials that can cause a compass deviation at a distance of 7 feet or more.
- d. In domestic mail via air transportation, dry ice in quantities exceeding 5 pounds per mailpiece.
- e. All lithium batteries in international mail, unless they are within the specified limits and only when properly installed in the equipment they operate.
- f. All lithium metal batteries in domestic air transportation, unless they are within the specified limits and only when properly installed in, or packed with, the equipment they are intended to operate.

**349.22 Mailable Class 9 Materials****349.221 Lithium Metal (Nonrechargeable) Cells and Batteries — Domestic**

For domestic mailings only, small consumer-type lithium metal cells or batteries (also called primary lithium cells or batteries) like those used to power cameras and flashlights are mailable domestically under the following conditions. See [622](#) or IMM 136 when mailing batteries internationally or to APO/FPO/DPO destinations.

- a. *General.* The following restrictions apply to the mailability of all lithium metal (or lithium alloy) cells and batteries:
  - (1) Each cell must contain no more than 1.0 gram (g) of lithium content per cell.
  - (2) Each battery must contain no more than 2.0 g aggregate lithium content per battery.
  - (3) Each cell or battery must meet the requirements of each test in the UN Manual of Tests and Criteria, part III, and subsection 38.3 as referenced in DOT's hazardous materials regulation at 49 CFR 171.7.
  - (4) All outer packages must have a complete delivery and return address.
  - (5) All packaging must meet all applicable requirements specified in 49 CFR 173.185.
  - (6) Except for mailpieces containing button cell batteries installed in equipment (including circuit boards), or no more than 4 lithium metal cells or 2 lithium metal batteries installed in the equipment they operate, mailpieces containing lithium metal batteries must bear markings that indicate that the package contains lithium metal cells or batteries; that the package is to be handled with care and that a flammable hazard exists if the package is damaged; that special procedures must be followed in the event the package is damaged, to include inspection and repacking, if

necessary; and a telephone number for additional information. Mailers may use a DOT lithium battery handling label, in domestic air or surface transportation, to meet these marking requirements provided all required elements are included.

- (7) Except for mailpieces containing button cell batteries installed in equipment (including circuit boards), or no more than 4 lithium metal cells or 2 lithium metal batteries installed in the equipment they operate, mailpieces containing lithium metal batteries must also be accompanied by a document that indicates that the package contains lithium metal cells or batteries; an indication that the package is to be handled with care and that a flammable hazard exists if the package is damaged; an indication that special procedures must be followed in the event the package is damaged, to include inspection and repacking, if necessary; and a telephone number for additional information.
- b. *Installed in Equipment.* The following additional restrictions apply to the mailing of lithium metal cells or batteries properly installed in the equipment they operate:
- (1) The batteries installed in the equipment must be protected from damage and short circuit.
  - (2) The equipment must be equipped with an effective means of preventing it from being inadvertently turned on or activated.
  - (3) The equipment must be cushioned to prevent movement or damage and be contained in a strong enough sealed package to prevent crushing of the package or exposure of the contents during normal handling in the mail.
  - (4) For lithium metal cells and batteries containing no more than 0.3 gram of lithium content, no mailpiece may exceed 2.5 kilograms (5.5 pounds). There is no maximum number of cells or batteries per mailpiece.
  - (5) For lithium metal cells containing more than 0.3 gram but no more than 1.0 gram of lithium content, and batteries containing more than 0.3 gram but no more than 2.0 grams of lithium content, no mailpiece may exceed 5 kilograms (11 pounds). Each mailpiece may contain a maximum of 8 cells or 2 batteries, with no more than 1.0 gram of lithium content per cell or 2.0 grams of lithium content per battery.
  - (6) Mailpieces are not required to bear markings or labels identifying the contents as lithium batteries. Mailers may optionally use a DOT-approved lithium battery handling label, in domestic air or surface transportation.
- c. *Mailed With Equipment.* The following additional restrictions apply to the mailing of lithium metal cells or batteries shipped with (but not installed in) the device or equipment being mailed:
- (1) The shipment cannot contain more batteries than the number needed to operate the device.

- (2) The lithium metal cells and batteries must be packaged separately and cushioned to prevent movement or damage.
  - (3) The shipment must be contained in a strong enough sealed package to prevent crushing of the package or exposure of the contents during normal handling in the mail.
  - (4) For lithium metal cells and batteries containing no more than 0.3 gram of lithium content, no mailpiece may exceed 2.5 kilograms (5.5 pounds). There is no maximum number of cells or batteries per mailpiece.
  - (5) For lithium metal cells containing more than 0.3 gram but no more than 1.0 gram of lithium content, and batteries containing more than 0.3 gram but no more than 2.0 grams of lithium content, no mailpiece may exceed 5 kilograms (11 pounds). Each mailpiece may contain a maximum of 8 cells or 2 batteries, with no more than 1.0 gram of lithium content per cell or 2.0 grams of lithium content per battery.
  - (6) Mailpieces must be marked and be accompanied by shipping documentation as described in [349.221a6](#) and [349.221a7](#).
- d. *Mailed Without Equipment.* The following additional restrictions apply to the mailing of lithium metal cells or batteries without equipment (individual batteries):
- (1) The lithium metal cells and batteries must be mailed in “the originally sealed packaging.”
  - (2) The sealed packages of batteries must be separated and cushioned to prevent short circuit, movement, or damage.
  - (3) The shipment must be contained in a strong enough sealed package to prevent crushing of the package or exposure of the contents during normal handling in the mail.
  - (4) Mailpieces must be sent by surface transportation only.
  - (5) In addition to the marking and shipping documentation requirements described in [349.221a6](#) and [349.221a7](#), the outside of the package must be marked on the address side “Surface Mail Only, Primary Lithium Batteries — Forbidden for Transportation Aboard Passenger Aircraft” or “Surface Mail Only, Lithium Metal Batteries — Forbidden for Transportation Aboard Passenger Aircraft.”
  - (6) The mailpiece must not exceed 5 pounds.

349.222 **Lithium-ion (Rechargeable) Cells and Batteries — Domestic**

Small consumer-type lithium-ion cells and batteries (also called secondary lithium cells or batteries) like those used to power cell phones and laptop computers are only mailable domestically under the following conditions. See [622](#) or IMM 135.6 when mailing batteries internationally or to and from APO/FPO/DPO destinations.

- a. *General.* The following additional restrictions apply to the mailability of all secondary lithium-ion or lithium polymer cells and batteries:
  - (1) The watt-hour rating must not exceed 20 Wh per cell.

- (2) The watt-hour rating must not exceed 100 Wh per battery.
  - (3) Each cell or battery must meet the requirements of each test in the UN Manual of Tests and Criteria, part III, and subsection 38.3 as referenced in DOT's hazardous materials regulation at 49 CFR 171.7.
  - (4) All outer packages must have a complete delivery and return address.
  - (5) All packaging must meet all applicable requirements specified in 49 CFR 173.185.
  - (6) Except for mailpieces containing button cell batteries installed in equipment (including circuit boards), or no more than 4 lithium-ion cells or 2 lithium-ion batteries installed in the equipment they operate, mailpieces containing lithium-ion batteries must bear markings that indicate that the package contains lithium-ion cells or batteries; that the package is to be handled with care and that a flammable hazard exists if the package is damaged; that special procedures must be followed in the event the package is damaged, to include inspection and repacking, if necessary; and a telephone number for additional information. Mailers may use a DOT-approved lithium battery handling label, in domestic air or surface transportation, to meet these marking requirements provided all required elements are included.
  - (7) Except for mailpieces containing button cell batteries installed in equipment (including circuit boards), or no more than 4 lithium-ion cells or 2 lithium-ion batteries installed in the equipment they operate, mailpieces containing lithium-ion batteries must also be accompanied by a document that indicates that the package contains lithium-ion cells or batteries; an indication that the package is to be handled with care and that a flammable hazard exists if the package is damaged; an indication that special procedures must be followed in the event the package is damaged, to include inspection and repacking, if necessary; and a telephone number for additional information.
- b. *Installed in Equipment.* The following additional restrictions apply to the mailing of lithium-ion cells or batteries properly installed in equipment they operate:
- (1) The batteries installed in the equipment must be protected from damage and short circuit.
  - (2) The equipment must be equipped with an effective means of preventing it from being inadvertently turned on or activated.
  - (3) The equipment must be cushioned to prevent movement or damage and be contained in a strong enough sealed package to prevent crushing of the package or exposure of the contents during normal handling in the mail. The shipment must be mailed in a strong outer package.

- (4) For lithium-ion cells and batteries with a watt-hour rating of not more than 2.7 Wh, no mailpiece may exceed 2.5 kilograms (5.5 pounds). There is no maximum number of cells or batteries per mailpiece.
  - (5) For lithium-ion cells with a watt-hour rating of not more than 20 Wh, and batteries with a watt-hour rating of not more than 100 Wh, each mailpiece must contain no more than 8 cells or 2 batteries. Each cell must have a watt-hour rating of no more than 20 Wh, and each battery must have a watt-hour of no more than 100 Wh.
  - (6) Mailpieces are not required to bear markings or labels identifying the contents as lithium batteries, however an applicable DOT-approved lithium battery handling label may optionally be applied to mailpieces in either domestic air or surface transportation.
- c. *Mailed With Equipment.* The following additional restrictions apply to the mailing of lithium-ion cells or batteries shipped with (but not installed in) the device or equipment being mailed:
- (1) For lithium-ion cells and batteries with a watt-hour rating of not more than 2.7 Wh, no mailpiece may exceed 2.5 kilograms (5.5 pounds). There is no maximum number of cells or batteries per mailpiece.
  - (2) For lithium-ion cells with a watt-hour rating of not more than 20 Wh, and batteries with a watt-hour rating of not more than 100 Wh, each mailpiece must contain no more than 8 cells or 2 batteries. Each cell must have a watt-hour rating of no more than 20 Wh, and each battery must have a watt-hour of no more than 100 Wh.
  - (3) The lithium-ion cells and batteries must be packaged separately and cushioned to prevent movement or damage.
  - (4) Mailpieces must be marked and be accompanied by shipping documentation as described in [349.222a6](#) and [349.222a7](#).
- d. *Mailed Without Equipment.* The following additional restrictions apply to the mailing of lithium-ion cells or batteries without equipment (individual batteries):
- (1) The lithium-ion cells and batteries must be mailed in “the originally sealed packaging,” and each mailpiece must contain no more than 8 cells or 2 batteries.
  - (2) The sealed packages of batteries must be separated and cushioned to prevent short circuit, movement, or damage.
  - (3) The shipment must be contained in a strong enough sealed package to prevent crushing of the package or exposure of the contents during normal handling in the mail.
  - (4) The outside of the package must be marked on the address side “Package Contains Lithium-ion Batteries (no lithium metal).”
  - (5) Mailpieces must be marked and accompanied by shipping documentation as described in [349.222a6](#) and [349.222a7](#).

Exhibit 349.222

**Domestic Lithium Battery Mailability**

	<b>Surface Transportation</b>	<b>Air Transportation</b>	<b>Mailpiece Limitations<sup>1</sup></b>
<b>Lithium Metal or Lithium Alloy Batteries<sup>2, 3</sup></b>			
<i>Small, non-rechargeable, consumer-type batteries</i>			
Contained in (properly installed in equipment)	Mailable	Mailable	8 cells or 2 batteries 11lbs.
Packed with equipment, but not installed in the equipment	Mailable	Mailable	8 cells or 2 batteries 11lbs.
Without the equipment they operate (individual batteries in originally sealed packaging)	Mailable	Prohibited	5 lbs.
<b>Lithium-ion or Lithium Polymer Batteries<sup>4, 5</sup></b>			
<i>Small, rechargeable, consumer-type batteries</i>			
Contained in (properly installed in equipment)	Mailable	Mailable	8 cells or 2 batteries
Packed with equipment, but not installed in the equipment	Mailable	Mailable	8 cells or 2 batteries
Without the equipment they operate (individual batteries in originally sealed packaging)	Mailable	Mailable	8 cells or 2 batteries
<b>Very Small Lithium Metal or Lithium-ion Batteries<sup>6, 7</sup></b>			
<i>Exception for very small consumer-type batteries in USPS air transportation</i>			
Contained in (properly installed in equipment)	Mailable	Mailable	No limit on cells/ batteries 5.5 pounds
Packed with equipment, but not installed in the equipment	Mailable	Mailable	No limit on cells/ batteries 5.5 pounds
<b>Damaged/Recalled Batteries</b>	Prohibited, unless approved by the manager, Product Classification.		

1. When a mailpiece limitation of 8 cells or 2 batteries is applicable, a mailpiece may contain either 8 cells or 2 batteries, not both.
2. Each cell must not contain more than 1g lithium content.
3. Each battery must not contain more than 2g aggregate lithium content.
4. Each cell must not exceed more than 20 Wh (watt-hour rating).
5. Each battery must not exceed 100 Wh.
6. Each lithium metal or lithium alloy cell or battery must not exceed 0.3 gram of lithium content.
7. Each lithium-ion or lithium polymer cell or battery must not exceed 2.7 Wh.

**349.23 Dry Ice****349.231 General**

Dry ice is primarily used to keep other items cool. The items being cooled can be either mailable hazardous materials or nonhazardous items, such as medical specimens or foods.

**349.232 Characteristics and Precautions**

Dry ice (carbon dioxide solid) is produced by expanding liquid carbon dioxide to vapor and compacting the material into blocks. When dry ice converts (dissipates) to a gaseous form, it takes in heat from its surroundings. The resulting gas is heavier than air and can cause suffocation in confined areas as air is displaced. When dry ice is enclosed in a thick metal or other restrictive type of container, internal pressure builds up and could cause the

container to rupture or explode. Mailpieces containing dry ice must be handled with care because its very low temperature (about  $-110^{\circ}\text{F}$  or  $-79^{\circ}\text{C}$ ) can cause severe burns to skin upon direct contact.

349.233 **Dry Ice Mailability**

Dry ice is permitted to be mailed when it is used as a refrigerant to cool the content of a mailable hazardous or nonhazardous material. Packages containing dry ice must be packed in containers that permit the release of carbon dioxide gas and conform to 49 CFR 173.217 and 175.10(a)(10). Mailpieces containing dry ice are subject to the following conditions, as applicable:

- a. *International Mail.* Dry ice is prohibited.
- b. *Domestic Mail via Air Transportation.* Dry ice is permitted in quantities of up to 5 pounds per mailpiece. Mailpieces containing dry ice are subject to the conditions for Packaging Instruction 9A in Appendix [C](#), as applicable.
- c. *Domestic Mail via Surface Transportation.* A mailpiece sent via surface transportation may contain more than 5 pounds of dry ice. Mailpiece preparation is subject to the conditions for Packaging Instruction 9A in Appendix [C](#).

**Note:** A mailpiece that is prepared for surface transportation *must not, under any circumstances*, be routed via air transportation.

349.24 **Magnetized Materials**

A magnetized material is not classified within any of the nine hazard classes. Such material is regulated as a hazardous material only if offered for carriage on air transportation and when it has a magnetic field strength capable of causing the deviation of aircraft instruments.

349.241 **Definition**

A magnetized material is any article that has a magnetic field strength capable of causing the deviation of aircraft instruments. A magnetized material is regulated as a hazardous material when it is presented for air transportation and has a measurable magnetic field strength greater than 0.00525 gauss at 15 feet. Magnetized materials include magnets and magnetized devices such as magnetrons and light meters of sufficient strength to possibly cause erroneous aircraft compass readings. If the maximum field strength observed at a distance of 7 feet is less than 0.002 gauss or there is no significant compass deflection (less than 0.5 degree), the article is not restricted as a magnetized material.

349.242 **Mailability**

Magnetized materials that have a magnetic field strength of 0.002 gauss or more at a distance of 7 feet from any point on the surface of the outer packaging are mailable via air transportation if properly packaged. Magnetized materials that have a field strength greater than 0.00525 gauss at 15 feet are nonmailable under any conditions. The following requirements also apply:

- a. *International Mail.* Only non-regulated magnetized materials that have a magnetic field strength less than 0.002 gauss at a distance of 7 feet

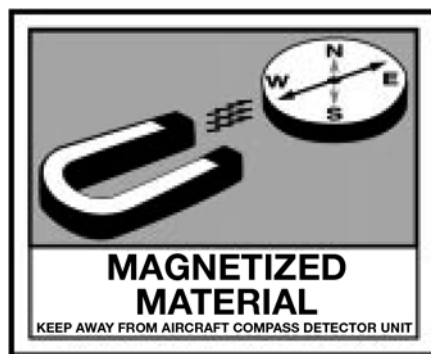


may be sent internationally. Magnetized materials which are regulated are prohibited. See [622.4](#) or IMM 136.1.

- b. *Domestic Mail via Air Transportation.* Magnetized materials that have a magnetic field strength greater than 0.00525 gauss at 15 feet are prohibited. A magnetic field strength less than 0.002 gauss at a distance of 7 feet is not regulated. Mailpiece preparation is subject to the conditions in Packaging Instruction 9B in Appendix [C](#). The address side of the outer packaging must bear the magnetized material warning label shown in [Exhibit 349.242b](#) and a shipping paper is required, if regulated.
- c. *Domestic Mail via Surface Transportation.* Magnetized material is not regulated as a hazardous material when transported via surface transportation.

Exhibit 349.242b

**Warning Label for Magnetized Materials**



**349.3 Packaging**

For mailable Class 9 materials, the following packaging requirements as detailed in the Packaging Instructions in Appendix [C](#) apply:

- a. Packaging Instruction 9A must be followed for mailable quantities of dry ice.
- b. Packaging Instruction 9B must be followed for mailable types of magnetized materials.
- c. Packaging Instruction 9C must be followed for Class 9 miscellaneous hazardous materials that can qualify as a mailable air-eligible consumer commodity material (ID8000) when intended for air transportation, or an ORM-D material when intended for ground transportation.
- d. Packaging Instruction 9D must be followed for lithium and lithium-ion cells and batteries.

**349.4 Marking and Documentation**

Parcels containing mailable Class 9 material must be marked as follows:

- a. For air transportation, a mailpiece Class 9 material must bear the DOT square-on-point marking. The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. The symbol "Y" must be black, located in the center of the square-on-point, and clearly visible. Mailpieces intended for transport by air and containing eligible limited quantity material of DOT Classes 2, 3, and

6.1, or eligible hazard Class 9 limited quantity material categorized in UN3077, UN3082, UN3175, UN3334, or UN3335, must be marked with the proper shipping name “Consumer Commodity” and identification number “ID8000.” Each mailpiece must also display an approved DOT Class 9 hazardous material warning label (see [Exhibit 325.2b](#)). A shipper’s declaration for dangerous goods that is prepared in triplicate must be affixed to the outside of the mailpiece.

- b. For surface transportation, parcels containing mailable Class 9 materials must be plainly and durably marked on the address side with “Surface Only” or “Surface Mail Only” and “ORM-D,” immediately following or below the proper shipping name (e.g., Consumer Commodity). Optionally, mailpieces may be marked with an approved DOT limited quantity square-on-point marking (see [Exhibit 325.2a](#)). The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. Surface shipments containing qualifying ORM-D material bearing the square-on-point limited quantity marking are not required to be marked with the shipping name and identification number.
- c. When the DOT square-on-point markings are used, markings must be durable, legible, and readily visible, and must be applied on at least one side or one end of the outer packaging. The border forming the square-on-point must be at least 2 mm in width, and the minimum dimension of each side must be 100 mm, unless the package size requires a reduced size marking of no less than 50 mm on each side.
- d. The specific marking and documentation requirements for dry ice, magnetized materials, and lithium batteries are specified in Packaging Instruction 9A, Packaging Instruction 9B, and Packaging Instruction 9D in Appendix C, as applicable.

# 4 Restricted Matter

## 41 General

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### 411 Definition

Restricted matter includes articles on which mailing restrictions have been imposed for reasons other than risk of harm to persons or property involved in moving the mail. Motor vehicle master keys and intoxicating liquors are examples of restricted items.

### 412 Mailer Responsibility

The mailer is responsible for ensuring that all Postal Service requirements, as well as all federal and state laws and local ordinances that apply to the shipment of an article of restricted matter, have been met.

### 413 Rulings

Where doubt exists about mailability of any article that is considered to be restricted matter, a request for a ruling may be made to the local postmaster (see [215.3](#)).

When the qualification of an addressee to receive restricted matter within the conditions in this chapter is in question, a Postmaster may require the mailer or addressee to furnish a written explanation of the addressee's eligibility and/or the item's mailability. If the explanation is not satisfactory or when uncertainty remains, the postmaster may forward the explanation along with a statement of the facts to the PCSC for a ruling.

### 414 Nonmailable Matter Found in the Mails

All nonmailable articles of restricted matter discovered in the mailstream must immediately be reported in accordance with the provisions in the *Postal Operations Manual* (POM) 139.117 or 139.118, as appropriate.

## 42 Intoxicating Liquors

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### 421 Definition

Intoxicating liquors are drinkable beverages that have 0.5 percent or more alcoholic content by weight and are taxable under Chapter 51 of the Internal Revenue Service (IRS) Code.

**422 Mailability****422.1 Nonmailable Matter****422.11 Intoxicating Liquors**

Intoxicating liquors having 0.5 percent or more alcoholic content are nonmailable. Taxable liquors (as defined by Chapter 51, Internal Revenue Service Code) with 3.2 percent or less alcohol, including those obtained under a prescription or as a collector's item, also are nonmailable. The prohibition of the mailing of intoxicating liquors is contained in federal law (18 U.S.C. 1716).

**422.12 Promotional Materials**

Advertising, promotional, or sales matter that solicits or induces the mailing of intoxicating liquors also is nonmailable. See DMM 601.7.4.1.

**422.2 Mailable Liquors****422.21 Products Not Categorized As Intoxicating Liquors**

A product containing an intoxicating liquor is mailable if it conforms to the applicable requirements of the IRS and the Food and Drug Administration (FDA), and if it is not a taxable alcoholic beverage, poisonous, or flammable. The following are examples of products that may be mailable:

- a. Cold remedies.
- b. Cooking wine.
- c. Mouthwash.

**422.22 Exempt Mailings Between Federal and State Agencies**

Intoxicating liquor is exempt from the prohibition against mailing when it is sent between employees of federal or state agencies who have an official use for the liquor, such as for testing purposes. This exemption is based on the intent of the law to prevent liquor from being transported to prohibited jurisdictions for consumption and to ensure that all proper tax revenues are paid.

**423 Packaging and Marking****423.1 General**

All exempt intoxicating liquors must be sent via Registered Mail service and must meet the packaging requirements for liquids in DMM 601.3.4.

**423.2 Denatured Flammable or Combustible Liquor**

There are no postal requirements to denature the contents (i.e., to change the nature or natural qualities) of intoxicating liquor. However, if contents are denatured through the use of such elements as sodium bisulfate (a corrosive) or mercuric chloride (a poison), the substances must meet the mailability requirements in Chapter [3](#) for a Class 8 corrosive material or a Division 6.1 toxic substance, as appropriate. If the contents are flammable or combustible, the material must meet the requirements for a Class 3 flammable or combustible liquid in Chapter [3](#).

## 43 Firearms

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### 431 Definitions

#### 431.1 Firearm

The following definitions apply:

- a. Firearm means any device, including a starter gun, which will, or is designed to, or may readily be converted to, expel a projectile by the action of an explosive; the frame or receiver of any such weapon; any firearm muffler or firearm silencer; or any destructive device; but the term shall not include antique firearms (except antique firearms meeting the description of a handgun or of a firearm capable of being concealed on a person).
- b. Firearm frame or receiver is the part of a firearm which provides housing for the hammer, bolt or breechblock, and firing mechanism, and which is usually threaded at its forward portion to receive the barrel. Frames and receivers usually (but not always) include the firearm serial number and are usually considered to be the regulated component of a firearm.

#### 431.2 Handguns

Pistols, revolvers, and other firearms capable of being concealed on the person (for example, short-barreled shotguns and short-barreled rifles) are defined as handguns. The following definitions apply:

- a. Handgun (including pistols and revolvers) means any firearm which has a short stock, and is designed to be held and fired by the use of a single hand and subject to [431.1](#), or a combination of parts from which a handgun can be assembled.
- b. Other firearms capable of being concealed on the person include, but are not limited to, short-barreled shotguns and short-barreled rifles.
- c. Short-barreled shotgun means a shotgun that has one or more barrels less than 18 inches long. The term short-barreled rifle means a rifle that has one or more barrels that are less than 16 inches long. These definitions include any weapon made from a shotgun or rifle, whether by alteration, modification, or otherwise, if such a weapon as modified has an overall length of less than 26 inches. A short-barreled shotgun or rifle of greater dimension may be regarded as nonmailable when it has characteristics to allow concealment on the person.

#### 431.3 Antique Firearm

Antique firearm means any muzzle loading rifle/shotgun/pistol, which is designed to use black powder or a black powder substitute, and which cannot use fixed ammunition (except those that incorporate a firearm frame or receiver, any firearm which is converted into a muzzle loading weapon, or any muzzle loading weapon which can be readily converted to fire fixed ammunition by replacing the barrel, bolt, breechblock, or any combination

thereof); or any firearm (including those with a matchlock, flintlock, percussion cap, or similar type of ignition system) manufactured on or before 1898, or any replica thereof, if such replica:

- a. Is not designed or redesigned for using rimfire or conventional centerfire fixed ammunition.
- b. Uses rimfire or conventional centerfire fixed ammunition that is no longer manufactured in the United States and is not readily available in the ordinary channels of commercial trade.

#### 431.4 **Rifles and Shotguns**

A rifle is a shoulder weapon having a barrel that is 16 inches or more in length. A shotgun is a shoulder weapon having a barrel that is 18 inches or more in length. Rifles and shotguns have an overall length of 26 inches or greater and cannot be concealed on a person.

#### 431.5 **Federal Firearms Licensee (FFL)**

Federal Firearms licenses are issued by the Bureau of Alcohol, Tobacco, and Firearms (ATF), U.S. Department of the Treasury, under the Gun Control Act of 1968, and are defined as follows:

- a. Federal Firearms Licensee (FFL) manufacturer, dealer, or importer of firearms means a manufacturer, dealer, or importer duly licensed by the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) under Chapter 44, Title 18, United States Code (U.S.C.).
- b. Curio and relic collector means an individual licensed by ATF to transfer or receive only those firearms defined as curios or relics by ATF under Title 27, Code of Federal Regulations (CFR), section 478.11.

#### 431.6 **Air Guns**

Air gun means a gun that fires a projectile by means of compressed air or other gas (including paintball and pellet guns).

### 432 **Mailability**

#### 432.1 **General**

Mailers must comply with the Gun Control Act of 1968, all of the provisions of postal law in 18 U.S.C. 1715, and all other all federal and state regulations and local ordinances affecting the movement of firearms. The following also applies:

- a. The Postal Service may require the mailer to open parcels containing firearms or air guns or give written certification that the weapon is unloaded and not concealable.
- b. Short-barreled rifles or shotguns that can be concealed on the person are nonmailable.
- c. No markings of any kind that indicate the nature of the contents may be placed on the outside wrapper or container of any mailpiece containing firearms.

- d. Mailable matter must be properly and securely packaged within the general packaging requirements in DMM 601.1-7.
- e. Except for shipments between licensed dealers, manufacturers, or importers, all regulated firearms must be mailed using a USPS product or Extra Service that provides tracking and signature capture at delivery.

#### 432.2 Handguns

Handguns and other firearms capable of being concealed on the person are nonmailable unless mailed between the parties listed in this section, after the filing of an affidavit or statement described in [432.22](#) or [432.24](#), and are subject to the following:

- a. Firearms meeting the definition of a handgun under [431.2](#) and the definition of curios or relics under 27 CFR 478.11 may be mailed between curio and relic collectors only when those firearms also meet the definition of an antique firearm under [431.3](#).
- b. Firearms meeting the definition of a handgun under [431.2](#), which are certified by the curator of a municipal, state, or federal museum that exhibits firearms to be curios or relics of museum interest, may be accepted for mailing between governmental museums without regard to the restrictions provided for handguns in [432.21](#) through [432.24](#) and [Exhibit 432.25](#).
- c. Air guns (see 431.6) that do not fall within the definition of firearms under [431.1](#) and are capable of being concealed on a person are mailable, but must include Adult Signature service under DMM 503.8. Mailers must comply with all applicable state and local regulations.
- d. Parts of handguns are mailable, except for handgun frames, receivers or other parts or components regulated under Chapter 44, Title 18, U.S.C.
- e. Mailers are also subject to applicable restrictions by governments of a state, territory, or district.

#### 432.21 Authorized Persons

Subject to [432.22](#), handguns may be mailed by a licensed manufacturer of firearms, a licensed dealer of firearms, a licensed importer of firearms, or an authorized agent of the federal government or the government of a state, territory, or district, *only* when addressed to a person in one of the following categories for use in the person's official duties, *and* upon filing the required affidavit or certificate:

- a. Officers of the Army, Coast Guard, Air Force, Navy, Marine Corps, or Organized Reserve Corps.
- b. Officers of the National Guard or militia of a state, territory, or district.
- c. Officers of the United States or of a state, territory, or district, whose official duty is to serve warrants of arrest or commitment.
- d. USPS employees authorized by the Chief Postal Inspector.
- e. Officers and employees of enforcement agencies of the United States.
- f. Watchmen engaged in guarding the property of the United States, a state, territory, or district.

- g. Purchasing agent or other designated member of agencies employing officers and employees included in [432.21c](#) through [e](#).

#### 432.22 **Affidavit of Addressee**

Any person proposing to mail a handgun under [432.21](#) must file with the Postmaster, at the time of mailing, an affidavit signed by the addressee setting forth that the addressee is qualified to receive the firearm under a particular category of [432.21a](#) through [432.21g](#), and that the firearm is intended for the addressee's official use. The affidavit must also bear a certificate stating that the firearm is for the official duty use of the addressee, signed by one of the following, as appropriate:

- a. For officers of Armed Forces, by the commanding officer.
- b. For officers and employees of enforcement agencies, by the head of the agency employing the addressee to perform the official duty with which the firearm is to be used.
- c. For watchmen, by the chief clerk of the department, bureau, or independent branch of the government of the United States, the state, the territory, or the district by which the watchman is employed.
- d. For the purchasing agent or other designated member of enforcement agencies, by the head of such agency, that the firearm is to be used by an officer or employee included in [432.21c](#) through [432.21e](#).

#### 432.23 **Manufacturers, Dealers, and Importers**

Handguns may also be mailed between licensed manufacturers of firearms, licensed dealers of firearms, and licensed importers of firearms in customary trade shipments, or for repairing or replacing parts.

#### 432.24 **Certificate of Manufacturers, Dealers, and Importers**

A federal firearms licensee manufacturer, dealer, or importer need not file the affidavit under [432.22](#), but must file with the Postmaster a statement on PS Form 1508, *Statement by Shipper of Firearms*, signed by the mailer that he or she is a licensed manufacturer, dealer, or importer of firearms. The mailer must also state that the parcels containing handguns, or parts and components of handguns under [432.2d](#), are being mailed in customary trade shipments or contain such articles for repairing or replacing parts, and that to the best of their knowledge the addressees are licensed manufacturers, dealers, or importers of firearms. Registered Mail service is recommended. Postmasters may forward an unsatisfactory mailer statement to the PCSC for a ruling.

#### 432.25 **Federal and Other Law Enforcement Agencies**

Handguns may be mailed without regard to [432.21](#) through [432.24](#) if the item is:

- a. Addressed to a scientific laboratory or crime detection bureau of any federal, state, or local law enforcement agency whose members are authorized to serve warrants of arrest or commitment.



- b. Sent by an authorized agent of the federal government as an official shipment to any qualified addressee in [432.21](#), or to a licensed manufacturer, dealer, or importer of firearms, or to a federal agency.

Exhibit 432.25

**Mailability Requirements for Handguns**

<b>Addressee</b>	<b>Affidavit or Certificate Requirements</b>
Officer of Air Force, Army, Coast Guard, Marine Corps, Navy, or Organized Reserve Corps.	Affidavit signed by the addressee and certificate signed by the commanding officer.
Officer of National Guard or militia of a state, territory, or district.	Affidavit signed by the addressee and certificate signed by the commanding officer.
Officer of the federal government or a state, district, or territory whose official duty is to serve warrants of arrest or commitment.*	Affidavit signed by the addressee and certificate signed by the head of the agency employing the addressee.
Postal Service employees specifically authorized by the Chief Postal Inspector.*	Affidavit signed by the addressee and certificate signed by the head of the agency employing the addressee.
Officer or employee of a U.S. enforcement agency.*	Affidavit signed by the addressee and certificate signed by the head of the agency employing the addressee.
Purchasing agent or other designated member of an enforcement agency employing officers and personnel included in (*) above.	Affidavit signed by the addressee and certificate signed by the head of agency stating the firearm is to be used by an officer or employee included in addressee column marked with an (*).
Watchman engaged in guarding federal, state, district, or territory property.	Affidavit signed by the addressee and certificate signed by chief clerk of department, bureau, or independent branch of the government agency employing the addressee.
Licensed manufacturers, importers, and dealers of firearms.	Signed statement on PS Form 1508, <i>Statement by Shipper of Firearms</i> . The mailer must be a licensed manufacturer, importer, or dealer mailing to another licensed manufacturer, importer, or firearms dealer.

**432.3 Rifles and Shotguns**

Except under [431.2](#), unloaded rifles and shotguns are mailable. Mailers must comply with the rules and regulations under 27 CFR, Part 478, as well as state and local laws. The mailer may be required by the USPS to establish, by opening the parcel or by written certification, that the rifle or shotgun is unloaded and not ineligible for mailing. The following conditions also apply:

- a. Subject to state, territory, or district regulations, rifles and shotguns may be mailed without restriction when intended for delivery within the same state of mailing. These items must:
- (1) Bear a "Return Service Requested" endorsement.
  - (2) Be mailed using a class of mail, product, or Extra Service that provides tracking and signature capture at delivery.
- b. A rifle or shotgun owned by a non-FFL may be mailed outside the owner's state of residence by the owner to himself or herself, in care of another person in the other state where he or she intends to hunt or engage in any other lawful activity. These mailpieces must:
- (1) Be addressed to the owner.
  - (2) Include the "in the care of" endorsement immediately preceding the name of the applicable temporary custodian.

- (3) Be opened by the rifle or shotgun owner only.
- (4) Be mailed using a class of mail, product, or Extra Service that provides tracking and signature capture at delivery.
- c. Mailing of rifles and shotguns between licensed FFL dealers, manufacturers, or importers are not restricted. The Postal Service recommends that these items be mailed using a class of mail, product, or Extra Service that provides tracking and signature capture at delivery.
- d. Rifles and shotguns may be mailed by a non-FFL owner domestically to a FFL dealer, manufacturer, or importer in any state. These items must be mailed using a class of mail, product, or Extra Service that provides tracking and signature capture at delivery.
- e. Except as described in [432.3a](#), licensed curio and relic collectors may mail firearms meeting the definition of curios or relics under 27 CFR 478.11 domestically to licensed FFL curio and relic collectors in any state. These items must be mailed using a class of mail, product, or Extra Service that provides tracking and signature capture at delivery.
- f. Firearms meeting the definition of a rifle or shotgun under [431.4](#) which are certified by the curator of a municipal, state, or federal museum, which exhibits firearms to be curios or relics of museum interest, may be accepted for mailing without restriction when mailed between governmental museums.
- g. Air guns (see [431.6](#)) that do not fall within the definition of firearms under [431.1a](#) are mailable. A shipment containing an air gun with a muzzle velocity of 400 or more feet per second (fps) must include an adult signature service under DMM 503.8. Mailers must additionally comply with all applicable state and local regulations.

#### 432.4 **Indemnity Claims**

When indemnity claims pertaining to regulated firearms are filed for loss or damage to contents, claims will only be paid for complete loss under either of the following conditions:

- a. The regulated firearm has been lost, or
- b. When the mailer has provided reasonable estimates of the firearm's value and of repair cost from a reputable dealer, and the repair cost exceeds the declared and/or actual value of the firearm at the time of mailing.

#### 433 **Legal Opinions on Mailing Firearms**

Postmasters are not authorized to give opinions on the legality of any shipment of firearms. Mailers requesting additional information should be referred to the ATF. Further advice and ATF contact information is available at <http://atf.gov/firearms/faq/licensing.html>.

**434 Replica or Inert Explosive Devices**

Replica or inert explosive devices that are not dangerous, but that bear a realistic appearance to explosive devices such as simulated grenades, are permitted in the mail when *all* of the following conditions are met:

- a. The package is presented by the mailer at a retail counter.
- b. Registered Mail service is used. (Registered Mail service is only available for items mailed as First-Class Mail or Priority Mail.)
- c. The address side of the package is labeled with “REPLICA EXPLOSIVE” using at least 20-point type or letters at least 1/4-inch high.

**435 Nonmailable Firearms Found in the Mails**

Nonmailable firearms discovered in the mailstream must be immediately reported to the Inspection Service in accordance with POM 139.117.

## 44 Knives and Sharp Instruments

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**441 Definitions****441.1 General**

Sharp instruments include all sharp-pointed or sharp-edged implements such as knives, tools, ice picks, razor blades, stilettos, or similar devices. When uncertain about the mailability of a sharp instrument or a switchblade knife, a ruling may be requested from the local postmaster (see [215.3](#)).

**441.2 Switchblade Knife**

A switchblade knife has a blade that opens automatically by hand pressure applied to a button or other device in the handle, or by operation of inertia, gravity, or both.

**442 Mailability**

A switchblade knife, as defined in [441.2](#), is mailable only to the following categories of addressees:

- a. Certain designated supply or procurement officers and employees ordering, procuring, or purchasing them for use in connection with their respective governments or organizations, such as:
  - (1) Civilian or armed forces supply or procurement officers, and employees of the federal government.
  - (2) Supply or procurement officers of the National Guard, the Air National Guard, or the militia of a state, territory, or the District of Columbia.
  - (3) Supply or procurement officers or employees of the municipal government of the District of Columbia, or of the government of any state or territory, or of any county, city, or other political subdivision of a state or territory.

**Note:** Addressee Identification. Before delivering a shipment (or parcel) that contains an article or articles described in [441.2](#), a USPS employee may require that the recipient identify himself or herself as being in one of the categories in [442a](#).

- b. Manufacturers or bona fide dealers of such knives in connection with a shipment made to an address in one of the above categories.

## 443 Packaging and Marking

### 443.1 General

All sharp-pointed or sharp-edged instruments such as knives, tools, ice picks, razor blades, etc., that are otherwise mailable, must be securely packaged in a strong container. An inner and outer packaging container is recommended. Sufficient cushioning material must be used to protect the sharp points and edges from cutting through the outer packaging during normal Postal Service handling.

### 443.2 Marking

No marking of any kind that indicates the nature of the contents may be placed on the outside of any mailpiece containing a switchblade knife.

## 444 Nonmailable Knives in the Mails

Nonmailable knives or sharp instruments discovered in the mailstream must be reported to the Inspection Service in accordance with POM 139.117.

# 45 Other Restricted Materials

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## 451 Liquids, Powders, and Odor-Producing Materials

### 451.1 Definitions

A *liquid* is any substance that flows readily and assumes the form of the container, but retains an independent volume. For the purposes of mailability, a liquid may be a cream or paste or any other nonhazardous substance (except a gas) that may liquify under existing conditions.

An *odor* is any matter that is a source of an obnoxious odor.

### 451.2 Mailability

- a. Liquids and powders that are nonhazardous (i.e., not regulated as hazardous materials) are mailable provided they are properly packaged as specified in [451.3](#).
- b. Any matter that is a source of an obnoxious odor is nonmailable.

### 451.21 Restrictions

Liquids and powders that are corrosive, explosive, flammable, toxic, or otherwise hazardous are subject to the mailing conditions for hazardous materials in Chapter [3](#), as applicable.

**451.22 Cremated Remains**

The following applies when mailing cremated remains (ashes):

- a. *Domestic:* Permitted for cremated human or animal remains only when sent via Priority Mail Express service. The identity of the contents should be marked “cremated remains” (Label 139 preferred) on the address side of the mailpiece. The item must be packaged as required in [451.3b](#) and Packaging Instruction 10C.
- b. *International:* When permitted by the destination country, cremated remains may only be sent via Priority Mail Express International service. Mailers must verify that the destination country accepts Priority Mail Express International and cremated remains prior to mailing. The contents must be indicated on the applicable customs declaration form. Label 139, Cremated Remains, may optionally be applied to the address side of the mailpiece. The item must be packaged as required in [451.3b](#) and Packaging Instruction 10C.

**451.3 Packaging and Marking**

The following conditions apply:

- a. *Liquids.* Nonhazardous liquids, creams, and pastes (particularly those in 1-gallon paint cans with only friction-top closures) are often a source of damage to other mail and postal equipment. The proper packaging of liquids is critical to ensuring the integrity of the mailpiece during handling. All liquids are subject to the general packaging requirements in DMM 601.3.4 and the following:
  - (1) Containers having friction-top closures are not acceptable by themselves. Such containers must be packed within a strong and securely sealed outer packaging.
  - (2) Screw caps with a minimum of one and one-half turns, soldering clips, or other effective means must be used to ensure a secure closure.
  - (3) Glass and other breakable containers more than 4 fluid ounces and any containers over 32 fluid ounces must be cushioned within a sealed, waterproof container such as a can or a plastic bag, and must be packed within a strong and securely sealed outer packaging.
  - (4) Steel pails and drums with carrying handles and positive closures (e.g., locking rings or recessed spouts under screw-cap closures) may be accepted without additional packaging.
- b. *Powders and Cremated Remains.* Dry materials that could cause damage, discomfort, destruction, or soiling upon escape (leakage) must be packed in siftproof containers or other containers that are sealed in durable siftproof outer containers.

## 452 **Motor Vehicle Master Keys and Locksmithing Devices**

### 452.1 **Definitions**

#### 452.11 **Motor Vehicle Master Keys**

*A motor vehicle master key* is any of the following:

- a. Motor vehicle master keys, as defined in [452.11](#), and any advertisement for the sale of such items, are nonmailable unless sent to any of the following categories of addressees:
- b. The key (or an exact duplicate) furnished with a replacement lock.
- c. Any key or manipulation device designed to operate two or more motor vehicle ignition, door, or trunk locks of different combinations, including any pattern, impression, or mold from which a master key or manipulation device can be made (18 U.S.C. 1716 and 39 U.S.C. 3002).

#### 452.12 **Locksmithing Devices**

*A locksmithing device* is any of the following:

- a. A device or tool (other than a key) designed to manipulate the tumblers in a lock into the unlocked position through the keyway of such lock.
- b. A device or tool (other than a key or a device or tool under [452.12a](#)) designed for bypassing a lock or similar security device, or for opening it by a method normally not used by consumers to open such locks or security devices.
- c. A device or tool designed for making an impression of a key or similar security device in order to duplicate such key or device.

### 452.2 **Mailability**

The following conditions apply:

- a. Motor vehicle master keys, as defined in [452.11](#), and any advertisement for the sale of such items, are nonmailable unless sent to any of the following categories of addressees:
  - (1) Lock manufacturers.
  - (2) Professional locksmiths.
  - (3) Motor vehicle manufacturers or dealers.
  - (4) Federal, state, or local government agencies.
- b. Locksmithing devices, as defined in [452.11](#), are nonmailable except when sent to any of the following categories of addressees:
  - (1) Lock manufacturers or distributors.
  - (2) Bona fide locksmiths.
  - (3) Bona fide reposseors.
  - (4) Motor vehicle manufacturers or dealers.
  - (5) Bona fide automotive repair shops or businesses.

**452.3 Packaging and Marking**

No marking of any kind that indicates the nature of the contents may be placed on the outer wrapper or packaging of any mailpiece containing motor vehicle master keys or locksmithing devices. Mailable matter must be properly and securely packaged within the general requirements in DMM 601.1-7.

**452.4 Nonmailable Matter Found in the Mails**

All nonmailable motor vehicle master keys and locksmithing devices discovered in the mailstream must be reported in accordance with POM 139.117.

**453 Controlled Substances and Drugs****453.1 Definitions****453.11 Controlled Substances**

A controlled substance is any anabolic steroid, narcotic, hallucinogenic, stimulant, or depressant drug identified in Schedules I through V of the Controlled Substances Act in 21 U.S.C. 801 and the implementing regulations in 21 CFR 1300.

Controlled substances include poisons, compositions containing poisons, poisonous drugs and medicines, or materials that may kill or injure within the intent and meaning of 18 U.S.C. 1716.

**453.12 Drugs**

The term “drug” refers to:

- a. *Prescription drugs* which are licensed medicines that require a written order by a medical doctor or pharmacist before they can be obtained. Certain poisonous (toxic) drugs and medicines may be subject to the requirements for Division 6.1 materials in Chapter [3](#).
- b. *Over-the-counter drugs* which are medicines that can be obtained without a prescription. This includes patent medicines and related items such as aspirin, antiseptics, cold remedies, diet pills, and cosmetic medicines that do not contain a controlled substance and are not poisonous drugs or medicines.

**453.13 Drug Paraphernalia**

The term “drug paraphernalia” refers to any equipment, product, or material primarily intended or designed for use in manufacturing, compounding, converting, concealing, producing, processing, preparing, injecting, ingesting, inhaling, or otherwise introducing into the human body a controlled substance.

Examples of drug paraphernalia are items primarily intended or designed for use in ingesting, inhaling, or otherwise introducing marijuana, cocaine, hashish, hashish oil, PCP, or amphetamines into the human body, such as metal, wooden, acrylic, glass, stone, plastic, or ceramic pipes with or without screens, permanent screens, hashish heads, or punctured metal bowls; water pipes, chamber pipes, carburetor pipes, electric pipes, ice pipes or

chillers, and air-driven pipes; carburetion tubes and devices; smoking and carburetion masks; roach clips (i.e., objects used to hold burning material that is too small or short to be held in the hand); miniature spoons with level capacities of 1/10 cubic centimeter or less; chillums; bongs; wired cigarette papers; and cocaine freebase kits.

#### 453.131 **Determination**

In determining whether an item constitutes drug paraphernalia, in addition to all other logically relevant factors, these factors may be considered:

- a. Oral or written instructions or other descriptive materials provided with the item that explain or depict its use.
- b. National and local advertising on its use.
- c. The manner in which the item is displayed for sale.
- d. Whether the owner, or anyone in control of the item, is a legitimate supplier of like or related items to the community, such as a licensed distributor or dealer of tobacco products.
- e. Direct or circumstantial evidence of the ratio of sales of the items to the total sales of the business enterprise.
- f. The existence and scope of legitimate uses of the item in the community.
- g. Expert testimony on its use.

#### 453.132 **Exceptions**

The standards in [453.13](#) and [453.131](#) apply neither to any person authorized by local, state, or federal law to manufacture, possess, or distribute items described in [453.13](#) and [453.131](#); nor to any item that, in the normal lawful course of business, is sold through the mail and traditionally intended for use with tobacco products, including any pipe, paper, or accessory.

#### 453.2 **Mailer Responsibility**

The mailer is fully responsible for the following:

- a. Ensuring compliance not only with Postal Service regulations, but also with all other federal laws and regulations, such as the Poison Prevention Packaging Act and the Consumer Product Safety Act, and with all local laws and regulations governing distribution of unsolicited samples.
- b. Being aware of other characteristics of an article or substance, such as its flammable, toxicity, or corrosive characteristics that may affect mailability.

#### 453.3 **Mailability**

##### 453.31 **Controlled Substances**

If the distribution of a controlled substance is unlawful under 21 U.S.C. 801–971 or any implementing regulation in 21 CFR Chapter II, then the mailing of the substance is also unlawful under 18 U.S.C. 1716.

Controlled substances and drugs that contain controlled substances are acceptable in the domestic mail only under the following conditions:

- a. For mailable controlled substances, generally both the mailer and addressee must meet either of the following conditions:



- (1) Be registered with the Drug Enforcement Administration (DEA).
- (2) Be exempted from DEA registration, such as military, civil defense, and law enforcement personnel, in performing official duties.
- b. For mail-back programs conducted in accordance with 453.7.
- c. For prescription medicines containing mailable narcotic drugs (controlled substances), when mailed by drug manufacturers or their registered agents, pharmacies, medical practitioners, or other authorized dispensers as permitted by 21 CFR 1307.11 or in compliance with any regulation of the Food and Drug Administration or other applicable law.

**453.32 Drugs (Other Than Controlled Substances)**

All prescription, nonprescription, and patent medicines and related items, including solicited and unsolicited samples of such items, that are not considered to be controlled substances under [453.11](#), are permitted to be mailed as follows:

- a. For prescription medicines containing a nonnarcotic drug(s), only a pharmacist or medical practitioner, etc., who dispenses the medicine may mail such substances to the patients under their care.
- b. For nonprescription medicines, the mailer must meet all applicable federal, state, or local laws that may apply (such as the Poison Prevention Packaging Act of 1970 in 15 U.S.C. 1471(2) and the Consumer Product Safety Commission requirements in 16 CFR 1700).

**453.33 Poisonous Drugs and Medicines**

Poisonous drugs and medicines may be sent only from the manufacturer or dealer to licensed physicians, surgeons, dentists, pharmacists, druggists, cosmetologists, barbers, and veterinarians (18 U.S.C. 1716). Some poisonous drugs are subject to the requirements for Division 6.1 materials in Chapter [3](#).

**453.34 Small Amounts for Law Enforcement Purposes**

Nothing in this section precludes the mailing of small amounts of unknown matter suspected of containing controlled substances to a federal, state, or local law enforcement agency for law enforcement purposes. Such mailings must comply with the applicable packaging requirements in [453.4](#).

**453.35 Drug Paraphernalia**

If the possession of any type of drug paraphernalia is unlawful under the Controlled Substances Act, the article also is nonmailable (see [453.13](#)).

**453.36 Return of Prescription Drugs**

Mailers may use merchandise return service to return prescription drugs for purposes of drug recalls; voluntary manufacturer withdrawals; and dispensing errors such as incorrect drug, dosage, or strength, as permitted by 21 CFR 1307.11 or other applicable law. The mailpiece must be addressed to the manufacturer or its registered agent. Manufacturers or their registered agents must furnish mailing containers to their customers for the purpose of mailing back the identified drugs. Manufacturers or their

registered agents must use merchandise return service (see DMM 505.3.0) with First-Class Mail or Priority Mail for these mailpieces. Manufacturers or their agents continue to be responsible for maintaining records in compliance with any regulation of the Drug Enforcement Administration and/or the Food and Drug Administration.

#### 453.4 **Packaging and Marking**

Securely package all mailable drugs so that the contents cannot become damaged or dislodged during mailing. The following conditions apply:

- a. *Controlled substances.* The inner packaging of any mailpiece containing a mailable controlled substance must be marked and sealed in accordance with the applicable provisions and regulations of the Controlled Substances Act (see [453.11](#)). The inner packaging is also labeled to show the prescription number and the name and address of the pharmacy, practitioner, or other person dispensing the prescription and must be securely held within a plain outer wrapper or packaging. No markings of any kind that indicate the nature of the contents may appear on the outside of the mailpiece. The general packaging requirements in DMM 601.1-7 also apply.
- b. *Drugs and Medicines.* Drugs and Medicines. Except for promotional samples as described in [453.4c](#), each mailpiece containing a mailable drug or medicine (that does not contain a controlled substance) must be held in a plain outer wrapper or packaging.
- c. *Promotional Samples.* A promotional sample package containing a mailable over the counter, non-controlled, non-prescription drug or medicine may bear a brief description of the sample as well as the marking “Sample Enclosed” on the outside packaging of the mailpiece.

#### 453.5 **Rulings**

Rulings must be based on the chemical composition of a product; the composition of commercial products is ever-changing-e.g., the packaging declares a “new and improved formula.”

Requests for rulings must include the trade name of the product, as well as information regarding any known hazardous ingredients. A generic description of the item (e.g., “tranquilizers”) is not sufficient. Requests for rulings are directed to the local postmaster (see [215.3](#)).

#### 453.6 **Nonmailable Matter Found in the Mails**

Nonmailable controlled substances, drugs, and drug paraphernalia discovered in the mailstream must be immediately reported in accordance with POM 139.117.

#### 453.7 **Mail-back Programs**

Effective October 9, 2014, the U.S. Department of Justice, Drug Enforcement Administration (DEA), published the *Federal Register* final rule titled “Disposal of Controlled Substances” (79 CFR 53519-53570), where it provided new regulations specific to the collection and disposal of controlled substances. This regulation authorized the use of DEA authorized mail-back collectors (mailers) or law enforcement entities to conduct mail-back programs. Though

these programs authorize ultimate users who have lawfully obtained unused or unwanted pharmaceuticals to transfer controlled substance pharmaceuticals to authorized mail-back collectors for the purpose of disposal, USPS authorization to conduct mail-back programs is subject to the following conditions:

a. **General**

DEA registrants wishing to become controlled substances “mail-back collectors” must obtain authorization from the DEA prior to conducting a mail-back program, and must have the ability to destroy the returned substances onsite. DEA-registered mail-back collectors must also obtain an authorization from the USPS manager, Product Classification prior to the implementation of any mail-back program. Mail-back programs may only be authorized within the customs territory of the United States (the 50 States, the District of Columbia, and Puerto Rico).

b. **Packaging**

Authorized DEA registrants participating in a mail-back program must provide users with ready-made packaging. All packaging used in mail-back programs must:

- (1) Be nondescript and must not include any markings or other information that might indicate that the package contains controlled substances.
- (2) Be water- and spill-proof, tamper-evident, tear-resistant, and sealable.
- (3) Be preaddressed for delivery to the authorized mail-back collector’s registered address or the participating law enforcement’s physical address.
- (4) Have postage pre-paid using one of the following products:
  - (a) Priority Mail Return Service,
  - (b) First-Class Package Return Service, or
  - (c) Business Reply Mail parcels.
- (5) Be accompanied by instructions for the user that describes the process for mailing back the package, and other required information.

c. **Labels**

Prior to requesting authorization, applicants (mailers) must:

- (1) Implement a process for generating labels including unique Intelligent Mail package barcodes, prepared in accordance with DMM 708.5.1, Publication 199, and the *Parcel Labeling Guide*. Publication 199 and the *Parcel Labeling Guide* are available on RIBBS at <http://ribbs.usps.gov>.
- (2) Applicants must obtain written approval for their labels and barcode quality from the National Customer Support Center (NCSC) prior to submitting their request for authorization to conduct a mail-back program.

**d. Authorization**

Mailers wishing to conduct a mail-back program must submit a letter of request to the manager, Product Classification (see DMM 608.8.1 for address). Requests must include:

- (1) The registrant's name, address, and DEA certificate of registration;
- (2) The authorized mail-back collector's DEA-registered location;
- (3) An irrevocable \$50,000 surety bond or letter of credit as proof of sufficient financial responsibility to cover disposal costs if the vendor ceases doing business to cover destruction costs of residual mail-back envelopes that are in Postal Service possession. The surety bond or letter of credit must be issued in the name of the vendor seeking the authorization and must name the Postal Service as the beneficiary or obligee;
- (4) A letter of approval from the NCSC for each label type used to conduct their mail-back program; and
- (5) Sample mailpieces and labels intended for use with their mail-back program.

**e. Discontinuation**

In the event an authorized mail-back collector terminates, transfers, or discontinues business, that collector must provide the manager, Product Classification with the name, registered address, and registration number of the mail-back collector that will receive the remaining mail-back packages, in accordance with DEA regulations.

**453.8 Undeliverable Medicines**

The disposition of undeliverable mailpieces containing drugs and medicines is governed by POM 691.52

**454 Unsolicited Promotional Samples****454.1 Definition**

The term "unsolicited promotional sample" refers to any article of merchandise that is sent through the mail free of charge and that is unrequested by the addressee. This definition includes items such as patent medicines, cosmetics, laundry products, and razors.

**454.2 Mailability****454.21 General**

The fact that an item is unsolicited by the addressee generally does not affect its mailability unless the article is composed of hazardous materials or restricted matter. Hazardous materials are subject to the mailing conditions in Chapter 3 of this publication, as applicable. Unsolicited items that are not hazardous materials may be subject to additional packaging requirements based on the content.

**454.22 Nonmailable Promotional Samples****454.221 Abortive and Contraceptive Devices or Materials**

Any article or instrument designed, adapted, or intended for producing abortion is nonmailable (18 U.S.C. 1461).

Unsolicited samples of an article or instrument designed, adapted, or intended for preventing conception is nonmailable, except when mailed to a manufacturer, dealer, licensed physician or surgeon, nurse, pharmacist/druggist, or a hospital or clinic (39 U.S.C. 3001 and 18 U.S.C. 1461).

**454.222 Restricted or Improperly Prepared Items**

Other types of unsolicited samples may be nonmailable for other reasons, including the following:

- a. The sample is an otherwise restricted item such as a toxic substance or poison subject to the hazardous materials requirements in Chapter [3](#).
- b. The sample is improperly prepared for mailing, such as an inadequately packaged razor blade or a household substance (39 U.S.C. 3001(f)), i.e., any matter unsolicited by the addressee, that contains a substance as defined by section 2 of the Poison Prevention Packaging Act of 1970 (15 U.S.C. 1471(2)), that does not comply with the child-resistant packaging established for that substance by the Consumer Product Safety Commission (16 CFR 1700).
- c. The sample is a pesticide (18 U.S.C. 1716), i.e., any matter that contains a pesticide as defined by section 2 of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136(u)), that does not comply with child-resistant packaging standards established by the Environmental Protection Agency applicable to that particular matter (40 CFR 157) and meets the applicable standards in 10.0.
- d. A fragrance advertising sample (39 U.S.C. 3001(g)), i.e., any matter normally acceptable in the mail but containing a fragrance advertising sample, that does not comply with the requirements to be sealed, wrapped, treated, or otherwise prepared in a manner reasonably designed to prevent individuals from being unknowingly or involuntarily exposed to the sample. A sample meets this requirement if it uses paper stocks with a maximum porosity of 20 Sheffield units or 172 Gurley-Hill units treated exclusively with microencapsulated oils, and if the sample is produced so that it cannot be activated except by opening a glued flap or binder or by removing an overlying ply of paper.
- e. The sample is an odd-shaped item in a letter-size envelope that is prohibited under DMM 601.3.3.

**454.3 Certificate Compliance**

A mailer, who presents matter that is generally permitted in the mail, but for compliance with the specified packaging and preparation requirements, may submit an accompanying written statement certifying that the matter is packaged or prepared under the applicable federal laws and postal standards. The certifying statement may be made on the mailer's letterhead, on a postage statement, or as a notice on the exterior of each item presented for mailing.

**454.4 Customer Objection to Unsolicited Matter**

Customers who object to receiving unsolicited matter should be advised that the Postal Service must accept any lawfully mailable matter that is properly prepared for mailing and bears appropriate postage. These customers may be directed to contact the mailer or manufacturer to have their names removed from the mailing list. Customers also may be advised they may refuse any piece of mail, either at the time it is offered for delivery or after it is delivered (if unopened), as provided in DMM 508.1 and POM 611.

**454.5 Rulings**

Rulings sometimes can be provided based on the trade name of an item, but that is not always possible. A generic description, such as “razor blade,” “cleaner,” “aerosol product,” or “drug,” is insufficient for determining mailability. To request a ruling on the mailability of restricted matter, furnish the information in [215.3](#) to the local postmaster.

If the matter for which the ruling is being requested has the physical characteristics of a toxic substance, flammable liquid, compressed gas, or other hazardous material, a ruling should be requested under the conditions in [215.2](#).

**455 Building Construction Material****455.1 Definition**

The term “building construction material” refers to any material which is used for construction purposes. Naturally occurring substances, such as clay, rocks, sand, and wood, fit into this category and some of these substances could be man-made products using synthetics.

**455.2 Mailability**

Building construction material is not permitted in the mail if the acceptance and processing is likely to harm or injure USPS employees, mail, or equipment. Factors considered include, but are not limited to, whether the material may pose potential storage problems at the postal facilities that may process the material; whether the volume of material may impede the flow of mail in USPS transportation or mail distribution systems; whether the volume of material may lead to security problems; and whether processing the material may create safety hazards for USPS employees.

**455.3 Rulings**

Rulings must be based on the composition of the product. Requests for rulings must include the trade name of the product, as well as information regarding any known hazardous ingredients. A generic description of the item is not sufficient. Requests for rulings are directed to the local Postmaster (see [215.3](#)).

**455.4 Nonmailable Matter Found in the Mails**

Nonmailable building construction material discovered in the mailstream must be immediately reported in accordance with POM 139.117.

## 46 Animal-Fighting Ventures

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### 461 Definitions

#### 461.1 Animal

For the purposes of participating in an animal-fighting venture, the term “animal” refers to any live bird, dog, or other mammal (except human).

#### 461.2 Animal-Fighting Venture

The term “animal-fighting venture” means any event, in or affecting interstate or foreign commerce, that involves a fight conducted or to be conducted between at least two animals for purposes of sport, wagering, or entertainment (excluding any activity whose primary purpose involves using one or more animals in hunting other animals).

#### 461.3 Animal-Fighting Accessory

The term “animal-fighting accessory” refers to a knife, gaff, or other sharp instrument attached to or designated or intended to be attached to the leg of a bird in an animal-fighting venture.

#### 461.4 Animal-Fighting Matter

Animal-fighting matter refers to written, printed, or graphic matter (e.g., advertisements or other commercial speech) promoting or furthering an animal-fighting venture.

### 462 Mailability

- a. The mailing of a live animal for the purpose of participating in an animal-fighting venture, as defined in [461.2](#), is prohibited regardless of whether such venture is permitted under a United States state, district, commonwealth, territory, or possession in which it is conducted. Violators can be subject to criminal penalties under 7 U.S.C. 2156 and 18 U.S.C. 49.
- b. The mailing of animal-fighting accessories as defined in [461.3](#) is prohibited. Violators can be subject to criminal penalties under 7 U.S.C. 2156.
- c. The mailing of animal-fighting matter promoting or furthering an animal-fighting venture conducted in any state, except for a venture involving live birds permitted under the laws of the state in which they are conducted, is nonmailable. See DMM 601.7.5.7.

## 47 Cigarettes and Smokeless Tobacco

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### 471 Definitions

#### 471.1 Cigarette

Any roll of tobacco wrapped in paper or in any substance not containing tobacco, and any roll of tobacco wrapped in any substance containing tobacco, which because of its appearance, the type of tobacco used in the filler, or its packaging and labeling, is likely to be offered to, or purchased by, consumers as a cigarette. The term cigarette includes roll-your-own-tobacco and excludes cigars.

#### 471.2 Smokeless Tobacco

Any finely cut, ground, powdered, or leaf tobacco that is intended to be placed in the oral or nasal cavity or otherwise consumed without being combusted.

#### 471.3 Cigar

Any roll of tobacco wrapped in leaf tobacco or in any substance containing tobacco, unless, because of its appearance, the type of tobacco used in the filler, or its packaging and labeling, is likely to be offered to, or purchased by, consumers as a cigarette.

#### 471.4 Roll-your-own tobacco

Any tobacco, which because of its appearance, type, packaging, or labeling, is suitable for use and likely to be offered to, or purchased by, consumers as tobacco for making cigarettes or cigars, or for use as wrappers thereof.

#### 471.5 Consumer Testing

Testing limited to formal data collection and analysis for the specific purpose of evaluating the product for quality assurance and benchmarking purposes of cigarette brands or sub-brands among existing adult smokers.

#### 471.6 State

Any of the 50 states of the United States, the District of Columbia, and any commonwealth, territory, or possession of the United States.

### 472 Mailability

#### 472.1 General

Except as provided in [472.2](#), all cigarettes (including roll-your-own tobacco) and smokeless tobacco are nonmailable and shall not be deposited in or carried through the Postal Service mailstream. Nonmailable cigarettes and smokeless tobacco deposited in the mail are subject to seizure and forfeiture. Any nonmailable cigarettes and smokeless tobacco products seized and forfeited shall be destroyed or retained by the federal government for the detection or prosecution of crimes or related investigations and then destroyed. Senders of nonmailable cigarettes and smokeless tobacco may



be subject to seizure and forfeiture of assets, criminal fines, imprisonment, and civil penalties. The Postal Service will not accept for delivery or transmit any package that it knows, or has reasonable cause to believe, contains nonmailable cigarettes or smokeless tobacco. If the Postal Service reasonably suspects that a mailer is tendering nonmailable cigarettes or smokeless tobacco, then the mailer bears the burden of proof in establishing eligibility to mail. The Postal Service has reasonable cause not to accept for delivery or transmit a package based on:

- a. A statement on a publicly available website, or an advertisement, by any person that the person will mail matter which is nonmailable under this section in return for payment; or
- b. The fact that the mailer or other person on whose behalf a mailing is being made is on the U.S. Attorney General's List of Unregistered or Noncompliant Delivery Sellers.

#### 472.2 **Mailability Exceptions**

Cigarettes and smokeless tobacco are mailable if one of the conditions in [472.21](#) through [472.26](#) is met. These exceptions only apply to domestic mail under DMM 608.2.1, including mail sent from the United States to Army Post Office (APO), Fleet Post Office (FPO), or Diplomatic Post Office (DPO) addresses to which tobacco is not restricted (see DMM 703.2.3.1), with the exception that delivery procedures for overseas military mail under the certain individuals exception in [472.23](#) may vary as practicable. These exceptions do not apply to the following:

- a. Mail treated as domestic under DMM 608.2.2.
- b. International mail as defined in DMM 608.2.3.
- c. Mail presented at APO, FPO, or DPO installations destined to addresses in the United States.

#### 472.21 **Mailing within Noncontiguous States**

Applicable mailings may not be tendered through Pickup on Demand or Package Pickup services. Intra-Alaskan and intra-Hawaiian shipments of cigarettes or smokeless tobacco are mailable, provided that such mailings:

- a. Are presented in a face-to-face transaction with a Postal Service employee within the state;
- b. Destinate in the same state of origin;
- c. Bear a valid complete return address that is within the state of origin; and,
- d. Are marked with the following exterior marking on the address side of the mailpiece: "INTRASTATE SHIPMENT OF CIGARETTES OR SMOKELESS TOBACCO."

#### 472.22 **Exception for Business/Regulatory Purposes**

Eligibility to mail and to receive mail under the business/regulatory purposes exception is limited to federal and state government agencies and legally operating businesses that have all applicable state and federal government

licenses or permits and are engaged in tobacco product manufacturing, distribution, wholesale, export, import, testing, investigation, or research under the conditions in [472.221](#) to [472.223](#).

**472.221 Application**

Each customer seeking to mail cigarettes or smokeless tobacco under the business/regulatory purposes exception must complete an application letter requesting to mail under the business/regulatory purposes exception.

- a. The applicant must furnish:
  - (1) Information about its legal status, any applicable licenses, and authority under which it operates;
  - (2) Information about the legal status, any applicable licenses, and operational authority for all entities to which the applicant's mailings under this exception will be addressed; and
  - (3) All locations where mail containing cigarettes and smokeless tobacco will be presented.
- b. The applicant must establish its and its recipients' eligibility as legally operating businesses that have all applicable state and federal government licenses or permits and are engaged in tobacco product manufacturing, distribution, wholesale, export, import, testing, investigation, or research; or, in the case of mailings for regulatory purposes, as a federal or state agency. Only those shipments containing otherwise nonmailable tobacco addressed to recipients on the customer's list of designated recipients are eligible for the business/regulatory purposes exception.
- c. Applications must be mailed to the manager, Pricing and Classification Service Center (PCSC). See [213](#) for address. The manager, PCSC, issues the initial agency decision of a determination of eligibility to mail under the business/regulatory purposes exception. A number is assigned to each letter of eligibility.
- d. The applicant must update the information in its application in a timely manner, as necessary, prior to conducting any mailing for as long as it continues to mail under the business/regulatory exception.
- e. Customers whose applications or amendments to existing applications are denied in whole or in part may appeal to the manager, Product Classification (see [214](#)).
- f. Eligibility to mail under the business/regulatory purposes exception may be revoked by the manager, PCSC, in the event of failure to comply with any applicable rules and regulations. A customer may appeal an adverse initial decision to the manager, Product Classification (see [214](#) for address). Decisions by the manager, Product Classification, to uphold the denial of an application or to revoke a customer's eligibility under the business/regulatory purposes exception may be appealed to the Judicial Officer under 39 C.F.R. Part 953.
- g. Upon written request by a state or federal agency, the manager, PCSC, may, in his or her discretion, waive certain application requirements for mailings entered by the requesting state or federal agency for regulatory purposes.

- h. Any determination of eligibility to mail under this exception shall lapse if the authorized mailer does not tender any mail under this exception within any 3-year period. After that time, the affected mailer must apply for and receive new authorization for any mailings under this exception.

472.222 **Mailing**

Customers eligible to mail under the business/regulatory purposes exception may enter mailings of cigarettes and smokeless tobacco only at the locations specified in the customer's application. Applicable mailings may not be tendered through Pickup on Demand or Package Pickup services. Before mailing any shipment under this exception, the mailer must present proof that the PCSC has authorized the mailer to mail such shipments at that location. All mailings under the business/regulatory purposes exception must:

- a. Be entered in a face-to-face transaction with a Postal Service employee (package pickup not permitted) as Priority Mail Express with Hold for Pickup service, Priority Mail Express with an Adult Signature service (see DMM 503.9.0), or Priority Mail with an Adult Signature service;
- b. Be accompanied by a request for PS Form 3811 return receipt, which must bear the sender's PACT eligibility number issued by the PCSC in the return address block as well as the addressee's full name and address, and made returnable to the PCSC, PACT Mailing Office (see DMM 608.4.1 for address);
- c. Bear the marking "PERMITTED TOBACCO MAILING — DELIVER ONLY TO ADDRESSED BUSINESS/AGENCY — RECIPIENT MUST FURNISH PROOF OF AGE AND EMPLOYMENT" on the address side of the mailpiece (place the marking directly above, below, or to the left of the postage);
- d. Bear the business or government agency name and full mailing addresses of both the sender and recipient, both of which must match exactly those listed on the customer's application on file with the Postal Service.

472.223 **Delivery**

Mailings bearing the marking for business/regulatory purposes can only be delivered to a verified employee of the addressee business or government agency. The recipient must show proof that he or she is an employee of the business or government identified as the addressee on the mailing label under the following conditions:

- a. The recipient must be an adult of at least the minimum age for the legal sale or purchase of tobacco products at the place of delivery, which should be verified by a postal employee before releasing or delivering the item to the recipient. The recipient must furnish proof of age via a driver's license, passport, or other government-issued photo identification that lists age or date of birth.
- b. Once age and the recipient's identity as an employee of the addressee are established, the recipient must sign PS Form 3849 and PS Form 3811 in the appropriate signature blocks. If the mailer's eligibility number is missing in the return address block of the PS Form 3811, the mailing must be returned to sender.

**472.23 Exception for Certain Individuals**

The exception for certain individuals permits the mailing of small quantities of cigarettes or smokeless tobacco by individual adults to businesses or to other adults. Such shipments may include, but are not limited to, cigarettes and smokeless tobacco exchanged as gifts between individual adults and a damaged or unacceptable tobacco product returned by a consumer to the manufacturer. For purposes of this rule, “gifts” do not include products purchased by one individual for another from a third-party vendor through a mail-order transaction, or the inclusion of cigarettes or smokeless tobacco at no additional charge with other matter pursuant to a commercial transaction. Eligibility to mail under the certain individuals exception may be revoked by the manager, PCSC, in the event of failure to comply with any applicable rules and regulations. A customer may appeal an adverse initial decision to the manager, Product Classification (see [214](#) for address). The mailer bears the burden of proof in establishing eligibility in the event of revocation. Decisions by the manager, Product Classification, to revoke a customer's eligibility under this exception may be appealed to the Judicial Officer under 39 CFR part 953. Mailings under this exception must be made under the conditions in [472.23](#) through [472.233](#).

**472.231 Entry and Acceptance**

Mailings under the certain individuals exception must be entered under the following conditions:

- a. Cigarettes or smokeless tobacco may only be mailed via a face-to-face transaction with a Postal Service employee. Applicable mailings may not be tendered through Pickup on Demand or Package Pickup services.
- b. Cigarettes or smokeless tobacco may only be entered by an adult of at least the minimum age for the legal sale or purchase of tobacco products at the place of entry. This must be confirmed by postal employees.
- c. The individual presenting the mailing must furnish government-issued photo identification that lists age or date of birth, such as a driver's license or passport, at the time of the mailing. The name on the identification must match the name of the sender appearing in the return address block of the mailpiece.
- d. For mailings addressed to an individual, at the time the mailing is presented, the customer must orally confirm that the addressee is an adult of at least the minimum age for the legal sale or purchase of tobacco products at the place of delivery.

**472.232 Mailing**

No customer may send or cause to be sent more than 10 mailings under this exception in any 30-day period. Each mailing under the certain individuals exception must:

- a. Be entered (package pickup not permitted) as Priority Mail Express with Hold For Pickup service, Priority Mail Express with an Adult Signature service (see DMM 503.9.0), or Priority Mail with an Adult Signature service, unless shipped to APO/FPO/DPO addresses under [472.234](#).

- b. Bear the marking “PERMITTED TOBACCO MAILING — DELIVER ONLY TO AGE-VERIFIED ADULT OF LEGAL AGE” on the address side of the exterior of the mailpiece (place the marking directly above, below, or to the left of the postage);
- c. Bear the full name and mailing address of the sender and recipient on the Priority Mail Express or Priority Mail label;
- d. Weigh no more than 10 ounces.

472.233 **Delivery**

Delivery under the certain individuals exception is made under the following conditions:

- a. The recipient receiving or signing for the article must be an adult of at least the minimum age for the legal sale or purchase of tobacco products at the place of delivery. This must be confirmed by postal employees.
- b. The recipient must furnish proof of age via a driver's license, passport, or other government-issued photo identification that lists age or date of birth.
- c. For Priority Mail Express or Adult Signature articles, once age is established, the recipient must sign PS Form 3849 in the appropriate signature block.

472.234 **Tobacco Product Shipments to APO/FPO/DPO**

Shipments of cigarettes and smokeless tobacco may not be sent to APO/FPO/DPO destination addresses to which the mailing of tobacco is restricted (see DMM 703.2.3.1). To the extent cigarettes or smokeless tobacco are permitted to be mailed to APO/FPO/DPO destination addresses, such mailings under the certain individuals exception must comply with all of the requirements of [472.23](#), with the exception that mailings may be entered as either Priority Mail Express Military Service (EMMS) or Priority Mail service with USPS Tracking/Delivery Confirmation. Regardless of the service elected, the mailing must bear the full name and mailing address of the sender and recipient.

472.24 **Consumer Testing Exception**

The exception for consumer testing permits a legally operating cigarette manufacturer or a legally authorized agent of a legally operating cigarette manufacturer to mail cigarettes to verified adult smokers solely for consumer testing purposes. The manufacturer for which mailings are entered under this exception must have a permit, in good standing, issued under 26 U.S.C. § 5713. The consumer testing exception applies only to cigarettes and not smokeless tobacco. Items must be mailed under conditions in [472.241](#) through [472.243](#).

472.241 **Application**

Each customer seeking to mail cigarettes under the consumer testing exception must submit an application letter to mail under consumer testing exception. In support of its application, the following must be met:

- a. The applicant must furnish information to establish that the customer, or the customer's principal if the customer is a manufacturer's agent, is a cigarette manufacturer in good standing under 26 U.S.C. § 5713; if the customer is an agent of a manufacturer, complete details about the

- agency relationship with the manufacturer; and all locations where mail containing cigarettes for consumer testing will be presented. The applicant must update all information in its application in a timely manner, as necessary, prior to conducting any mailing for as long as it continues to mail under the consumer testing exception.
- b. As part of its application, the applicant must certify in writing that it will comply with the following requirements:
    - (1) Any recipient of consumer testing samples of cigarettes is an adult established smoker;
    - (2) No recipient has made any payment for the cigarettes;
    - (3) Every recipient will sign a statement indicating that the recipient wishes to receive the mailings;
    - (4) The manufacturer or the legally authorized agent of the manufacturer will offer the opportunity for any recipient to withdraw the recipient's written statement at least once in every 3-month period;
    - (5) Any package mailed under this exception will contain not more than 12 packs of cigarettes (maximum of 240 cigarettes) on which all taxes levied on the cigarettes by the state and locality of delivery have been paid and all related state tax stamps or other tax-payment indicia have been applied; and
    - (6) The manufacturer will maintain records establishing compliance with these obligations for a 3-year period from the date of each mailing.
  - c. The application must be submitted to the manager, Pricing and Classification Service Center (PCSC) (see [213](#) for address).
  - d. The applicant must provide any requested copies of records establishing compliance to the manager, PCSC, and/or the manager, Product Classification (see [214](#) for address), upon request, no later than 10 business days after the date of the request.
  - e. The manager, PCSC, issues the initial agency decision of a determination of eligibility to mail under the consumer testing exception. A number is assigned to each letter of eligibility. Customers whose applications are denied in whole or in part may appeal to the manager, Product Classification. Eligibility to mail under the consumer testing exception may be revoked by the manager, PCSC, in the event of failure to comply with any applicable rules and regulations. Decisions by the manager, Product Classification, to uphold the denial of an application or to revoke a customer's eligibility under the consumer testing exception may be appealed to the Judicial Officer under 39 CFR part 953.
  - f. Any determination of eligibility to mail under this exception shall lapse if the authorized mailer does not tender any mail under this exception within any 3-year period. After that time, the affected mailer must apply for and receive new authorization for any further mailings under this exception.

**472.242 Mailing**

Customers eligible to mail under the consumer testing exception may enter mailings of cigarettes only at the locations specified in the customer's application. Applicable mailings may not be tendered through Pickup on Demand or Package Pickup services. Mailings must be tendered under the following conditions:

- a. Before tendering any shipment under this exception, the mailer must present proof (PCSC Eligibility letter) that the PCSC has authorized the mailer to tender such shipments at that location.
- b. All mailings under the consumer testing exception:
  - (1) Be entered in a face-to-face transaction with a Postal Service employee (package pickup not permitted) as Priority Mail Express with Hold For Pickup service, Priority Mail Express with Adult Signature Restricted Delivery service (see DMM 503.9.0), or Priority Mail with Adult Signature Restricted Delivery service;
  - (2) Be accompanied by a request for the PS Form 3811 return receipt, which must bear the sender's PACT eligibility number issued by the PCSC in the return address block, as well as the addressee's full name and address, and be made returnable to:  
PCSC, PACT MAILING OFFICE  
USPS ELIGIBILITY NO. XX-00-0000  
90 CHURCH ST, STE 3100  
NEW YORK, NY 10007-2951
  - (3) Must bear the marking "PERMITTED TOBACCO MAILING — DELIVER ONLY TO ADDRESSEE UPON AGE VERIFICATION — AGE 21 OR ABOVE" on the address side of the mailpiece (place the marking directly above, below, or to the left of the postage);
  - (4) Must bear the full mailing addresses of both the sender and recipient on the Priority Mail Express or Priority Mail label (the name and address of the sender must match exactly those listed on the customer's application on file with the PCSC);
  - (5) Are limited in tobacco contents to no more than 12 packs of cigarettes (maximum 240 cigarettes) on which all taxes levied on the cigarettes by the destination state and locality have been paid and all related state tax stamps or other tax-payment indicia have been applied;
  - (6) May not be addressed to an addressee located in a state that prohibits the delivery or shipment of cigarettes to individuals in the destination state;
  - (7) May be sent only to an addressee who has not made any payment for the cigarettes, is being paid a fee for participation in consumer tests, and has agreed to evaluate the cigarettes and furnish feedback to the manufacturer in connection with the consumer test.
- c. Customers must maintain records to establish compliance with the requirements in [472.24](#) for a 3-year period.

- d. Mailing frequency may not exceed more than one package from any one manufacturer to an adult smoker during any 30-day period.
- e. Nothing in these rules shall preempt, limit, or otherwise affect any related state laws.

#### 472.243 **Delivery**

Mailings bearing the marking for consumer testing can only be delivered to the named addressee under the following conditions:

- a. The recipient signing for the article must be an adult of at least 21 years of age.
- b. The recipient must furnish proof of age through production of a driver's license, passport, or other government-issued photo identification that lists age or date of birth.
- c. The name on the identification must match the name of the addressee on the Priority Mail Express or Priority Mail label.
- d. Once age is established, the recipient must sign the PS Form 3849 and PS Form 3811 in the appropriate signature blocks. If the mailer's eligibility number is missing in the return address block of the PS Form 3811 return receipt, the mailing must be returned to sender.

#### 472.25 **Minimum Purchasing Age**

Several states require purchasers of tobacco to be age 19 or older (see Exhibit 472.25). If not specified, then the minimum age is presumed to be 18 years of age under federal law. Additionally, there are cities and counties across the country that have set minimum purchasing ages above those mandated by their respective states. Postal Service employees should check with their local city and county governments to ensure that those localities do not have supplementary age requirements for tobacco sales.

Exhibit 472.25

#### **Minimum Purchasing Age**

<b>Minimum Purchasing Age</b>	<b>Location (State Level)</b>
21 years old	Hawaii
19 years old	Alaska; Alabama; New Jersey; Utah
18 years old	All other states, subject to local law

#### 472.26 **Public Health Exception**

Federal government agencies involved in the consumer testing of tobacco products solely for public health purposes may mail cigarettes under the mailing standards of [472.24](#), except as provided herein. The federal agency shall not be subject to the requirement that the recipient be paid a fee for participation in consumer tests. Upon written request, the manager, PCSC, may, according to his or her discretion, waive certain application requirements.



# 5 Perishable Matter

## 51 Definition

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### 511 General Definitions

Perishable matter is anything that can deteriorate in the mail and thereby lose value, create a health hazard, or cause an obnoxious odor, nuisance, or disturbance, under ordinary mailing conditions. Mailable perishable matter may be sent at the mailer's own risk when it is packaged as required and when it can be delivered within appropriate and reasonable time limits to prevent deterioration.

Examples of perishable matter include mailable types of live animals, food items, and plants.

### 512 Federal Statutes

Federal statutes impose restrictions and prohibitions on the mailing of fish, wildlife, plants, and products made from these, as well as plant pests, injurious animals, and taken fish, wildlife, and plants. The purpose of these restrictions and prohibitions is to protect agriculture, ecosystems, and natural resources in the United States. Additional information on these restrictions and prohibitions can be found in the Lacey Act and in the Endangered Species Act, U.S. Fish & Wildlife Service, and the Plant Protection Act under the U.S. Department of Agriculture.

## 52 Animals

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### 521 General Requirements

The full cooperation of the mailer is essential in order to safely and effectively transport animals through the mail. The following factors are applied to all shipments of mailable live or dead animals:

- a. Protection of Postal Service employees and the public against harm from dangerous or diseased animals.
- b. Protection of the mail and the environment against the following:
  - (1) Damage to the shipping container or other mailpieces from either the animal or the refrigerant used (e.g., moisture or condensation from melting ice, or pressure build-up from dry ice).
  - (2) Obnoxious odors and noise.

- c. Protection of animals against death, or protection of animal specimens against spoilage, taking into account the following:
  - (1) Expected time in transit.
  - (2) Expected temperature in transit (weather conditions).
  - (3) Packaging, including insulation against impact, heat, cold, and preventing suffocation.
- d. Ability of an animal to survive without food or water during transport. Live animals must be transported without food or water, because liquids, moisture, and loose foodstuffs can cause damage to the shipping container, other mail, and Postal Service equipment during transport.
- e. The ability of the Postal Service to provide transportation and delivery service. Mailers are urged to work with postmasters in providing advance notification of shipments of live animals. The Postal Service advises destination and transfer offices when any significant quantities of animals are moving in the mail. Postal Service field personnel should consider a 4-hour time limit on the period during which animals (especially bees, day-old poultry, and adult birds) may move in a regular, closed Postal Service vehicle.

## 522 **Packaging and Markings**

### 522.1 **Container Construction**

Any container used to mail perishable matter must be constructed to protect and securely contain the contents.

Shipping containers for mailable live animals must, at a minimum, be made of 275-pound test, double-wall, corrugated, weather-resistant fiberboard (W5c) or equivalent. The container must be constructed to prevent escape of the animals while in the mail and to preclude the container and its contents from being crushed in normal handling. USPS-produced packaging, including Flat Rate containers, are not eligible to be used. Additional container requirements apply to mailable adult birds.

### 522.2 **Security and Ventilation**

Containers must be constructed to prevent escape of animals, prevent the crushing of the container and contents during normal handling, and provide adequate ventilation for the animals at all times.

### 522.3 **Marking**

Each mailpiece must bear a complete return address and be marked on the address side with a description of the contents (e.g., “Live Animals,” “Live Honey Bees,” etc.). A mailpiece marked “If Undeliverable, Abandon” may not be accepted for mailing.

## 523 **Acceptance for Mailing**

A mailpiece containing live animals that cannot reach its destination in a viable condition should not be accepted. Factors that can be taken into consideration in assessing the viability of a mailpiece containing live animals

include: use of proper packaging methods that protect against suffocation and crushing during transport; expected time in transit; and extreme weather conditions that exceed the normal weather pattern along the transportation route.

This provision does not give Postal Service personnel the authority to refuse mailable animals that are properly packaged or to impose local black-out periods based on temperature conditions, heavy mail volumes, etc.

Acceptance personnel must have reasonable justification to refuse a mailpiece. Before refusing any mailpiece that contains a mailable type of animal, acceptance personnel are to confer with the manager, business mail entry, at their district office or with the PCSC, as appropriate.

Animals mailed to the Republic of Palau, the Republic of the Marshall Islands, and the Federated States of Micronesia require a permit issued by the government of the destination country. See [642](#).

#### 524 **Disposal**

Any mailpiece containing live animals that cannot be delivered to the addressee or returned to the sender within 72 hours (for live, day-old poultry) or within the delivery period marked on the parcel (for other mailable animals) must be disposed of immediately. For safety reasons, dispose of mailpieces not marked with a delivery period when it reasonably appears the articles cannot be delivered or returned in a viable condition. See POM 691.52 for disposal information. Also see [742.3](#) for the disposition of mailpieces that are refused by air carriers.

#### 525 **Nonmailable Live Animals**

Nonmailable types of animals discovered in the mailstream must be reported to the PCSC in accordance with the instructions in POM 139.118.

Additionally, the mailer and the Post Office of mailing must be notified to prevent future shipments from being incorrectly accepted for mailing.

##### 525.1 **Live Birds**

Day-old poultry vaccinated with Newcastle disease (live virus) is nonmailable. Day-old birds, except those specifically permitted under [526.3](#) are nonmailable.

##### 525.2 **Live, Warm-Blooded Animals**

Warm-blooded animals, except for adult birds and specified day-old birds under the specific conditions in this section, are not mailable.

- a. Cats or kittens.
- b. Dogs or puppies.
- c. Guinea pigs.
- d. Hamsters.
- e. Mice.
- f. Rabbits.
- g. Rats.
- h. Squirrels and flying squirrels.

**525.3 Reptiles**

All snakes, turtles, and poisonous reptiles are nonmailable.

**525.4 Poisonous Insects and Spiders**

All poisonous insects and all spiders, except scorpions under limited circumstances (see [526.5](#)), are nonmailable. Other nonpoisonous and non-disease-conveying insects are permitted as stated in [Exhibit 526.6](#).

**526 Mailable Live Animals****526.1 General**

Some animals are mailable under proper conditions. See the specific instructions as noted for the following kinds of animals:

- a. Live bees, [526.2](#) and [Exhibit 526.21](#).
- b. Live, day-old poultry, [526.3](#) and [Exhibit 526.33](#).
- c. Live adult birds, [526.4](#).
- d. Live scorpions (only under limited circumstances), [526.5](#) and [Exhibit 526.5](#).
- e. Other small, harmless, cold-blooded animals, [526.6](#) and [Exhibit 526.6](#).

**Note:** Regarding dead animals or parts of animals, see [526.7](#) and [Exhibit 526.7](#).

**526.2 Live Bees****526.21 Mailability Requirements**

Honeybees and queen honeybees are acceptable for shipping within the continental U.S. and must be free of disease, as required under federal and state regulations. The following additional conditions apply:

- a. *Honeybees.* Honeybees are acceptable only via surface transportation, and must bear special handling fees, in addition to regular postage. Mailpieces must be plainly marked on the address side with “Live Bees” and “Surface Only” or “Surface Mail Only.”
- b. *Queen Honeybees.*

*Via air transportation.* Only queen honey bees may be shipped via air transportation. Each queen honeybee shipped via air transportation may be accompanied by up to eight attendant honeybees.

*Via surface transportation.* Queen honeybees shipped via surface transportation must bear special handling fees, in addition to regular postage.

All mailpieces containing queen honeybees must be plainly marked on the address side with “Live Queen Bees.” Refer to [Exhibit 526.21](#) for a general summary of the requirements for mailing live bees.

Exhibit 526.21

### Requirements for Mailing Live Bees

#### Live Bees



Contents must be either queen honeybees or honeybees. Bees must be securely packaged (see [522](#)) to provide adequate air and they must be kept within a tolerable temperature range at 40° to 100° F.

The use of insecticides must be eliminated in Postal Service areas that will be occupied by bee shipments.

#### Air Transportation

- Only queen honeybees may be shipped by air transportation.
- Each queen honeybee may be accompanied by up to eight attendant honeybees.
- Alert personnel to ensure the queen honeybees' timely and safe dispatch to, and arrival at, the destination.
- Equipment must be available for transportation up to the 4th zone. Advance arrangements must be made for shipment to addresses beyond the 4th zone.

#### Surface Transportation

- Any type of live honeybees may be shipped in the continental United States by surface transportation.
- Packages of honeybees must include special handling service fees, in addition to regular postage.
- Alert personnel to ensure the honeybees' timely and safe dispatch to, and arrival at, the destination.
- Equipment must be available for transportation up to the 4th zone. Advance arrangement must be made for shipment beyond the 4th zone.

### 526.22 Claims for Bee Shipments

Indemnity claims (see DMM 609) for damage, partial loss, and loss of insured shipments of mailable bees are accepted only in the following situations:

- a. Death of the bees resulted from Postal Service handling after conditions for mailability were met and when there was strong likelihood that the shipment could have been safely transported.
- b. Contents were lost because of damage to the container while in Postal Service custody.
- c. The complete package was lost in the mail.
- d. Special handling was purchased as required under [526.21](#).

### 526.3 Live, Day-Old Poultry

#### 526.31 General

The following live, day-old animals are acceptable for mailing when properly packaged: chickens, ducks, emus, geese, guinea birds, partridges, pheasants (only during April through August), quail, and turkeys. All other types of live, day-old poultry are nonmailable. Day-old poultry vaccinated with Newcastle disease (live virus) also is nonmailable.

**526.32 Mailability Requirements**

The specific types of day-old poultry named in [526.31](#) are mailable subject to the following requirements:

- a. Poultry that is not more than 24 hours old and is presented for mailing in the original, unopened hatchery box from the hatchery of origin.
- b. The date and hour of hatching is noted on the box by a representative of the hatchery who has personal knowledge thereof. (For Collect on Delivery (COD) shipments made by a hatchery for the account of others, the name or initials and address of the hatchery or the Post Office box number and address of the hatchery must be prominently shown for this standard.)
- c. Box is properly ventilated, of proper construction and strength to bear safe transport in the mail, and is not stacked more than 10 units high.
- d. Day-old poultry is mailed early enough in the week to avoid receipt at the office of address (in case of missed connections) on a Sunday, a national holiday, or the afternoon before a Sunday or national holiday.
- e. Day-old poultry can be delivered to the addressee within 72 hours of the time of hatching.
- f. Day-old poultry sent via surface transportation, must include special handling service fees, in addition to regular postage.
- g. Day-old poultry sent via air transportation must meet all provisions of the airlines. Delivery of the mailpiece is dependent on the availability of air carriers having available equipment to safely deliver the day-old poultry within the specified time limit.
- h. Day-old poultry that is first shipped via a commercial air express or air cargo service and then presented for mailing to a final destination must be in good condition and properly packaged as specified in [526.32a-e](#).
- i. Boxes of day-old poultry of about identical size, securely fastened together to prevent separation in transit, may be accepted for mailing as a single parcel, provided the total length and girth combined does not exceed Postal Service limits.

See [Exhibit 526.33](#), Requirements for Mailing Live, Day-Old Poultry. See Chapter [7](#) regarding domestic mail shipments sent via air transportation.

**526.33 Claims for Live, Day-Old Poultry**

Indemnity claims (see DMM 609) for damage, partial loss, and loss of insured shipments of mailable, live, day-old poultry are accepted only in the following situations:

- a. Death of the live, day-old poultry resulted from Postal Service handling after conditions for mailability were met and when there was strong likelihood that the shipment could have been safely transported.
- b. Contents were lost because of damage to the container while in Postal Service custody.
- c. The complete package was lost in the mail.
- d. Special handling was purchased as required under [526.32f](#).

Exhibit 526.33

**Requirements for Mailing Live, Day-Old Poultry**

<b>Answer each question and follow the instruction as indicated.</b>		<b>YES</b>	<b>NO</b>
1.	Is poultry live, day-old poultry as listed in <a href="#">526.31</a> ?	If pheasants, they are mailable only during April through August. Go to No. 2.	If not day-old poultry, item is NONMAILABLE. If not poultry or not day-old, check other mailable animal types in Section <a href="#">52</a> to determine mailability.
2.	Was hatching time 24 hours ago or less?	Go to No. 3.	NONMAILABLE.
3.	Was poultry presented for mailing in original, unopened hatchery box from hatchery of origin?	Go to No. 4.	Do not accept.
4.	Are boxes properly ventilated and of proper construction and strength to bear safe transport in mail? <b>Note:</b> Boxes of approximately identical size, securely fastened to prevent separation in transit, may be accepted for mailing as a single parcel if the mailpiece does not exceed DMM limits for combined length and girth or exceed 70 pounds in weight.	Boxes are not to be stacked more than 10 units high. Go to No. 5.	Do not accept.
5.	Are the date and hour of hatching noted on box by representative of hatchery who has personal knowledge of facts?	Go to No. 6.	Do not accept.
6.	Did shipment originate at another office, or was it sent by air express or air cargo and then presented for mailing?	Before accepting, take special precautions to ensure that shipment is in excellent condition. Go to No. 7.	Go to No. 7.
7.	Is the shipment being mailed with a special handling service charge, in addition to regular postage? Exception: shipment is being mailed via air transportation.	Go to No. 8.	Shipment must include special handling service to be mailable.
8.	If shipment is COD, have all conditions for using COD service (as required in DMM 503.11) been met? If not COD, go to No. 9.	Go to No. 9.	If COD, do not accept unless all applicable requirements in DMM 503.11 are met.
9.	Is poultry being mailed sufficiently early in week to avoid arrival at the delivery post office on Sunday or holiday, or on afternoon preceding Sunday or holiday?	Go to No. 10.	Do not accept.
10.	Can poultry be delivered to addressee within 72 hours of time of hatching, regardless of whether addressee resides in town or on rural or highway contract route?	Accept for mailing.	Do not accept.

**526.4 Adult Birds****526.41 General**

Disease-free adult birds may be mailed domestically when shipped under all applicable governmental laws and regulations, including the Lacey Act, the Endangered Species Act (ESA), and regulations of the U.S. Department of Agriculture, U.S. Fish and Wildlife Service, and any state, municipal, or local ordinances. Mailers must comply with all applicable governmental laws and regulations, including the Lacey Act, the Endangered Species Act (ESA), and regulations of the U.S. Department of Agriculture, U.S. Fish and Wildlife Service, and any state, municipal, or local ordinances. Mailings must also be compliant with the requirements provided in USPS Publication 14, *Prohibitions and Restrictions on Mailing Animals, Plants, and Related Matter*, Chapter 5. In addition, each container or package must be marked as required by U.S. Fish and Wildlife Service under 50 CFR 14. Adult birds must be properly packaged and able to sustain shipment without food or water because liquids, moisture, and loose foodstuffs can cause damage to the shipping container, other mail, and Postal Service equipment during transport.

**526.42 Mailability Requirements**

Adult birds are mailable only when sent under the following conditions:

- a. The shipment is mailed using Priority Mail Express service.
- b. Each bird must weigh more than 6 ounces and no more than 25 pounds.
- c. The number of birds per parcel must follow the container manufacturer limits.
- d. The mailer must secure containers approved by the manager, Product Classification (see [214](#) for address).
- e. A mailing container must be used that is constructed by a USPS-approved manufacturer listed on the RIBBS website at <http://ribbs.usps.gov>.

**526.43 Claims for Adult Birds**

Indemnity may be paid only for articles that are lost, damaged, or for missing contents, and not for death of the birds in transit if there is no visible damage to the mailing container.

Postage refunds may not be available if the Priority Mail Express shipment was delivered or delivery was attempted within three days of the date of mailing as shown in the “Date In” box on Label 11. See DMM 609.

**526.5 Live Scorpions**

The mailing of scorpions is limited by the restrictions in 18 U.S.C. 1716. Under this limitation, scorpions are mailable only when sent for the purposes of medical research use or the manufacture of antivenin. Scorpions are nonmailable under any other circumstances. See [Exhibit 526.5](#) for mailing conditions that apply to permissible shipments.



## Exhibit 526.5

**Restrictions on Mailing Live Scorpions****Live scorpions are mailable only if EACH of the following conditions is met:**

1. Must be for delivery only within the continental United States.
2. May be sent only by surface transportation.
3. Must be sent only for special purposes of either:
  - Medical research use.
  - Manufacture of antivenin.
4. Must be properly packaged prior to mailing, as follows:
  - Live scorpions is packed in a double container system, with each receptacle closed or fastened in such a way as to prevent escape.
  - Inner receptacle is made of material that cannot be punctured by a scorpion.
  - Inner receptacle is marked "Live Scorpions."
  - Cushioning material is used to prevent shifting of the inner receptacle.
  - Design of packaging is of sufficient strength, as required in [522](#), to prevent crushing of the mailpiece or escape of the contents during normal Postal Service handling and transport.
  - Address side of mailpiece is clearly marked "Live Scorpions."

526.6 **Small, Harmless, Cold-Blooded Animals**

Small, harmless, cold-blooded animals, except for snakes, turtles, and turtle eggs, are mailable only when they meet certain requirements. For some examples, see [Exhibit 526.6](#).

## Exhibit 526.6

**Requirements for Mailing Small, Harmless, Cold-Blooded Animals (Except Snakes, Turtles, and Turtle Eggs)****General Requirements:**

All animals in this group:

- Must be able to reach their destination in good condition in the normal transit time between the mailing and address points.
- Must not require any food, water, or attention during transport.
- Must not create sanitary problems.
- Must not create obnoxious odors.

**Specific Requirements by Animal:**

Baby Alligators	<ul style="list-style-type: none"> <li>■ Animals must not exceed 20 inches in length.</li> <li>■ No additional requirements, except the applicable standards in section <a href="#">52</a>.</li> <li>■ Packaging must comply with <a href="#">522</a>.</li> </ul>
Baby Caimans	
Chameleons	
Frogs	
Lizards	
Newts	
Reptiles and Amphibians	
Salamanders	
Tadpoles and Toads	

## Exhibit 526.6

**Requirements for Mailing Small, Harmless, Cold-Blooded Animals  
(Except Snakes, Turtles, and Turtle Eggs)**

<b>Specific Requirements by Animal:</b>	
Goldfish Tropical Fish	<ul style="list-style-type: none"> <li>■ Fish must be held in a securely sealed primary receptacle.</li> <li>■ Primary receptacle must be cushioned with sufficient absorbent material to take up all liquid in case of leakage.</li> <li>■ Primary receptacle and absorbent cushioning material must be sealed within waterproof outer (shipping) packaging.</li> </ul>
Worms Bloodworms Hellgrammites Leeches Mealworms Snails	<ul style="list-style-type: none"> <li>■ No additional requirements, except the applicable standards in section <a href="#">52</a>.</li> <li>■ Packaging must comply with <a href="#">522</a>.</li> </ul>
Nonpoisonous Insects	<ul style="list-style-type: none"> <li>■ No additional requirements, except the applicable standards in section <a href="#">52</a>.</li> <li>■ Packaging must comply with <a href="#">522</a>.</li> </ul>

526.7 **Dead Animals or Parts of Animals**

The dead bodies, or parts thereof, of any wild animals, wild birds, or eggs are acceptable for mailing only when they are lawfully killed or taken, and their shipment is not prohibited by law of the United States or of the state, territory, district, or foreign country or subdivision thereof in which killed or taken or offered for shipment. Mailing of fresh game is also subject to these standards. Dead animals or parts of animals include two groups of items:

- a. Group A: Items that need to be refrigerated.
- b. Group B: Items that must be dried.

See [Exhibit 526.7](#) for additional information on the conditions for mailing.

## Exhibit 526.7

**Requirements for Mailing Dead Animals or Parts of Animals****GROUP A: Items that need to be refrigerated**

<p>Game birds, fish, or other animals to be used for food.</p> <p>Animals or animal parts to be used in conservation studies or to be preserved by taxidermy.</p>	<p>Mailable only when:</p> <ul style="list-style-type: none"> <li>■ Overall requirements for animals (see <a href="#">521</a>) are met.</li> <li>■ A proper refrigerant is used as follows: <ul style="list-style-type: none"> <li>– Water ice. When water ice is used as a refrigerant, it must be packed like a liquid in a sealed, waterproof primary receptacle. The primary receptacle must be surrounded by absorbent cushioning material in a quantity sufficient to take up all water in the event of leakage. The primary receptacle and cushioning material must be securely packed within an outer (shipping) packaging.</li> <li>– Dry ice. When dry ice is used, it must be packaged as required in <a href="#">349.23</a>. It must NEVER be placed in a sealed container. In addition, sufficient cushioning material must be used so that an inner container will not become loose inside the shipping container as the dry ice sublimates.</li> </ul> </li> <li>■ Salt. The use of salt to retard spoilage can be effective.</li> <li>■ The mailpiece is properly addressed and marked as required under <a href="#">221</a> and DMM 102.</li> </ul>
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**GROUP B: Items that must be dried**

<p>Dried furs, hides, skins, or pelts of wild animals.</p>	<p>Mailable only when such articles:</p> <ul style="list-style-type: none"> <li>■ Are properly dried or cured.</li> <li>■ Have no offensive odor.</li> <li>■ Are plainly marked and/or labeled on the address side with the full names and addresses of shipper and addressee, together with such endorsement(s) as may be required by state laws.</li> <li>■ Are securely packaged and/or wrapped to prevent harm to Postal Service employees and damage to the package contents or postal equipment.</li> </ul>
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## 53 Fresh Foods and Other Perishables

Fresh fruits and vegetables are nonmailable unless presented in a dry (not *dried*) condition. Other perishable foods that are capable of easily decomposing or that cannot reach their destination without spoiling are nonmailable. Packaging must be strong and securely sealed as required in DMM 601.1-7.

## 54 Eggs

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Eggs are mailable in domestic mail subject to the following general conditions:

- a. They are individually cushioned.
- b. They are otherwise packed to withstand shocks encountered during normal Postal Service handling.
- c. They are not likely to be harmed by anticipated temperature changes while in Postal Service custody.

## 55 Meats and Meat Products

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Meats and meat products are mailable in domestic mail only when they conform to regulations of the U.S. Department of Agriculture (USDA). Packaging must be strong and securely sealed as required in DMM 601.1-7. If dry ice is used to cool meat or meat products during transport, the dry ice is subject to the mailing conditions in [349.23](#).

## 56 Plants

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### 561 General

Plants and plant products are mailable within the United States and its territories and possessions, but are subject to certain prohibitions and restrictions imposed by federal agricultural and conservation statutes. When these prohibitions and restrictions render the shipment of any plant or plant product as unlawful, then those plants are nonmailable. For more information, see Publication 14, *Prohibitions and Restrictions on Mailing Animals, Plants, and Related Matter*.

### 562 Quarantines

Under 39 U.S.C. 3014(b), any plant, plant product, or other article capable of carrying a dangerous plant disease or insect infestation is nonmailable from a quarantined area, if shipping such an item is prohibited by the U.S. Department of Agriculture (USDA) Plant Protection Act issued under 7 U.S.C. 7701. The USDA imposes such quarantines on specific plants to prevent the introduction of agricultural diseases or pests into the United States and to prevent their spread from one part of the United States to another.

USDA quarantine notices, issued under 7 U.S.C. 7701, are published in the *Federal Register* and codified in 7 CFR (e.g., 7 CFR 301 and 318). Details on these and other USDA regulations may be obtained by writing to the USDA Animal and Plant Health Inspection Service (APHIS) Plant Protection and Quarantine (PPQ) Programs (see [564](#) for address).

**562.1 Types of Quarantines**

There are domestic quarantines that apply to the continental United States; other quarantines that apply to Hawaii, Puerto Rico, and the U.S. Virgin Islands; and others that apply to other territories and possessions.

Any plant or plant matter prohibited under the Act of August 20, 1912 (37 Stat. 315, Chapter 308; 7 U.S.C. 151 et seq.), commonly known as the Plant Protection Act, is made nonmailable by 39 U.S.C. 3015©.

**562.2 Specific Information**

Plant quarantines cover a great variety of plant diseases and pests, and all areas of the country. For more specific information, consult Publication 14, *Prohibitions and Restrictions on Mailing Animals, Plants, and Related Matter*.

**562.3 Inspection**

Plants under quarantine by the USDA may be moved from the quarantine area only after being inspected under conditions prescribed in the quarantine notice or in other USDA regulations, issued under 7 U.S.C. 7701, and after a permit or certificate is issued. Refer to ASM 274.9 regarding USDA inspection of mail.

**562.4 Penalties****562.41 Nonmailable Items**

Criminal penalties of fine and imprisonment are provided for mailing nonmailable items as follows:

- a. Under 18 U.S.C. 1716B, for anyone who knowingly mails, or causes to be delivered by mail, anything nonmailable pursuant to 39 U.S.C. 3014(b) and the regulations implementing 39 U.S.C. 3014(c).
- b. Under 18 U.S.C. 1716D, for anyone who knowingly mails, or causes to be delivered by mail, anything nonmailable pursuant to 39 U.S.C. 3015(c).

**562.42 Forged or Counterfeit Documents**

Similar criminal penalties of fine and imprisonment are provided by 18 U.S.C. 1716C as follows:

- a. For anyone who forges or counterfeits any certification authorized by USDA regulations with intent to make such certification appear genuine.
- b. For anyone who makes or knowingly uses, sells, or possesses with intent to use or sell, any such forged or counterfeited certification or any device for imprinting a forged or counterfeited certification.

**563 Packaging and Marking****563.1 General**

Wettable packing materials and roots or butts of plants must be wrapped or boxed in a waterproof material. The material must be heavy enough to retain the moisture content needed for the roots of the plants without weakening

the strength of the box, and must be able to withstand Postal Service handling without leakage or loss of the packing material or contents. Waterproof material means one of the following:

- a. Tar-centered paper.
- b. Kraft paper waxed on one side.
- c. Kraft paper with a waxed or tarred paper liner.
- d. Plastic wrap.

#### 563.2 **Securing Tops of Bundles**

The tops of all bundles must be wrapped with a covering of paper, straw, or similar material to protect the plant from injury or drying out. If the plant has thorns or pointed projections, the wrapper must be puncture proof.

#### 564 **Further Information**

For further information about specific plants or diseases, or about requirements for international shipments, consult the local county agriculture agent or the following federal agency:

ANIMAL AND PLANT HEALTH INSPECTION SERVICE  
US DEPARTMENT OF AGRICULTURE  
4700 RIVER RD  
RIVERDALE MD 20737-1228

## 57 Nonmailable Plant Pests, Injurious Animals, and Illegally Taken Fish or Wildlife

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#### 571 **General**

Under the respective provisions in 39 U.S.C. 3015(a), (b), or (d), the following items are nonmailable:

- a. Any injurious animal, the importation or interstate shipment of which is prohibited under 18 U.S.C. 42.
- b. Any plant pest, the movement of which is prohibited under section 103 or 104 of the Federal Plant Pest Act (7 U.S.C. 150bb or 150cc).
- c. Any fish or wildlife, the conveyance of which is prohibited under section 3 of the Lacey Act Amendments of 1981 (16 U.S.C. 3372).

For more information, see Publication 14, *Prohibitions and Restrictions on Mailing Animals, Plants, and Related Matter*.

#### 572 **Criminal Penalties**

Criminal penalties are specified in 18 U.S.C. 1716d for mailing anything that is nonmailable under 39 U.S.C. 3015(a), (b), or (d).

# 6 International Mail

## 61 General

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This chapter contains regulations on the mailability of hazardous materials, restricted matter, and perishable matter that may be sent as international mail. Additional information on these subjects is contained in Chapters [3](#), [4](#), and [5](#), and in *Mailing Standards of the United States Postal Service*, International Mail Manual (IMM) 135–138.

### 611 Refusal by Air Carrier

Mailpieces refused by an air carrier that contain, or are suspected to contain, hazardous, restricted, or perishable materials, must be handled in accordance with [711](#).

## 62 Hazardous Materials: International Mail

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### 621 General Requirements

#### 621.1 Mailing Conditions

In international commerce, the term “dangerous goods” is commonly used to describe hazardous materials.

Almost all hazardous materials are prohibited in international mail. The only mailable hazardous materials are certain infectious substances, excepted quantities of radioactive material that are allowed in domestic mail, certain magnetized materials, and certain lithium and lithium-ion batteries. See [Exhibit 621.1](#) for a summary of the types of hazardous materials that are eligible for mailing in international mail.

In certain situations, the few types of hazardous materials that are generally permitted in international mail may be further restricted by the mailing limitations imposed by an individual country. Because individual countries have unique prohibitions and restrictions, it is always necessary to consult the Individual Country Listings in the IMM to be certain that an otherwise mailable hazardous material is acceptable for shipment to a specific country.

Exhibit 621.1

**DOT Hazard Classes and Mailability for International Mail**

Hazard Class	Name of Hazard Class (and Division when applicable)	International Mail APO/FPO/DPO	
		Air Transportation	Surface Transportation
1	Explosives	Prohibited	Prohibited
2	Gases	Prohibited	Prohibited
3	Flammable and Combustible Liquids	Prohibited	Prohibited
4	Flammable Solids	Prohibited	Prohibited
5	Oxidizing Substances, Organic Peroxides	Prohibited	Prohibited
6	Toxic Substances and Infectious Substances		
	Division 6.1: Toxic Substances	Prohibited	Prohibited
	Division 6.2: Infectious Substances	Only via First-Class Package International Service with Registered Mail service per limits in <a href="#">622.2</a> and IMM 135.1.	Prohibited
7	Radioactive Materials	Only via First-Class Package International Service using Registered Mail service per limits in <a href="#">622.3</a> and IMM 135.5.	Prohibited
8	Corrosives (liquids and solids)	Prohibited	Prohibited
9	Miscellaneous Hazardous Materials	Prohibited, except for magnetized materials per <a href="#">622.4</a> and lithium or lithium-ion batteries per <a href="#">622.5</a>	Prohibited, except for magnetized materials per <a href="#">622.4</a> and lithium batteries per <a href="#">622.5</a>

**621.2 Hazard Classes**

The nine classes of hazardous materials listed in [331](#) also apply to dangerous goods shipped in international commerce.

The non-Postal Service regulations that govern the air shipment of hazardous materials (dangerous goods) in international commerce are specified in the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* of the International Civil Aviation Organization (ICAO). In 49 CFR, DOT recognizes ICAO requirements for the air transportation of hazardous materials. However, 49 CFR gives DOT the authority to regulate only the domestic transportation of hazardous materials. Generally, most air carriers follow the *Dangerous Goods Regulations* of the International Air Transport Association (IATA), and those regulations are slightly more restrictive than the ICAO rules.



621.3 **Consumer Commodity, Mailable Limited Quantity, and ORM-D Materials**

The Consumer Commodity, Mailable Limited Quantity, and ORM-D classifications are unique within domestic commerce in the United States and are not recognized in international commerce. Hazardous materials under these classifications that are mailable in domestic mail are typically prohibited in international mail.

621.4 **APO/FPO/DPO Mail**

Hazardous, restricted, or perishable materials mailed to, from, and between overseas military Post Offices are subject to the conditions of IMM 130, the standards in this publication, conditions prescribed by the Department of State international security policy, and conditions prescribed by the Department of Defense (DOD), as listed in *Overseas Military/Diplomatic Mail* in the *Postal Bulletin*. Also see DMM 703.2-4.

622 **Mailable Hazardous Materials**

622.1 **General**

As shown in [Exhibit 621.1](#), almost all hazardous materials are prohibited in international mail. Under specific circumstances, only biological substances, limited amounts of radioactive materials, and certain magnetized materials are eligible to be sent in international mail.

622.2 **Biological Substances, Division 6.2**

Infectious and noninfectious biological substances are permitted in international mail subject to the provisions that apply to domestic mail in [346.2](#). In addition, the following requirements apply:

- a. Biological substances are prohibited from international mail by certain countries. To determine if a prohibition exists for a specific country, check the Individual Country Listings in the IMM.
- b. Mailable infectious substances must only be sent via First-Class Package International Service using Registered Mail service. Nonregulated materials defined in [346.234](#) and exempt human or animal specimens defined in [346.12d](#) are mailable when properly packaged as described in [346.32](#).
- c. Biological substances can be sent to or received by only the following types of institutions when permission has been granted:
  - (1) Laboratories of local, state, and federal government agencies.
  - (2) Laboratories of federally licensed manufacturers of biological products derived from bacteria and viruses.
  - (3) Laboratories affiliated with or operated by hospitals, universities, research facilities, and other teaching institutions.
  - (4) Private laboratories licensed, certified, recognized, or approved by a public authority.

Permission to mail biological substances must be obtained prior to mailing. Qualifying institutions wishing to mail biological substances must submit a written letter of application on its organizational letterhead to the following address:

MANAGER PRODUCT CLASSIFICATION  
US POSTAL SERVICE  
475 L' ENFANT PLZ SW RM 4446  
WASHINGTON DC 20260-4446

The application must state the institution's nature of work, the identity and qualifications of the prospective recipient, and the number of packages to be mailed.

- d. Mailable infectious substances are limited to 50 ml for liquids or 50 g for solids, per mailpiece, and must be packaged in accordance with Packaging Instruction 6C in Appendix [C](#), and the additional requirements in IMM 135.31 and 135.41.
- e. Nonregulated materials and exempt human or animal specimens must be packaged in accordance with Packaging Instructions 6G and 6H in Appendix [C](#), and the additional requirements in IMM 135.32 and 135.42.
- f. A shipper's declaration for dangerous goods is required. See [326](#) and [725.3](#).

#### 622.3 **Radioactive Materials, Class 7**

Class 7 radioactive materials are permitted in international mail subject to the limits in [347](#) and the following conditions:

- a. Radioactive materials may be sent only to those countries that have expressed a willingness to accept them. For specific details, consult the Individual Country Listings in the IMM.
- b. Each radioactive materials shipment must be sent only by First-Class Package International Service with Registered Mail service.
- c. Each shipment must comply with both the International Atomic Energy Agency Regulations and the specifications contained in [347](#) and this section.
- d. Mailable radioactive materials must be packaged in accordance with Packaging Instruction 7A in Appendix [C](#) and the requirements specified in IMM 135.5.
- e. The sender and recipient of each radioactive materials shipment must receive prior authorization from the appropriate regulatory authorities within their countries.
- f. A white package label bearing the French words "Matières Radioactives" (Radioactive Materials) must be securely affixed, taped, or gummed to the address side of each mailpiece containing radioactive materials. The sender is responsible for supplying and affixing this label to the mailpiece.

- g. The address side of each mailpiece must bear the following endorsements in bold letters: “Return to Sender in Case of Nondelivery” and “Radioactive Materials, Quantities Permitted for Movement by Post.”
- h. A shipper’s declaration for dangerous goods is required. See [326](#) and [725.3](#).

#### 622.4 **Magnetized Materials**

Magnetized materials, as defined in [349.24](#), are prohibited in international mail except for those that cannot cause a compass deviation at a distance of 7 feet or more. Mailable magnetized materials must be prepared for mailing following Packaging Instruction 9B in Appendix [C](#).

#### 622.5 **Lithium and Lithium-ion Cells and Batteries — General**

Only lithium batteries under [622.51](#) and [622.52](#) that are properly installed in the equipment they operate may be sent internationally or to and from an APO, FPO, or DPO location (subject to the conditions prescribed by the Department of Defense listed in *Overseas Military/Diplomatic Mail* in the *Postal Bulletin*. Lithium batteries that are *packed with* the equipment or lithium batteries *sent separately* from equipment are prohibited. Damaged or recalled batteries are prohibited and may not be mailed internationally under any circumstances.

#### 622.51 **Lithium Metal (Non-Rechargeable) Cells and Batteries**

Small consumer-type lithium metal cells or batteries (lithium metal or lithium alloy) like those used to power cameras and flashlights are mailable in a single shipment with the following restrictions:

- a. The batteries must be installed in the equipment being shipped.
- b. Each shipment may contain a maximum of four lithium cells or two lithium batteries.
- c. The lithium content must not exceed 1 gram (g) per cell.
- d. The total aggregate lithium content must not exceed 2 g per battery.
- e. The batteries installed in the equipment must be protected from damage and short circuit.
- f. The equipment must be equipped with an effective means of preventing it from being inadvertently turned on or activated.
- g. The equipment must be contained in a strong sealed package and cushioned to prevent movement or damage.
- h. Mailpieces must not bear markings or labels identifying the contents as lithium batteries.

**622.52 Lithium-ion (Rechargeable) Cells and Batteries**

Small consumer-type lithium-ion cells and batteries like those used to power cell phones and laptop computers are mailable in a single shipment with the following restrictions:

- a. The batteries must be installed in the equipment being shipped.
- b. Each shipment may contain a maximum of four lithium-ion cells or two lithium-ion batteries.
- c. The watt-hour rating must not exceed 20 Wh per cell.
- d. The watt-hour rating must not exceed 100 Wh per battery.
- e. Each battery must bear the “Watt-hour” or “Wh” marking on the battery to determine if it is within the limits defined in items c and d.
- f. The batteries installed in the equipment must be protected from damage and short circuit.
- g. The equipment must be equipped with an effective means of preventing it from being inadvertently turned on or activated.
- h. The equipment must be contained in a strong sealed package and cushioned to prevent movement or damage.
- i. Mailpieces must not bear markings or labels identifying the contents as lithium batteries.

**622.53 Very Small Lithium Metal and Lithium-ion Cells and Batteries**

Each shipment containing very small lithium batteries, when installed in the equipment they operate (including circuit boards), may contain a maximum of four lithium cells or two lithium batteries. Very small cells/batteries are mailable internationally with the following conditions:

- a. Each lithium metal cell and battery must contain no more than 0.3 gram of lithium content.
- b. Each lithium-ion cell/battery must have a watt-hour rating of not more than 2.7 Wh.
- c. Mailpieces must not bear markings or labels identifying the contents as lithium batteries.

## Exhibit 622.5

**International Lithium Battery Mailability**

	<b>International APO/FPO/DPO<sup>1</sup></b>	<b>Mailpiece Battery Limit<sup>2</sup></b>
<b>Lithium Metal or Lithium Alloy Batteries<sup>3, 4</sup></b>		
<i>Small, non-rechargeable, consumer-type batteries</i>		
Contained in (properly installed in equipment)	Mailable	Maximum of 4 cells or 2 batteries
Packed with equipment, but not installed in the equipment	Prohibited	
Without the equipment they operate (individual batteries in originally sealed packaging)	Prohibited	
<b>Lithium-ion or Lithium Polymer Batteries<sup>5, 6</sup></b>		
<i>Small, rechargeable, consumer-type batteries</i>		
Contained in (properly installed in equipment)	Mailable	Maximum of 4 cells or 2 batteries
Packed with equipment, but not installed in the equipment	Prohibited	
Without the equipment they operate (individual batteries in originally sealed packaging)	Prohibited	
<b>Very Small Lithium Metal or Lithium-ion Batteries<sup>7, 8</sup></b>		
<i>Exception for very small consumer-type batteries in international transportation</i>		
Contained in (properly installed in equipment)	Mailable	Maximum of 4 cells or 2 batteries
Packed with equipment, but not installed in the equipment	Prohibited	
Without the equipment they operate (individual batteries in originally sealed packaging)	Prohibited	

<sup>1</sup> Unless otherwise prohibited by the international destination country or specific APO/FPO/DPO ZIP Code location.

<sup>2</sup> When a mailpiece limitation of 4 cells or 2 batteries is applicable, a mailpiece may contain either 4 cells or 2 batteries, not both.

<sup>3</sup> Each lithium metal or lithium alloy cell must not contain more than 1g lithium content.

<sup>4</sup> Each lithium metal or lithium alloy battery must not contain more than 2g of aggregate lithium content.

<sup>5</sup> Each lithium-ion or lithium polymer cell must not exceed more than 20 Wh (watt-hour rating).

<sup>6</sup> Each lithium-ion or lithium polymer battery must not exceed 100 Wh.

<sup>7</sup> Each lithium metal or lithium alloy cell or battery must not exceed 0.3 gram of lithium content.

<sup>8</sup> Each lithium-ion or lithium polymer cell or battery must not exceed a watt-hour rating of 2.7 Wh.

**Note:** Shipments containing lithium batteries are not permitted in Global Express Guaranteed mailpieces.

## 623 Nonmailable Hazardous Materials

The following types of hazardous materials, as defined in Chapter [3](#), and IMM 135–136, are prohibited in international mail:

- a. Class 1, explosives (including explosive devices) [\(341\)](#).
- b. Class 2, gases [\(342\)](#).
- c. Class 3, flammable and combustible liquids [\(343\)](#).
- d. Class 4, flammable solids including matches [\(344\)](#).
- e. Class 5, oxidizing substances and organic peroxides [\(345\)](#).
- f. Class 6, Division 6.1, toxic substances (including irritants) [\(346\)](#).
- g. Class 6, Division 6.2, infectious substances [\(346\)](#), except as permitted in [622.2](#).
- h. Class 7, radioactive materials [\(347\)](#), except as permitted in [622.3](#).
- i. Class 8, corrosives [\(348\)](#).

- j. Class 9, miscellaneous hazardous materials (349).
- k. Dry ice (carbon dioxide solid) (349.23).
- l. Magnetized materials capable of causing a compass deviation at a distance of 7 feet or more (349.24). See 622.4 for mailable magnetized materials.
- m. ORM-D materials (335 and 621.3).

## 63 Restricted Matter: International Mail

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### 631 APO/FPO/DPO Mail

Hazardous, restricted, or perishable materials mailed to, from, and between overseas military Post Offices are subject to the conditions of IMM 130, the standards in this publication, conditions prescribed by the Department of State international security policy, and conditions prescribed by the Department of Defense (DOD), as listed in *Overseas Military/Diplomatic Mail* in the *Postal Bulletin*. Also see DMM 703.2-4.

### 632 Firearms

The requirements and prohibitions that apply to the mailing of firearms in domestic mail, as stated in Chapter 4, also apply to international mail subject to any restrictions in the Individual Country Listings in the IMM.

- a. Nonautomatic and semiautomatic rifles, carbines, revolvers, and pistols (regardless of caliber), except those of .50 caliber or less manufactured before 1898.
- b. Shotguns with barrels less than 18 inches long.
- c. All machine guns, submachine guns, machine pistols, and fully automatic rifles.

To obtain an export license, mailers should contact the following federal agency:

U.S. DEPARTMENT OF STATE  
PM/DTC STE 1200 SA-1  
2401 E ST NW  
WASHINGTON DC 20037-2915

Telephone: 202-663-2980

In addition, see IMM 540 for U.S. Department of State licensing requirements applicable to the international mailing of arms or implements of war, component parts, and related technical data.

#### 632.1 Export to APOs/FPOs/DPOs

Export of firearms to certain specified overseas military or diplomatic Post Offices (APOs/ FPOs/DPOs) is prohibited. To determine if the mailing of firearms to a specific APO, FPO, or DPO is prohibited, refer to the table titled "Overseas Military/Diplomatic Mail," which is published periodically in the *Postal Bulletin*. Footnote F of this table lists the restrictions for mailing firearms. If the destination military or diplomatic Post Office permits the shipment of firearms (meaning no Footnote F restriction is assigned to the

specific APO, FPO, or DPO ZIP Code), the mailer must present an export license obtained from the regional Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) office.

#### 632.2 **Import**

Under the following conditions, members of the armed forces may mail rifles or shotguns without an import permit:

- a. Incident to a permanent change of duty or release from active duty, any member of the armed forces who has been stationed on active duty outside the United States for the preceding 60 days may, without an import permit, present up to three rifles or shotguns that are mailable to the appropriate armed forces transportation officer to be forwarded to the member's residence as unaccompanied baggage officially shipped through the mail. Firearms imported in this manner must be intended for the member's personal use.
- b. Any member of the armed forces who wishes to import more than three mailable firearms must prepare ATF Form 6, *Application and Permit for Importation of Firearms, Ammunition, and Implements of War*, and must comply with the Defense Transportation Regulation 4500.9-r and other appropriate military directives.
- c. The three-firearm limitation does not apply to mailable firearms for which the member of the armed forces has proof of prior ownership in the United States. A member may personally mail these other firearms back into the United States, or to any of its possessions, if the member can establish to the satisfaction of the U.S. Customs Service that he or she previously took the firearms out of the United States or any of its possessions.
- d. Any member of the armed forces importing firearms under a, b, or c of this section must prepare ATF Form 6A, *Release and Receipt of Imported Firearms, Ammunition, and Implements of War*, under 27 CFR 178.114(b). In addition, the member's authorized agent must furnish this form and associated certification to the customs officer releasing the firearms.

#### 633 **Inert Replica and Explosive Devices**

The following types of replica or inert explosive devices are prohibited in international mail:

- a. Military ordnance, ammunition, and shells.
- b. Grenades.
- c. Similar devices that were originally designed for military or combative use (including training).

#### 634 **Knives and Sharp Instruments**

Knives and sharp instruments permitted to be mailed in domestic mail may be mailed in international mail as permitted in the conditions specified for the Individual Country Listings in the IMM.

**635 Drugs**

Drugs that are admissible in domestic mail (see Chapter 4) are also acceptable in international and APO/FPO/DPO mail, provided there is no specific exclusion by the destination country or military or diplomatic Post Office.

**636 Controlled Substances**

Controlled substances are not permitted in international mail. Controlled substances addressed to APO/FPO/DPO destinations are subject to the prohibitions in DMM 703.2.3 or 703.3.2, in addition to all requirements that apply to domestic mail, as contained in Chapter 4.

**637 Other Restricted Matter**

Materials that are nonmailable domestically are also prohibited in international mail. The restricted materials include, but are not limited to, intoxicating liquor; matter emitting obnoxious odor, motor vehicle master keys, odd-shaped items sent in letter-size envelopes, abortive and contraceptive devices, and certain building construction material. See IMM 135 and 136 for other general restrictions and prohibitions, and the Individual Country Listings in the IMM for specific country restrictions and prohibitions.

## 64 Perishable Matter: International Mail

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**641 APO/FPO/DPO Mail**

Hazardous, restricted, or perishable materials mailed to, from, and between overseas military or diplomatic Post Offices are subject to the conditions of IMM 130, the standards in this publication, conditions prescribed by the Department of State international security policy, and conditions prescribed by the Department of Defense (DOD), as listed in *Overseas Military/Diplomatic Mail* in the *Postal Bulletin*. Also see DMM 703.2-4.

**642 Animals**

Most live or dead animals are nonmailable in international mail. Animals mailed to the Republic of Palau, the Republic of the Marshall Islands, and the Federated States of Micronesia require a permit issued by the government of the destination country.

When permitted by the destination country, only the following types of animals are mailable:

- a. Live bees, leeches, silkworms, and flies of the family Drosophilidae.
- b. Thoroughly dried dead insects or reptiles.
- c. Parasites and predators of injurious insects, provided all of the following conditions are met:
  - (1) The parasites and predators of injurious insects are permitted in domestic mail.
  - (2) They are useful in controlling harmful insects.



- (3) They are exchanged by officially recognized scientific or health agencies.
- (4) They are sent by First-Class Mail International service, First-Class Package International Service, or Priority Mail International Flat Rate Envelopes or Small Flat Rate Priced Boxes.
- (5) They are securely packaged in containers conforming to the requirements for domestic mail.

## 643 Eggs

### 643.1 Fresh Eggs

Eggs may be mailed in international mail via Priority Mail International service only as follows:

- a. For shipments to all countries except Canada, eggs must be packed in the following manner:
  - (1) Each egg must be packed in sufficient cushioning material.
  - (2) Eggs must be shipped in a metal egg container.
  - (3) The metal egg container must be enclosed in an outer container of wood with sufficient cushioning material packed between the inner and outer containers.
- b. For shipments to Canada, eggs must be packed in the following manner:
  - (1) Each egg must be wrapped in protective material and placed on end.
  - (2) Eggs must be either packed in the manner prescribed for other countries in [643.1a](#) or packed in a wooden, papier-mâché, or other box of rigid material having a well-fitting, tightly adjusted lid.
  - (3) Vacant space in the box must be filled with packing material to prevent eggs from striking together or against the sides, top, or bottom of the box.

### 643.2 Dried Whole Eggs

#### 643.21 Commodity Credit Corporation Endorsement

Dried whole eggs purchased under the USDA's Commodity Credit Corporation program must carry an endorsement by the exporter or authorized representative waiving any right to withdraw the parcel from the mail or to have it returned. The endorsement must be written or stamped on the address side of each mailpiece. These mailings may be made by Priority Mail International service only.

#### 643.22 Certificate

A certificate using the format shown in IMM Exhibit 553.121 (and repeated here as [Exhibit 643.22](#)) must be prepared and completed by the sender, and presented at the time of mailing. The following conditions also apply:

- a. A single certificate may cover any number of mailpieces presented by the same sender and in the same mailing, even if the mailpieces are addressed to different countries.
- b. A charge (see IMM 552) is made for each certificate or each parcel (if a single certificate covers more than one parcel).

- c. Postage to cover the certificate charge must be affixed to the certificate and canceled with the postmark of the office of mailing.
- d. After being postmarked, the certificate must be signed by the postmaster (or designee) and returned to the sender.

Exhibit 643.22

#### **Certificate of Mailing Dried Whole Eggs**

<b>CERTIFICATE OF MAILING DRIED WHOLE EGGS</b>	
<p>I hereby certify that there has (have) been posted at this Post Office facility today by (Sender), parcels containing a total of (Number) pounds of dried whole eggs on which the sender has waived the right to withdraw same from the mail or have same returned.</p>	
<p>Parcels addressed to</p>	
<hr style="width: 80%; margin: 0 auto;"/> <p>(Name and addresses of addressees)</p>	
<hr style="width: 80%; margin: 0 auto;"/> <p>(Office stamp) (Date)</p>	<hr style="width: 80%; margin: 0 auto;"/> <p>(Postmaster)</p>
<hr style="width: 80%; margin: 0 auto;"/> <p>By</p>	

#### 644 **Plants**

Plants, seeds, and plant materials, including fruits and vegetables, are subject to the provisions for domestic mail in section 56, Publication 14, *Prohibitions and Restrictions on Mailing Animals, Plants, and Related Matter*, and the quarantine regulations of the country of destination. Customers can obtain information from the U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) Plant Protection and Quarantine (PPQ) Programs at:

USDA APHIS PPQ  
4700 RIVER RD  
RIVERDALE MD 20737-1228

#### 645 **Fresh Foods and Other Perishables**

Fresh meats, fruits, vegetables, and other items that are capable of easily decomposing or cannot reasonably be expected to reach their destination without spoiling are nonmailable in international mail. Consult the Individual Country Listing in the IMM for specific restrictions or prohibitions.

# 7 Air Transportation Requirements

## 71 General

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This chapter contains standards on the mailability of hazardous materials, restricted matter, and perishable matter in domestic mail via air transportation. (For international and APO/FPO/DPO mail, see Chapter [6](#).)

Full compliance with the regulations governing the shipment of harmful matter by air transportation is essential because these materials can endanger postal employees, airline passengers and personnel, aircraft equipment, and postal equipment and facilities.

For the purposes of this chapter, air transportation requirements apply to all mailable hazardous materials, restricted matter, and perishable matter sent via Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service.

### 711 Refusal by Air Carrier

#### 711.1 Air Carrier Policy or Pilot's Decision

Although a mailpiece containing a mailable hazardous, perishable, or restricted material may be properly prepared for air transportation under Postal Service mailing requirements, an individual pilot may refuse it. Nonmailable or improperly prepared mailpieces can also be rejected by an air carrier when tendered for shipment. Refusals can result from the following situations:

- a. The air carrier is not authorized to carry hazardous materials under the provisions of the Federal Aviation Administration (FAA) Operator's Certificate.
- b. The air carrier's corporate policy prohibits carrying hazardous or restricted materials.
- c. The pilot of an individual flight rejects any mailpieces perceived as questionable or unsafe. Pilots have the right to refuse the boarding and transport of questionable articles that could interfere or prevent the safe operation of the aircraft under Federal Air Regulations (FAR).
- d. The mailpiece contains a nonmailable hazardous or restricted material that was mistakenly accepted or deposited in the mailstream.
- e. The mailpiece is not properly packaged, marked, or labeled for air transportation.

- f. The mailpiece does not carry a properly completed shipper's declaration for dangerous goods.
- g. The mailpiece is unidentified as to its contents and appears to contain a hazardous or restricted material.
- h. The air carrier refuses a mailable shipment of live animals or other mailable articles of perishable matter because of its company policy on safety or current extreme temperature conditions.

#### 711.2 **Handling of Mailpieces Refused by an Air Carrier**

All mailpieces containing hazardous, restricted, or perishable materials that are refused by an air carrier must be handled as follows:

- a. If the mailpiece is damaged or leaking, contact the local facility's safety officer or designee for assistance. The procedures in the facility's Spill/Leak SOP and Handbook EL-812 must be followed.
- b. An online Mailpiece Incident Report (MIR) is required to be completed and filed in accordance with the instructions in the Safety Toolkit, based on the incident type. Types of incidents may include spills, leaks, or hazardous, restricted, or perishable material that has been rejected by an air carrier.
- c. If the mailpiece contains a nonmailable or improperly packaged hazardous or restricted material, a nonmailable or improperly packaged animal or other perishable matter, immediately follow the reporting procedures in POM 139.117–118 and the Aviation Mail Security Hazardous Materials Program Instructions, as applicable. Additionally, to prevent future shipments from being incorrectly accepted for mailing, notify the mailer and the mailing Post Office of the problem.
- d. If the mailpiece contains a mailable hazardous or restricted material that is properly packaged, labeled, and marked, attempt to contact the mailer. If the mailer can be reached, advise the mailer that the item has been refused by the air carrier and offer to divert to surface transportation or return to sender. If the mailer agrees to divert to surface, apply Label 127, *Surface Transportation Only*, and immediately dispatch the mailpiece to the destination via the most expeditious means of surface transportation.
- e. If the mailer cannot be contacted, or if the mailer does not wish to have the mailpiece rerouted via surface transportation, or if the mailpiece cannot be rerouted via surface transportation to the delivery address, do the following:
  - (1) Affix Label 180, *Rejected by Air Carrier*, or endorse the address side of the mailpiece "Refused for Air Transportation by Air Carrier" and note the name of the airline, flight number, and reason for refusal.
  - (2) Correct the markings on the mailpiece to read "Surface Mail Only," and return the mailpiece to the sender via surface transportation (if permitted).

- (3) Apply Label 127, *Surface Transportation Only*, and immediately dispatch the mailpiece to the destination via the most expeditious means of surface transportation.
  - (4) Provide the mailer with instructions on how to obtain a refund of the postage charges because service was not provided, and the item was determined to be mailable.
  - (5) Complete PS Form 2759, *Report of Irregular Handling of Mail*, for internal Postal Service information only, and distribute copies to the appropriate Postal Service offices. Do not send a copy to the mailer. Include the name and address of the mailer, the type and amount of hazardous material, and the reason for the air carrier's refusal.
- f. If the mailpiece contains mailable animals that cannot be delivered to the addressee or returned to the sender via surface transportation within 72 hours (for live day-old poultry), or within the delivery period marked on the mailpiece (for other animals), immediately dispose of it. For safety reasons, dispose of mailpieces not marked with a delivery period when it reasonably appears the articles could not be delivered or returned in a viable condition. Also dispose of, or donate to a charitable institution, any perishable matter that cannot be returned in a viable condition. See POM 691.52 for disposal information.
- g. If the mailpiece contains a mailable animal or other article of perishable matter that appears to be viable and can be delivered within the specified delivery period, attempt to contact the mailer via information from the return address. If the mailer can be reached, advise the mailer of the available option for rerouting the mailpiece via the most expeditious means of surface transportation (if available). If the mailer agrees to divert to surface, apply Label 127, *Surface Transportation Only*, and immediately dispatch the mailpiece to the destination via the most expeditious means of surface transportation.
- h. If the mailer of a parcel containing a mailable animal or other article of perishable matter (that appears to be in a viable condition) cannot be contacted, and the mailpiece can be returned to the sender within the specified delivery period, do the following:
- (1) Affix Label 180, *Rejected by Air Carrier*, or endorse the address side of the mailpiece "Refused for Air Transportation by Air Carrier" and note the name of the airline, flight number, and reason for refusal.
  - (2) Apply Label 127, *Surface Transportation Only*, and immediately return the mailpiece to the sender via the most expeditious means of surface transportation.
  - (3) Provide the mailer with instructions on how to obtain a refund of the postage charges because service was not provided, and the item was determined to be mailable.

## 72 Hazardous Materials: Air Transportation

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### 721 General Requirements

For domestic mail sent via air transportation, a mailpiece containing a hazardous material must:

- a. Consist of a material that is permitted to be transported by air.
- b. Be prepared and packaged under all applicable conditions for transport by air.
- c. Be sent by Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service.

Hazardous materials are not acceptable for air transportation if they are not prepared in compliance with the specific applicable requirements. These requirements consider the degree of hazard, quantity of material, method of packaging, required shipping papers, and adequacy of labels and/or markings required for carriage aboard an aircraft.

Chapter 3 and the Packaging Instructions in Appendix C, provide full details of the conditions under which mailable hazardous materials may be sent in domestic mail via air transportation.

### 722 Additional Requirements

#### 722.1 APO/FPO/DPO Mail

Hazardous, restricted, or perishable materials mailed to, from, and between overseas military or diplomatic Post Offices are subject to the conditions of IMM 130, the standards in this publication, conditions prescribed by the Department of State international security policy, and conditions prescribed by the Department of Defense (DOD), as listed in *Overseas Military/Diplomatic Mail* in the *Postal Bulletin*. Also see Chapter 6 and DMM 703.2 for information on air transportation and other restrictions affecting APO/FPO/DPO, SAM, and PAL service.

#### 722.2 ZIP Codes Served Only by Air Transportation

Hazardous materials that are prohibited from mailing via air transportation cannot be mailed to any ZIP Code that is serviced only by air transportation (e.g., certain ZIP Codes in Alaska).

#### 722.3 Air Transportation Prohibitions

The following types of hazardous materials are prohibited from transport via aircraft under any circumstances:

- a. Explosives.
- b. Anything susceptible to damage or that can become harmful because of changes in temperature or atmospheric pressures, unless protected against the effects of such changes.
- c. Magnetic material that has a field strength sufficient to cause a compass deviation at a distance of 7 feet or more from any point on the outer packaging.

- d. Flammable materials (gases, liquids, and solids).
- e. Radioactive materials.
- f. Hazardous materials excluded from air shipment by the regulations of 49 CFR 100-185, or by the applicable country or air carrier operator variations.

## 723 **Hazardous Materials Warning Labels**

See [325](#) for information on hazardous materials warning labels. Parcels displaying any of the DOT warning labels shown in [Exhibit 325.1](#) are prohibited because items required to bear those warning labels contain hazardous materials or quantities of hazardous materials that possess too great a risk to be safely handled in the mail. Parcels displaying any of the labels shown in [Exhibit 325.2a](#) are permitted to be mailed within specific limits set by the Postal Service and as defined in Chapter [3](#).

## 724 **Consumer Commodity and Mailable Limited Quantity Materials**

Hazardous materials permitted to be sent in domestic mail via air transportation must qualify as consumer commodity materials or air-eligible mailable limited quantity materials, except for the few materials specified in [322](#) and [Exhibit 331](#). See [333](#) and [334](#) for more information on air-eligible hazardous materials.

To be acceptable for air transportation, a consumer commodity material or mailable limited quantity materials must be eligible for shipment via air and must be properly packaged and marked. The mailpiece must also bear a shipper's declaration for dangerous goods as required in [326](#) and [725.3](#).

## 725 **Mailer Responsibility**

### 725.1 **General**

Full responsibility rests with the mailer to comply with all Postal Service and non-Postal Service laws and regulations regarding the mailing of hazardous materials. Anyone who mails, or causes to be mailed, a nonmailable or improperly packaged hazardous material can be subject to legal penalties, including, but not limited to, those specified in 18 U.S.C.

### 725.2 **Warning Labels and Marking Requirements**

Except as noted, hazardous materials acceptable for air transportation generally fall within the consumer commodity or mailable limited quantity categories. Mailpieces containing these materials and intended for air transportation have specific marking requirements, including the use of certain DOT hazard class warning labels. Some air-eligible mailable hazardous materials also have marking and packaging requirements that are unique to mailpieces entered under these exceptions (e.g. SP 9275, certain

mailable infectious substances and medical waste, and dry ice). Mailable hazardous material must bear DOT handling labels (such as orientation arrows, magnetized materials, etc.) when applicable. The following also apply:

- a. Mailpieces containing air-eligible materials in hazard Classes 2, 3, and 6.1, or portions of 9 must bear DOT square-on-point markings and an approved DOT Class 9 hazardous material warning label (see [Exhibit 325.2b](#)). The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. The symbol “Y” must be black, located in the center of the square-on-point, and clearly visible. Mailpieces must also be marked with the proper shipping name “Consumer Commodity” and identification number “ID8000.” A shipper’s declaration for dangerous goods, prepared in triplicate, must be affixed to the outside of the mailpiece.
- b. Mailpieces containing air-eligible materials in hazard Classes 5.1, 5.2, or 8 must bear a DOT square-on-point marking and the appropriate approved DOT Class 5.1, 5.2, or 8 hazardous material warning label. The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. The symbol “Y” must be black, located in the center of the square-on-point, and clearly visible. Mailpieces must also be marked with the appropriate identification number and the proper shipping name. A properly completed shipper’s declaration for dangerous goods must be affixed to the outside of the mailpiece.
- c. Markings must be durable, legible, and readily visible, and must be applied on at least one side or one end of the outer packaging. The border forming the square-on-point must be at least 2 mm in width, and the minimum dimension of each side must be 100 mm, unless the package size requires a reduced size marking of no less than 50 mm on each side.

### 725.3 Shipping Papers

Most mailable hazardous materials (including consumer commodity materials or mailable limited quantity materials) must be accompanied by a Shipper’s Declaration for Dangerous Goods (shipping paper, see [326](#)). To determine which mailable hazardous materials require a shipping paper when sent via air transportation, refer to the appropriate sections in Chapter [3](#), and the appropriate Packaging Instruction in Appendix [C](#).

The shipping paper must be properly completed and signed in triplicate by the mailer. It must bear a red candy-striped border and the exact format and same basic wording as shown in [Exhibit 326](#). The shipper’s declaration must be properly prepared, as required by 49 CFR 172.200 through 172.205, which, in part, requires the following information:

- a. Proper shipping name of material.
- b. Hazard class.
- c. UN or NA identification number, as applicable.
- d. The quantity and type of packaging.



- e. The packaging instruction used.
- f. The full name, address, and telephone number of the shipper or consignee.
- g. The signed shipper's certification statement.

Neither the Postal Service nor DOT stocks or furnishes shipper's declaration forms. Mailers may obtain them from commercial printers, Internet-based retailers, safety supply stores, or stationery stores.

#### 725.4 **Addressing**

The full names and addresses of both the sender and the addressee must appear legibly on the address side of the mailpiece, in accordance with DMM 602.

### 726 **Postal Service Handling**

#### 726.1 **Acceptance Personnel**

In addition to the basic guidelines in [251](#), acceptance personnel must follow the Aviation Mail Security Hazardous Materials Program Instructions for the acceptance of hazardous materials. Ensure the following:

- a. Each mailpiece presented contains a mailable hazardous material that is properly packaged and labeled.
- b. If required, the mailpiece bears the required shipper's declaration for dangerous goods (see [326](#) and [725.3](#)).
- c. The mailpiece is eligible for air transportation and mailed as Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service, as permitted.

**Note:** For safety reasons, mailpieces containing hazardous materials that are not eligible for air transportation cannot pay postage at an Priority Mail Express, Priority Mail, First-Class Package Service, or First-Class Mail price, and must be marked "Surface Mail" or "Surface Mail Only."

#### 726.2 **Dispatch Personnel**

In addition to the basic guidelines in [252](#), Postal Service personnel involved with mail dispatch via air transportation must follow the Aviation Mail Security, Hazardous Materials Program Instructions and the POM. These policy statements provide interim field instructions for handling mailpieces containing hazardous materials within mail processing areas and the proper tendering of such mail to the air carriers.

#### 727 **Refusal by Air Carrier**

Mailpieces refused by an air carrier that contain hazardous material, or are suspected to contain hazardous materials, must be handled in accordance with [711](#).

**727.1 Nonmailable or Improperly Prepared Mailpieces**

Mailpieces containing nonmailable or improperly packaged hazardous materials that were inadvertently accepted for mailing should be stopped where identified and not presented to an air carrier. They should be handled in accordance with the Aviation Mail Security Hazardous Materials Program Instructions. Additionally, to prevent future shipments from being incorrectly accepted for mailing, notify the mailer and the Post Office of mailing of the problem.

**728 Spills and Leaks**

The standard procedures to be followed by Postal Service personnel for dealing with spills and leaks are specified in Management Instruction EL-810-2006-3, *Response to Hazardous Materials Releases*, and Handbook EL-812, *Hazardous Materials and Spill Response*.

## 73 Restricted Matter: Air Transportation

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Restricted matter includes articles for which certain mailing restrictions have been imposed for reasons other than risk of harm to persons or property involved in moving the mail. Refer to Chapter [4](#) for mailing information on restricted matter.

**731 Refusal by Air Carrier**

Certain restricted articles, as described in 49 CFR 100-185 and the operator variations of the air carriers, may be accepted for air transportation if properly packaged. These articles must be labeled and bear a shipper's declaration in triplicate, as required by 49 CFR 172.204, or must be marked according to the air carrier's operator variations. Refer to the technical instruction of the International Civil Aviation Organization (ICAO) for air carrier operator variations.

Mailpieces refused by an air carrier that contain restricted matter, or are suspected to contain hazardous matter, must be handled in accordance with [711](#).

## 74 Perishable Matter: Air Transportation

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**741 General Requirements**

Perishable matter is any item that can readily deteriorate during normal mail transport conditions and thereby lose value, create a health hazard, or cause a nuisance or disturbance.

## 742 **Live Animals**

### 742.1 **Basic Conditions**

Most mailable live animals, except honeybees, are permitted to be sent via air transportation. However, the ability of the Postal Service to provide air transportation is dependent on the following:

- a. The animal must be mailable and eligible for transport via air.
- b. All provisions of airline tariffs and air carriers are met.
- c. Air carrier equipment is available to the Postal Service and allows the safe delivery of shipments within specified and reasonable time limits. Time allowance must also be provided for delays en route in air and ground transportation.

**Note:** Local Postal Service personnel are not authorized to refuse the deposit of mailable live animals that are properly packaged.

See [523](#).

### 742.2 **Bees**

Only queen honeybees are permitted to be sent in the domestic mail via air transportation (see [526.2](#) and [Exhibit 526.21](#)).

### 742.3 **Refusal by Air Carrier**

Mailpieces refused by an air carrier that contain live animals or other perishable matter, or are suspected to contain perishable matter, must be handled in accordance with [711](#).

## 743 **Perishable Matter with Dry Ice**

A mailpiece containing mailable matter that is packed in dry ice (carbon dioxide solid) to cool the perishable contents must meet all requirements in [349](#) that apply to sending dry ice in domestic mail via air transportation. For air transportation, the amount of dry ice cannot exceed 5 pounds per mailpiece. Dry ice is prohibited to be mailed to international or APO/FPO/DPO addresses.

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## Appendix A

# Hazardous Materials Table: Postal Service Mailability Guide

The mailing information in this table is based on the online DOT Hazardous Materials Table in 49 CFR 172.101 (dated December 30, 2013). The information is modified to identify the mailability of each hazardous material based on Postal Service mailing regulations. This table identifies the mailability of hazardous materials for *domestic mail only*. Almost no hazardous materials are permitted in international mail. For information on mailability in international mail, see Chapter [6](#) and [Exhibit 621.1](#).

In the domestic mail, generally only those hazardous materials that can be reclassified as an ORM-D material and renamed with the proper shipping name of “Consumer Commodity” are eligible for mailing subject to the postal quantity limitations. The only exceptions are for the small number of materials listed in [322](#).

The columns in the table contain the following information:

**Column (a):** Lists the proper shipping name of the hazardous material in roman type. Text that appears in *italic* type is not part of the proper shipping name of the hazardous material and is listed for descriptive or reference purposes. Some listings direct the user to the preferred proper shipping name of a material listed elsewhere in the table. The text in this column closely matches the information in Column 2 of the Hazardous Materials Table in 49 CFR 172.101.

**Column (b):** Lists the assigned hazard class or division of the hazardous material. The entry “Forbidden” means the material may not be transported under any circumstances. The entry “n/a” means the material does not have an assigned hazard class. If the field is blank, refer to the listing for the preferred proper shipping name cited in Column (a). The text in this column closely matches the information in Column 3 of the Hazardous Materials Table in 49 CFR 172.101.

**Column (c):** Lists the identification (ID) number assigned to the hazardous material. The number may be either a United Nations (UN) number or a North American (NA) number. This field is blank if Column (a) directs the user to the listing for the preferred proper shipping name of the material, or if the entry in Column (b) is “Forbidden.” The text in this column closely matches the information in Column 4 of the Hazardous Materials Table in 49 CFR 172.101.

**Column (d):** Lists the DOT Packing Group (PG) assignment for the hazardous material. Not all hazard classes have DOT Packing Group assignments. If this field contains “n/a,” the material is in a hazard class that does not use Packing Group assignments. This field is blank if Column (a) directs the user to the listing for the preferred proper shipping name of the material, or if the entry in Column (b) is “Forbidden.” The text in this column closely matches the information in Column 5 of the Hazardous Materials Table in 49 CFR 172.101.

**Column (e):** Lists the mailability of the hazardous material according to Postal Service regulations. If the entry is “Prohibited,” the material is nonmailable. If the entry cites a reference to this publication or the DMM, the material is subject to those requirements and restrictions. If the entry is “Only ORM-D,” the material is mailable only if it can be reclassified as an ORM-D material and renamed with the proper shipping name of “Consumer Commodity” as permitted in 49 CFR. Mailable ORM-D materials cannot exceed the postal quantity limits specified in this publication. The mailer is responsible for correctly determining if the hazardous material is eligible to be reclassified as an ORM-D material. If assistance is needed, the mailer may request a ruling from the PCSC as provided in [215.2](#). If the hazardous material is mailable in the domestic mail, refer to Column (f) and (g), as appropriate, to determine the applicable postal packaging instruction in Appendix [C](#).

**Column (f):** Lists the USPS packaging instruction in Appendix [C](#) that must be followed if the hazardous material is permitted in domestic mail via air transportation. This field is blank if Column (a) directs the user to the listing for the preferred proper shipping name of the material, or if the hazardous material is prohibited from mailing as designated in Column (e). If the entry in this column is “Prohibited,” the material is not permitted in domestic mail via air transportation.

**Column (g):** Lists the USPS packaging instruction in Appendix [C](#) that must be followed if the hazardous material is permitted in domestic mail via surface transportation. This field is blank if Column (a) directs the user to the listing for the preferred proper shipping name of the material, or if the hazardous material is prohibited from mailing as designated in Column (e). If the entry in this column is “Prohibited,” the material is not permitted in domestic mail via surface transportation.

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<b>A</b>						
<i>Accelerene, see p-Nitrosodimethylaniline</i>						
<i>Accumulators, electric, see Batteries, wet etc.</i>						
Accumulators, pressurized, pneumatic or hydraulic (containing nonflammable gas), see Articles pressurized, pneumatic or hydraulic (containing nonflammable gas)						
Acetal	3	UN1088	II	Only ORM-D	Prohibited	3A
Acetaldehyde	3	UN1089	I	Prohibited		
Acetaldehyde ammonia	9	UN1841	III	Only ORM-D or Consumer Commodity	9C	9C
Acetaldehyde oxime	3	UN2332	III	Only ORM-D	Prohibited	3A
Acetic acid, glacial or Acetic acid solution, with more than 80 percent acid, by mass	8	UN2789	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Acetic acid solution, not less than 50 percent but not more than 80 percent acid, by mass	8	UN2790	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Acetic acid solution, with more than 10 percent and less than 50 percent acid, by mass	8	UN2790	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Acetic anhydride	8	UN1715	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Acetone	3	UN1090	II	Only ORM-D	Prohibited	3A
Acetone cyanohydrin, stabilized	6.1	UN1541	I	Prohibited		
Acetone oils	3	UN1091	II	Only ORM-D	Prohibited	3A
Acetonitrile	3	UN1648	II	Only ORM-D	Prohibited	3A
Acetyl acetone peroxide with more than 9 percent by mass active oxygen	Forbidden			Prohibited		
Acetyl benzoyl peroxide, solid, or with more than 40 percent in solution	Forbidden			Prohibited		
Acetyl bromide	8	UN1716	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Acetyl chloride	3	UN1717	II	Prohibited		
Acetyl cyclohexanesulfonyl peroxide, with more than 82 percent wetted with less than 12 percent water	Forbidden			Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Acetyl iodide	8	UN1898	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Acetyl methyl carbinol	3	UN2621	III	Only ORM-D	Prohibited	3A
<i>Acetyl peroxide, solid, or with more than 25 percent in solution</i>	Forbidden			Prohibited		
Acetylene, dissolved	2.1	UN1001	n/a	Prohibited		
<i>Acetylene (liquified)</i>	Forbidden			Prohibited		
<i>Acetylene silver nitrate</i>	Forbidden			Prohibited		
<i>Acetylene, solvent free</i>	Forbidden			Prohibited		
<i>Acetylene tetrabromide, see Tetrabromoethane</i>						
<i>Acid butyl phosphate, see Butyl acid phosphate</i>						
<i>Acid, sludge, see Sludge, acid</i>						
Acridine	6.1	UN2713	III	Only ORM-D or Consumer Commodity	6A	6A
Acrolein dimer, stabilized	3	UN2607	III	Only ORM-D	Prohibited	3A
Acrolein, stabilized	6.1	UN1092	I	Prohibited		
Acrylamide, solid	6.1	UN2074	III	Only ORM-D or Consumer Commodity	6A	6A
Acrylamide, solution	6.1	UN3426	III	Only ORM-D or Consumer Commodity	6A	6A
Acrylic acid, stabilized	8	UN2218	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Acrylonitrile, stabilized	3	UN1093	I	Prohibited		
<i>Actuating cartridge, explosive, see Cartridges, power device</i>						
<i>Adhesives, containing a flammable liquid</i>	3	UN1133	I, II, III	Only ORM-D	Prohibited	3A
Adiponitrile	6.1	UN2205	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Aerosols, corrosive, Packing Group II or III, (each not exceeding 1 L capacity)</i>	2.2	UN1950	n/a	Only ORM-D or Consumer Commodity	2B	2B
<i>Aerosols, flammable (each not exceeding 1 L capacity)</i>	2.1	UN1950	n/a	Only ORMD	Prohibited	2A
<i>Aerosols, flammable, n.o.s. (engine starting fluid) (each not exceeding 1 L capacity)</i>	2.1	UN1950	n/a	Only ORM-D	Prohibited	2A



<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
Aerosols, <i>nonflammable</i> (each not exceeding 1 L capacity)	2.2	UN1950	n/a	Only ORM-D or Consumer Commodity	2B	2B
Aerosols, <i>poison</i> , each not exceeding 1 L capacity	2.2	UN1950	n/a	Only ORM-D or Consumer Commodity	2B	2B
Air bag inflators, or Air bag modules, or Seatbelt pretensioners	1.4G	UN0503	II	Prohibited		
Air bag inflators, or Air bag modules, or Seatbelt pretensioners	9	UN3268	III	Prohibited		
Air, compressed	2.2	UN1002	n/a	Only ORM-D or Consumer Commodity	2B	2B
Air, refrigerated liquid ( <i>cryogenic liquid</i> )	2.2	UN1003	n/a	Prohibited		
Air, refrigerated liquid ( <i>cryogenic liquid</i> ), nonpressurized	2.2	UN1003	n/a	Prohibited		
Aircraft engines (including turbines), see Engines, internal combustion						
Aircraft evacuation slides, see Lifesaving appliances etc.						
Aircraft hydraulic power unit fuel tank (containing a mixture of anhydrous hydrazine and monomethyl hydrazine) (M86 fuel)	3	UN3165	I	Prohibited		
Aircraft survival kits, see Lifesaving appliances etc.						
Alcoholates solution, n.o.s., in alcohol	3	UN3274	II	Prohibited		
Alcoholic beverages	3	UN3065	II, III	Prohibited (by 18 U.S.C. 1716)		
Alcohols, n.o.s.	3	UN1987	I	Prohibited		
Alcohols, n.o.s.	3	UN1987	II, III	Only ORM-D	Prohibited	3A
Alcohols, flammable, toxic, n.o.s.	3	UN1986	I, II, III	Prohibited		
Aldehydes, n.o.s.	3	UN1989	I	Prohibited		
Aldehydes, n.o.s.	3	UN1989	II, III	Only ORM-D	Prohibited	3A
Aldehydes, flammable, toxic, n.o.s.	3	UN1988	I, II	Prohibited		
Aldehydes, flammable, toxic, n.o.s.	3	UN1988	III	Only ORM-D	Prohibited	3A
Aldol	6.1	UN2839	II	Prohibited		
Aldrin, <i>liquid</i>	6.1	NA2762	II	Prohibited		
Aldrin, <i>solid</i>	6.1	NA2761	II	Prohibited		
Alkali metal alcoholates, selfheating, corrosive, n.o.s.	4.2	UN3206	II, III	Prohibited		
Alkali metal alloys, liquid, n.o.s.	4.3	UN1421	I	Prohibited		
Alkali metal amalgam, liquid	4.3	UN1389	I	Prohibited		
Alkali metal amalgam, solid	4.3	UN3401	I	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Alkali metal amides	4.3	UN1390	II	Only ORM-D	Prohibited	4A
Alkali metal dispersions, flammable or Alkaline earth metal dispersions, flammable	4.3	UN3482	I	Prohibited		
Alkali metal dispersions, or Alkaline earth metal dispersions	4.3	UN1391	I	Prohibited		
<i>Alkaline corrosive liquids, n.o.s., see Caustic alkali liquids, n.o.s.</i>						
Alkaline earth metal alcoholates, n.o.s.	4.2	UN3205	II, III	Prohibited		
Alkaline earth metal alloys, n.o.s.	4.3	UN1393	II	Only ORM-D	Prohibited	4A
Alkaline earth metal amalgams, liquid	4.3	UN1392	I	Prohibited		
Alkaline earth metal amalgams, solid	4.3	UN3402	I	Prohibited		
Alkaloids, liquid, n.o.s., or Alkaloid salts, liquid, n.o.s.	6.1	UN3140	I, II	Prohibited		
Alkaloids, liquid, n.o.s., or Alkaloid salts, liquid, n.o.s.	6.1	UN3140	III	Only ORM-D or Consumer Commodity	6A	6A
Alkaloids, solid, n.o.s. or Alkaloid salts, solid, n.o.s. <i>poisonous</i>	6.1	UN1544	I, II	Prohibited		
Alkaloids, solid, n.o.s. or Alkaloid salts, solid, n.o.s. <i>poisonous</i>	6.1	UN1544	III	Only ORM-D or Consumer Commodity	6A	6A
Alkyl sulfonic acids, liquid or Aryl sulfonic acids, liquid with more than 5 percent free sulfuric acid	8	UN2584	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Alkyl sulfonic acids, liquid or Aryl sulfonic acids, liquid with not more than 5 percent free sulfuric acid	8	UN2586	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Alkyl sulfonic acids, solid or Aryl sulfonic acids, solid with more than 5 percent free sulfuric acid	8	UN2583	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Alkyl sulfonic acids, solid or Aryl sulfonic acids, solid with not more than 5 percent free sulfuric acid	8	UN2585	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Alkylphenols, liquid, n.o.s. (including C2-C12 homologues)	8	UN3145	I	Prohibited		
Alkylphenols, liquid, n.o.s. (including C2-C12 homologues)	8	UN3145	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Alkylphenols, solid, n.o.s. (including C2-C12 homologues)	8	UN2430	I	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Alkylphenols, solid, n.o.s. (including C2-C12 homologues)	8	UN2430	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Alkylsulfuric acids	8	UN2571	II	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Allethrin</i> , see Pesticides, liquid, toxic, n.o.s.						
Allyl acetate	3	UN2333	II	Prohibited		
Allyl alcohol	6.1	UN1098	I	Prohibited		
Allyl bromide	3	UN1099	I	Prohibited		
Allyl chloride	3	UN1100	I	Prohibited		
<i>Allyl chlorocarbonate</i> , see Allyl chloroformate						
Allyl chloroformate	6.1	UN1722	I	Prohibited		
Allyl ethyl ether	3	UN2335	II	Prohibited		
Allyl formate	3	UN2336	I	Prohibited		
Allyl glycidyl ether	3	UN2219	III	Only ORM-D	Prohibited	3A
Allyl iodide	3	UN1723	II	Prohibited		
Allyl isothiocyanate, stabilized	6.1	UN1545	II	Prohibited		
Allylamine	6.1	UN2334	I	Prohibited		
Allyltrichlorosilane, stabilized	8	UN1724	II	Prohibited		
Aluminum borohydride or Aluminum borohydride in devices	4.2	UN2870	I	Prohibited		
Aluminum bromide, anhydrous	8	UN1725	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Aluminum bromide, solution	8	UN2580	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Aluminum carbide	4.3	UN1394	II	Only ORM-D	Prohibited	4A
Aluminum chloride, anhydrous	8	UN1726	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Aluminum chloride, solution	8	UN2581	III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Aluminum dross, wet or hot</i>	Forbidden			Prohibited		
Aluminum ferrosilicon powder	4.3	UN1395	II, III	Only ORM-D	Prohibited	4A
Aluminum hydride	4.3	UN2463	I	Prohibited		
Aluminum, molten	9	NA9260	III	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Aluminum, nitrate	5.1	UN1438	III	Only ORM-D or Mailable Limited Quantity	5A	5A
<i>Aluminum phosphate solution, see Corrosive liquids, etc.</i>						
Aluminum phosphide	4.3	UN1397	I	Prohibited		
Aluminum phosphide pesticides	6.1	UN3048	I	Prohibited		
Aluminum powder, coated	4.1	UN1309	II, III	Only ORM-D	Prohibited	4A
Aluminum powder, uncoated	4.3	UN1396	II, III	Only ORM-D	Prohibited	4A
Aluminum resinate	4.1	UN2715	III	Only ORM-D	Prohibited	4A
Aluminum silicon powder, uncoated	4.3	UN1398	III	Only ORM-D	Prohibited	4A
Aluminum smelting by-products or Aluminum remelting by-products	4.3	UN3170	II, III	Prohibited		
<i>Amatols, see Explosives, blasting, type B</i>						
Amine, flammable, corrosive, n.o.s. or Polyamines, flammable, corrosive, n.o.s.	3	UN2733	I, II	Prohibited		
Amine, flammable, corrosive, n.o.s. or Polyamines, flammable, corrosive, n.o.s.	3	UN2733	III	Only ORM-D	Prohibited	3A
Amine, liquid, corrosive, flammable, n.o.s. or Polyamines, liquid, corrosive, flammable, n.o.s.	8	UN2734	I, II	Prohibited		
Amines, liquid, corrosive, n.o.s. or Polyamines, liquid, corrosive, n.o.s.	8	UN2735	I	Prohibited		
Amines, liquid, corrosive, n.o.s. or Polyamines, liquid, corrosive, n.o.s.	8	UN2735	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Amines, solid, corrosive, n.o.s. or Polyamines, solid, corrosive, n.o.s.	8	UN3259	I	Prohibited		
Amines, solid, corrosive, n.o.s. or Polyamines, solid, corrosive, n.o.s.	8	UN3259	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
2-Amino-4-chlorophenol	6.1	UN2673	II	Prohibited		
2-Amino-5-diethylaminopentane	6.1	UN2946	III	Only ORM-D or Consumer Commodity	6A	6A
2-Amino-4,6-Dinitrophenol, wetted with not less than 20 percent water by mass	4.1	UN3317	I	Prohibited		
2-(2-Aminoethoxy) ethanol	8	UN3055	III	Only ORM-D or Mailable Limited Quantity	8A	8A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
N-Aminoethylpiperazine	8	UN2815	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Aminophenols ( <i>o</i> -; <i>m</i> -; <i>p</i> -)	6.1	UN2512	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Aminopropyldiethanolamine, see Amines, etc.</i>						
<i>n-Aminopropylmorpholine, see Amines, etc.</i>						
Aminopyridines ( <i>o</i> -; <i>m</i> -; <i>p</i> -)	6.1	UN2671	II	Prohibited		
Ammonia, anhydrous (international)	2.3	UN1005	n/a	Prohibited		
Ammonia, anhydrous (domestic)	2.2	UN1005	n/a	Prohibited		
Ammonia solution, <i>relative density between 0.880 and 0.957 at 15° C in water, with more than 10 percent but not more than 35 percent ammonia</i>	8	UN2672	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Ammonia solution, <i>relative density less than 0.880 at 15° C in water, with more than 35 percent but not more than 50 percent ammonia</i>	2.2	UN2073	n/a	Prohibited		
Ammonia solution, <i>relative density less than 0.880 at 15° C in water, with more than 50 percent ammonia</i>	2.2	UN3318	n/a	Prohibited		
Ammonia solution, <i>relative density less than 0.880 at 15° C in water, with more than 50 percent ammonia</i>	2.3	UN3318	n/a	Prohibited		
Ammonium arsenate	6.1	UN1546	II	Prohibited		
Ammonium azide	Forbidden			Prohibited		
<i>Ammonium bifluoride, solid, see Ammonium hydrogen difluoride, solid</i>						
<i>Ammonium bifluoride, solution, see Ammonium hydrogen difluoride, solution</i>						
Ammonium bromate	Forbidden			Prohibited		
Ammonium chlorate	Forbidden			Prohibited		
Ammonium dichromate	5.1	UN1439	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Ammonium dintro-o-cresolate, solid	6.1	UN1843	II	Prohibited		
Ammonium dintro-o-cresolate, solution	6.1	UN3424	II	Prohibited		
Ammonium fluoride	6.1	UN2505	III	Only ORM-D or Consumer Commodity	6A	6A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Ammonium fluorosilicate	6.1	UN2854	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Ammonium fulminate</i>	Forbidden			Prohibited		
Ammonium hydrogen sulfate	8	UN2506	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Ammonium hydrogendifluoride, solid	8	UN1727	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Ammonium hydrogendifluoride, solution	8	UN2817	II	Prohibited		
Ammonium hydrogendifluoride, solution	8	UN2817	III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Ammonium hydrosulfide, solution, see Ammonium sulfide solution</i>						
<i>Ammonium hydroxide, see Ammonia solutions, etc.</i>						
Ammonium metavanadate	6.1	UN2859	II	Prohibited		
Ammonium nitrate fertilizers	5.1	NA2072	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Ammonium nitrate based fertilizers	5.1	UN2067	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Ammonium nitrate based fertilizers	9	UN2071	III	Only ORM-D or Consumer Commodity	9C	9C
<i>Ammonium nitrate-fuel oil mixture containing only prilled ammonium nitrate and fuel oil</i>	1.5D	NA0331	II	Prohibited		
Ammonium nitrate, liquid ( <i>hot concentrated solution</i> )	5.1	UN2426	n/a	Prohibited		
Ammonium nitrate mixed fertilizers	5.1	NA2069	III	Only ORM-D or Mailable Limited Quantity	5A	5A
<i>Ammonium nitrate, with more than 0.2 percent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance</i>	1.1D	UN0222	II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Ammonium nitrate, <i>with not more than 0.2 percent of combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance</i>	5.1	UN1942	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Ammonium nitrate	Forbidden			Prohibited		
Ammonium perchlorate	1.1D	UN0402	II	Prohibited		
Ammonium perchlorate	5.1	UN1442	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Ammonium permanganate	Forbidden			Prohibited		
Ammonium persulfate	5.1	UN1444	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Ammonium picrate, <i>dry or wetted with less than 10 percent water, by mass</i>	1.1D	UN0004	II	Prohibited		
Ammonium picrate, <i>wetted with not less than 10 percent water, by mass</i>	4.1	UN1310	I	Prohibited		
Ammonium polysulfide, solution	8	UN2818	II	Prohibited		
Ammonium polysulfide, solution	8	UN2818	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Ammonium polyvanadate	6.1	UN2861	II	Prohibited	6A	6A
Ammonium silicofluoride, <i>see</i> Ammonium fluorosilicate						
Ammonium sulfide solution	8	UN2683	II	Prohibited		
Ammunition, <i>blank, see</i> Cartridges for weapons, blank						
Ammunition, <i>illuminating with or without burster, expelling charge, or propelling charge</i>	1.2G	UN0171	II	Prohibited		
Ammunition, <i>illuminating with or without burster, expelling charge, or propelling charge</i>	1.3G	UN0254	II	Prohibited		
Ammunition, <i>illuminating with or without burster, expelling charge, or propelling charge</i>	1.4G	UN0297	II	Prohibited		
Ammunition, <i>incendiary liquid or gel, with burster, expelling charge, or propelling charge</i>	1.3J	UN0247	II	Prohibited		
Ammunition, <i>incendiary (water-activated contrivances) with burster, expelling charge, or propelling charge, see</i> Contrivances, <i>water-activated, etc.</i>						

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
Ammunition, incendiary, white phosphorus, <i>with burster, expelling charge, or propelling charge</i>	1.2H	UN0243	II	Prohibited		
Ammunition, incendiary, white phosphorus, <i>with burster, expelling charge, or propelling charge</i>	1.3H	UN0244	II	Prohibited		
Ammunition, incendiary <i>with or without burster, expelling charge, or propelling charge</i>	1.2G	UN0009	II	Prohibited		
Ammunition, incendiary <i>with or without burster, expelling charge, or propelling charge</i>	1.3G	UN0010	II	Prohibited		
Ammunition, incendiary <i>with or without burster, expelling charge, or propelling charge</i>	1.4G	UN0300	II	Prohibited		
Ammunition, practice	1.4G	UN0362	II	Prohibited		
Ammunition, practice	1.3G	UN0488	II	Prohibited		
Ammunition, proof	1.4G	UN0363	II	Prohibited		
<i>Ammunition, rocket, see Warheads, rocket etc.</i>						
<i>Ammunition, SA (small arms), see Cartridges for weapons, etc.</i>						
<i>Ammunition, smoke (water-activated contrivances), white phosphorus, with burster, expelling charge, or propelling charge, see Contrivances, water-activated, etc. (UN0248)</i>						
<i>Ammunition, smoke (wateractivated contrivances), without white phosphorus or phosphides, with burster, expelling charge, or propelling charge, see Contrivances, wateractivated, etc. (UN0249)</i>						
Ammunition smoke, white phosphorus <i>with burster, expelling charge, or propelling charge</i>	1.2H	UN0245	II	Prohibited		
Ammunition, smoke, white phosphorus <i>with burster, expelling charge, or propelling charge</i>	1.3H	UN0246	II	Prohibited		
Ammunition, smoke, <i>with or without burster, expelling charge, or propelling charge</i>	1.2G	UN0015	II	Prohibited		
Ammunition, smoke, <i>with or without burster, expelling charge, or propelling charge</i>	1.3G	UN0016	II	Prohibited		
Ammunition, smoke, <i>with or without burster, expelling charge, or propelling charge</i>	1.4G	UN0303	II	Prohibited		



Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<i>Ammunition, sporting, see Cartridges for weapons, etc. (UN0012; UN0328; UN0339)</i>						
Ammunition, tearproducing, nonexplosive, <i>without burster or expelling charge, non-fuzed</i>	6.1	UN2017	II	Prohibited		
Ammunition, tearproducing <i>with burster, expelling charge, or propelling charge</i>	1.2G	UN0018	II	Prohibited		
Ammunition, tearproducing <i>with burster, expelling charge, or propelling charge</i>	1.3G	UN0019	II	Prohibited		
Ammunition, tearproducing <i>with burster, expelling charge, or propelling charge</i>	1.4G	UN0301	II	Prohibited		
<i>Ammunition, toxic (wateractivated contrivances), with burster, expelling charge, or propelling charge, see Contrivances, wateractivated, etc.</i>						
Ammunition, toxic, nonexplosive, <i>without burster or expelling charge, nonfuzed</i>	6.1	UN2016	II	Prohibited		
Ammunition, toxic <i>with burster, expelling charge, or propelling charge</i>	1.2K	UN0020	II	Prohibited		
Ammunition, toxic <i>with burster, expelling charge, or propelling charge</i>	1.3K	UN0021	II	Prohibited		
Amyl acetates	3	UN1104	III	Only ORM-D	Prohibited	3A
Amyl acid phosphate	8	UN2819	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Amyl butyrates	3	UN2620	III	Only ORM-D	Prohibited	3A
Amyl chlorides	3	UN1107	II	Only ORM-D	Prohibited	3A
Amyl formates	3	UN1109	III	Only ORM-D	Prohibited	3A
Amyl mercaptans	3	UN1111	II	Prohibited		
n-Amyl methyl ketone	3	UN1110	III	Only ORM-D	Prohibited	3A
Amyl nitrate	3	UN1112	III	Only ORM-D	Prohibited	3A
Amyl nitrites	3	UN1113	II	Only ORM-D	Prohibited	3A
Amylamines	3	UN1106	II	Prohibited		
Amylamines	3	UN1106	III	Only ORM-D	Prohibited	3A
Amyltrichlorosilane	8	UN1728	II	Prohibited		
<i>Anhydrous ammonia see Ammonia, anhydrous, liquified</i>						
<i>Anhydrous hydrofluoric acid, see Hydrogen fluoride, anhydrous</i>						
Aniline	6.1	UN1547	II	Prohibited		

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
Aniline hydrochloride	6.1	UN1548	III	Only ORM-D or Consumer Commodity	6A	6A
Aniline oil, see Aniline						
Anisidines	6.1	UN2431	III	Only ORM-D	6A	6A
Anisole	3	UN2222	III	Only ORM-D	Prohibited	3A
Anisoyl chloride	8	UN1729	II	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Antifreeze, liquid, see Flammable liquids, n.o.s.</i>						
<i>Antimonous chloride, see Antimony trichloride</i>						
Antimony compounds, inorganic, liquid, n.o.s.	6.1	UN3141	III	Only ORM-D or Consumer Commodity	6A	6A
Antimony compounds, inorganic, solid, n.o.s.	6.1	UN1549	III	Only ORM-D or Consumer Commodity	6A	6A
Antimony lactate	6.1	UN1550	III	Only ORM-D or Consumer Commodity	6A	6A
Antimony pentachloride, liquid	8	UN1730	II	Prohibited		
Antimony pentachloride, solutions	8	UN1731	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Antimony pentafluoride	8	UN1732	II	Prohibited		
Antimony potassium tartrate	6.1	UN1551	III	Only ORM-D or Consumer Commodity	6A	6A
Antimony powder	6.1	UN2871	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Antimony sulfide and a chlorate, mixtures of</i>	Forbidden			Prohibited		
<i>Antimony sulfide, solid, see Antimony compounds, inorganic, n.o.s.</i>						
Antimony tribromide, solid	8	NA1549	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Antimony tribromide, solution	8	NA1549	II	Only ORM-D or Mailable Limited Quantity	8A	8A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Antimony trichloride, liquid	8	UN1733	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Antimony trichloride, solid	8	UN1733	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Antimony, trifluoride, solid	8	NA1549	II	Only ORMD or Mailable Limited Quantity	8A	8A
Antimony, trifluoride, solution	8	NA1549	II	Only ORMD or Mailable Limited Quantity	8A	8A
Aqua ammonia, see Ammonia solution, etc.						
Argon, compressed	2.2	UN1006	n/a	Only ORM-D or Consumer Commodity	2B	2B
Argon, refrigerated liquid ( <i>cryogenic liquid</i> )	2.2	UN1951	n/a	Prohibited		
Arsenic	6.1	UN1558	II	Prohibited		
Arsenic acid, liquid	6.1	UN1553	I	Prohibited		
Arsenic acid, solid	6.1	UN1554	II	Prohibited		
Arsenic bromide	6.1	UN1555	II	Prohibited		
<i>Arsenic chloride, see Arsenic trichloride</i>						
Arsenic compounds, liquid, n.o.s. <i>inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</i>	6.1	UN1556	I, II	Prohibited		
Arsenic compounds, liquid, n.o.s. <i>inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</i>	6.1	UN1556	III	Only ORM-D or Consumer Commodity	6A	6A
Arsenic compounds, solid, n.o.s. <i>inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</i>	6.1	UN1557	I, II	Prohibited		
Arsenic compounds, solid, n.o.s. <i>inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</i>	6.1	UN1557	III	Only ORM-D or Consumer Commodity	6A	6A
Arsenic pentoxide	6.1	UN1559	II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Arsenic sulfide	6.1	NA1557	II	Prohibited		
<i>Arsenic sulfide and a chlorate, mixtures of</i>	Forbidden			Prohibited		
Arsenic trichloride	6.1	UN1560	I	Prohibited		
Arsenic trioxide	6.1	UN1561	II	Prohibited		
Arsenic trisulfide	6.1	NA1557	II	Prohibited		
<i>Arsenic, white, solid, see Arsenic trioxide</i>						
Arsenical dust	6.1	UN1562	II	Prohibited		
Arsenical pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>	3	UN2760	I, II	Prohibited		
Arsenical pesticides, liquid, toxic	6.1	UN2994	I, II	Prohibited		
Arsenical pesticides, liquid, toxic	6.1	UN2994	III	Only ORM-D or Consumer Commodity	6A	6A
Arsenical pesticides, liquid, toxic, flammable <i>flashpoint not less than 23° C</i>	6.1	UN2993	I, II	Prohibited		
Arsenical pesticides, liquid, toxic, flammable <i>flashpoint not less than 23° C</i>	6.1	UN2993	III	Only ORM-D or Consumer Commodity	6A	6A
Arsenical pesticides, solid, toxic	6.1	UN2759	I, II	Prohibited		
Arsenical pesticides, solid, toxic	6.1	UN2759	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Arsenious acid, solid, see Arsenic trioxide</i>						
<i>Arsenious and mercuric iodide solution, see Arsenic compounds, liquid, n.o.s.</i>						
Arsine	2.3	UN2188	n/a	Prohibited		
Articles, explosive, extremely insensitive <i>or</i> Articles, EEI	1.6N	UN0486	II	Prohibited		
Articles, explosive, n.o.s.	1.4S	UN0349	II	Prohibited		
Articles, explosive, n.o.s.	1.4B	UN0350	II	Prohibited		
Articles, explosive, n.o.s.	1.4C	UN0351	II	Prohibited		
Articles, explosive, n.o.s.	1.4D	UN0352	II	Prohibited		
Articles, explosive, n.o.s.	1.4G	UN0353	II	Prohibited		
Articles, explosive, n.o.s.	1.1L	UN0354	II	Prohibited		
Articles, explosive, n.o.s.	1.2L	UN0355	II	Prohibited		
Articles, explosive, n.o.s.	1.3L	UN0356	II	Prohibited		
Articles, explosive, n.o.s.	1.1C	UN0462	II	Prohibited		
Articles, explosive, n.o.s.	1.1D	UN0463	II	Prohibited		
Articles, explosive, n.o.s.	1.1E	UN0464	II	Prohibited		
Articles, explosive, n.o.s.	1.1F	UN0465	II	Prohibited		
Articles, explosive, n.o.s.	1.2C	UN0466	II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Articles, explosive, n.o.s.	1.2D	UN0467	II	Prohibited		
Articles, explosive, n.o.s.	1.2E	UN0468	II	Prohibited		
Articles, explosive, n.o.s.	1.2F	UN0469	II	Prohibited		
Articles, explosive, n.o.s.	1.3C	UN0470	II	Prohibited		
Articles, explosive, n.o.s.	1.4E	UN0471	II	Prohibited		
Articles, explosive, n.o.s.	1.4F	UN0472	II	Prohibited		
Articles, pressurized pneumatic or Hydraulic containing nonflammable gas	2.2	UN3164	n/a	Only ORM-D or Consumer Commodity	2A	2A
Articles, pyrophoric	1.2L	UN0380	II	Prohibited		
Articles, pyrotechnic for technical purposes	1.1G	UN0428	II	Prohibited		
Articles, pyrotechnic for technical purposes	1.2G	UN0429	II	Prohibited		
Articles, pyrotechnic for technical purposes	1.3G	UN0430	II	Prohibited		
Articles, pyrotechnic for technical purposes	1.4G	UN0431	II	Prohibited		
Articles, pyrotechnic for technical purposes	1.4S	UN0432	II	Prohibited		
Asbestos	9	NA2212	III	Only ORM-D or Consumer Commodity	9C	9C
Ascaridole (organic peroxide)	Forbidden			Prohibited		
Asphalt, at or above its flashpoint	3	NA1999	III	Only ORM-D or Consumer Commodity	Prohibited	3A
Asphalt, cut back, see Tars, liquid, etc.						
Automobile, motorcycle, tractor, other self-propelled vehicle, engine, or other mechanical apparatus, see Vehicle or Battery etc.						
Aviation regulated liquid, n.o.s.	9	UN3334	n/a	Only ORM-D or Consumer Commodity	9C	9C
Aviation regulated solid, n.o.s.	9	UN3335	n/a	Only ORM-D or Consumer Commodity	9C	9C
Azaurolic, acid (salt of), (dry)	Forbidden			Prohibited		
Azido guanidine picrate (dry)	Forbidden			Prohibited		
5-Azido-1-hydroxy tetrazole	Forbidden			Prohibited		
Azido hydroxy tetrazole (mercury and silver salts)	Forbidden			Prohibited		
3-Azido-1,2-Propylene glycol dinitrate	Forbidden			Prohibited		
Azidodithiocarbonic acid	Forbidden			Prohibited		
Azidoethyl nitrate	Forbidden			Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<i>1-Aziridinylphosphine oxide-(tris), see Tris-(1aziridinyl)phosphine oxide, solution</i>						
Azodicarbonamide	4.1	UN3242	II	Only ORM-D	Prohibited	4A
<i>Azotetrazole (dry)</i>	Forbidden			Prohibited		
<b>B</b>						
Barium	4.3	UN1400	II	Only ORM-D	Prohibited	4A
Barium alloys, pyrophoric	4.2	UN1854	I	Prohibited		
Barium azide, <i>dry or wetted with less than 50 percent water, by mass</i>	1.1A	UN0224	II	Prohibited		
Barium azide, <i>wetted with not less than 50 percent water, by mass</i>	4.1	UN1571	I	Prohibited		
Barium bromate	5.1	UN2719	II	Prohibited		
Barium chlorate, solid	5.1	UN1445	II	Prohibited		
Barium chlorate, solution	5.1	UN3405	II	Prohibited		
Barium compounds, n.o.s.	6.1	UN1564	II	Prohibited		
Barium compounds, n.o.s.	6.1	UN1564	III	Only ORM-D or Consumer Commodity	6A	6A
Barium cyanide	6.1	UN1565	I	Prohibited		
Barium hypochlorite <i>with more than 22 percent available chlorine</i>	5.1	UN2741	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Barium nitrate	5.1	UN1446	II	Prohibited		
Barium oxide	6.1	UN1884	III	Only ORM-D or Consumer Commodity	6A	6A
Barium perchlorate, solid	5.1	UN1447	II	Prohibited		
Barium perchlorate, solution	5.1	UN3406	II, III	Prohibited		
Barium permanganate	5.1	UN1448	II	Prohibited		
Barium peroxide	5.1	UN1449	II	Prohibited		
<i>Barium selenate, see Selenates or Selenites</i>						
<i>Barium selenite, see Selenates or Selenites</i>						
Barium styphnate	1.1A	NA0473	II	Prohibited		
Batteries, containing sodium	4.3	UN3292	II	Prohibited		
Batteries, dry, containing potassium hydroxide solid, <i>electric, storage</i>	8	UN3028	III	Prohibited		
Batteries, dry, <i>not subject to the requirements of 49 CFR</i>	n/a	n/a	n/a	Mailable, not regulated by 49 CFR		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Batteries, nickel-metal hydride see Batteries, dry. Sealed, n.o.s. for <i>nickel metal hydride batteries transported by modes other than vessel</i>	9	UN3496	n/a			Mailable per <a href="#">348.22b.</a>
Batteries, wet, filled with acid, <i>electric storage</i>	8	UN2794	III	Prohibited		
Batteries, wet, filled with alkali, <i>electric storage</i>	8	UN2795	III	Prohibited		
Batteries, wet, nonspillable, <i>electric storage</i>	8	UN2800	III	Mailable per 348	8B	8B
Battery fluid, acid	8	UN2796	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Battery fluid, alkali	8	UN2797	II	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Battery lithium type, see Lithium batteries etc.</i>						
Battery-powered vehicle or Battery-powered equipment	9	UN3171	n/a	Prohibited		
<i>Battery, wet, filled with acid or alkali with vehicle or mechanical equipment containing internal combustion engine) see Vehicle, etc. or, Engines, internal combustion etc.</i>						
Benzaldehyde	9	UN1990	III	Only ORM-D or Consumer Commodity	9C	9C
Benzene	3	UN1114	II	Only ORM-D	Prohibited	3A
<i>Benzene diazonium chloride (dry)</i>	Forbidden			Prohibited		
<i>Benzene diazonium nitrate (dry)</i>	Forbidden			Prohibited		
<i>Benzene phosphorus dichloride, see Phenyl phosphorus dichloride</i>						
<i>Benzene phosphorus thiodichloride, see Phenyl phosphorus thiodichloride</i>						
Benzene sulfonyl chloride	8	UN2225	III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Benzene triozone</i>	Forbidden			Prohibited		
<i>Benzenethiol, see Phenyl mercaptan</i>						
Benzidine	6.1	UN1885	II	Prohibited		
<i>Benzol, see Benzene</i>						
Benzonitrile	6.1	UN2224	II	Prohibited		
Benzoquinone	6.1	UN2587	II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Benzotrichloride	8	UN2226	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Benzotrifluoride	3	UN2338	II	Only ORM-D	Prohibited	3A
<i>Benzoxidiazoles (dry)</i>	Forbidden			Prohibited		
<i>Benzoyl azide</i>	Forbidden			Prohibited		
Benzoyl chloride	8	UN1736	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Benzyl bromide	6.1	UN1737	II	Prohibited		
Benzyl chloride	6.1	UN1738	II	Prohibited		
Benzyl chloride <i>unstabilized</i>	6.1	UN1738	II	Prohibited		
Benzyl chloroformate	8	UN1739	I	Prohibited		
Benzyl iodide	6.1	UN2653	II	Prohibited		
Benzyl dimethylamine	8	UN2619	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Benzylidene chloride	6.1	UN1886	II	Prohibited		
Beryllium compounds, n.o.s.	6.1	UN1566	II	Prohibited		
Beryllium compounds, n.o.s.	6.1	UN1566	III	Only ORM-D or Consumer Commodity	6A	6A
Beryllium nitrate	5.1	UN2464	II	Prohibited		
Beryllium, powder	6.1	UN1567	II	Prohibited		
Bicyclo [2,2,1] hepta-2, 5-diene, stabilized or 2,5-Norbornadiene, stabilized	3	UN2251	II	Only ORM-D	Prohibited	3A
Biological substance, Category B	6.2	UN3373	n/a	Mailable per 346		
<i>Biphenyl triozone</i>	Forbidden			Prohibited		
Bipyridilium pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>	3	UN2782	I, II	Prohibited		
Bipyridilium pesticides, liquid, toxic	6.1	UN3016	I, II	Prohibited		
Bipyridilium pesticides, liquid, toxic	6.1	UN3016	III	Only ORM-D or Consumer Commodity	6A	6A
Bipyridilium pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN3015	I, II	Prohibited		
Bipyridilium pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN3015	III	Only ORM-D or Consumer Commodity	6A	6A
Bipyridilium pesticides, solid, toxic	6.1	UN2781	I, II	Prohibited		



Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Bipyridilium pesticides, solid, toxic	6.1	UN2781	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Bis (Aminopropyl) piperazine, see Corrosive liquids, n.o.s.</i>						
Bisulfate, aqueous solution	8	UN2837	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Bisulfites, aqueous solutions, n.o.s.	8	UN2693	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Black powder, compressed or Gunpowder, compressed or Black powder, in pellets or Gunpowder, in pellets	1.1D	UN0028	II	Prohibited		
Black powder for small arms	4.1	NA0027	I	Prohibited		
Black powder or Gunpowder, granular or as a meal	1.1D	UN0027	II	Prohibited		
<i>Blasting agent, n.o.s., see Explosives, blasting etc.</i>						
<i>Blasting cap assemblies, see Detonator assemblies, non-electric, for blasting</i>						
<i>Blasting caps, electric, see Detonators, electric, for blasting</i>						
<i>Blasting caps, non-electric, see Detonators, non-electric for blasting</i>						
<i>Bleaching powder, see Calcium hypochlorite mixtures, etc.</i>						
Blue asbestos ( <i>Crocidolite</i> ) or Brown asbestos ( <i>amosite, mysorite</i> )	9	UN2212	II	Only ORM-D or Consumer Commodity	9C	9C
Bombs, photo-flash	1.1F	UN0037	II	Prohibited		
Bombs, photo-flash	1.1D	UN0038	II	Prohibited		
Bombs, photo-flash	1.2G	UN0039	II	Prohibited		
Bombs, photo-flash	1.3G	UN0299	II	Prohibited		
Bombs, smoke, non-explosive, with corrosive liquid, without initiating device	8	UN2028	II	Prohibited		
Bombs, with bursting charge	1.1F	UN0033	II	Prohibited		
Bombs, with bursting charge	1.1D	UN0034	II	Prohibited		
Bombs, with bursting charge	1.2D	UN0035	II	Prohibited		
Bombs, with bursting charge	1.2F	UN0291	II	Prohibited		
Bombs with flammable liquid, with bursting charge	1.1J	UN0399	II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Bombs with flammable liquid, <i>with bursting charge</i>	1.2J	UN0400	II	Prohibited		
Boosters with detonator	1.1B	UN0225	II	Prohibited		
Boosters with detonator	1.2B	UN0268	II	Prohibited		
Boosters, <i>without detonator</i>	1.1D	UN0042	II	Prohibited		
Boosters, <i>without detonator</i>	1.2D	UN0283	II	Prohibited		
<i>Borate and chlorate mixtures, see Chlorate and borate mixtures</i>						
Borneol	4.1	UN1312	III	Prohibited		
Boron tribromide	8	UN2692	I	Prohibited		
Boron trichloride	2.3	UN1741	n/a	Prohibited		
Boron trifluoride acetic acid complex, liquid	8	UN1742	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Boron trifluoride acetic acid complex, solid	8	UN3419	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Boron trifluoride	2.3	UN1008	n/a	Prohibited		
Boron trifluoride diethyl etherate	8	UN2604	I	Prohibited		
Boron trifluoride dihydrate	8	UN2851	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Boron trifluoride dimethyl etherate	4.3	UN2965	I	Prohibited		
Boron trifluoride propionic acid complex, liquid	8	UN1743	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Boron trifluoride propionic acid complex, solid	8	UN3420	II	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Box toe gum, see Nitrocellulose etc.</i>						
Bromates, inorganic, aqueous solution, n.o.s.	5.1	UN3213	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Bromates, inorganic, n.o.s.	5.1	UN1450	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Bromine or Bromine solutions	8	UN1744	I	Prohibited		
<i>Bromine azide</i>	Forbidden			Prohibited		
Bromine chloride	2.3	UN2901		Prohibited		
Bromine pentafluoride	5.1	UN1745	I	Prohibited		
Bromine trifluoride	5.1	UN1746	I	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
4-Bromo-1,2-dinitrobenzene	Forbidden			Prohibited		
4-Bromo-1,2-dinitrobenzene (unstable at 59° C)	Forbidden			Prohibited		
1-Bromo-3-chloropropane	6.1	UN2688	III	Only ORM-D or Consumer Commodity	6A	6A
1-Bromo-3-methylbutane	3	UN2341	III	Only ORM-D	Prohibited	3A
1-Bromo-3-nitrobenzene (unstable at 56° C)	Forbidden			Prohibited		
Bromoacetic acid, solid	8	UN3425	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Bromoacetic acid, solution	8	UN1938	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Bromoacetone	6.1	UN1569	II	Prohibited		
Bromoacetyl bromide	8	UN2513	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Bromobenzene	3	UN2514	III	Only ORM-D	Prohibited	3A
Bromobenzyl cyanides, liquid	6.1	UN1694	I	Prohibited		
Bromobenzyl cyanides, solid	6.1	UN3449	I	Prohibited		
1-Bromobutane	3	UN1126	II	Only ORM-D	Prohibited	3A
2-Bromobutane	3	UN2339	II	Only ORM-D	Prohibited	3A
Bromochloromethane	6.1	UN1887	III	Only ORM-D or Consumer Commodity	6A	6A
2-Bromoethyl ethyl ether	3	UN2340	II	Only ORM-D	Prohibited	3A
Bromoform	6.1	UN2515	III	Only ORM-D or Consumer Commodity	6A	6A
Bromomethylpropanes	3	UN2342	II	Only ORM-D	Prohibited	3A
2-Bromo-2-nitropropane-1,3-diol	4.1	UN3241	III	Only ORM-D	Prohibited	4A
2-Bromopentane	3	UN2343	II	Only ORM-D	Prohibited	3A
Bromopropanes	3	UN2344	II, III	Only ORM-D	Prohibited	3A
3-Bromopropyne	3	UN2345	II	Only ORM-D	Prohibited	3A
Bromosilane	Forbidden			Prohibited		
Bromotoluenealpha, see Benzyl bromide						
Bromotrifluoroethylene	2.1	UN2419	n/a	Prohibited		
Bromotrifluoromethane or Refrigerant gas, R 13B1	2.2	UN1009	n/a	Only ORM-D or Consumer Commodity	2B	2B
Brucine	6.1	UN1570	I	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Bursters, <i>explosive</i>	1.1D	UN0043	II	Prohibited		
Butadienes, stabilized or Butadienes and Hydrocarbon mixture, stabilized containing more than 40 percent butadienes	2.1	UN1010	n/a	Only ORM-D	Prohibited	2A
Butane see also Petroleum gases, liquified	2.1	UN1011	n/a	Only ORM-D	Prohibited	2A
<i>Butane, butane mixtures and mixtures having similar properties in cartridges each not exceeding 500 grams, see Receptacles, etc.</i>						
Butanedione	3	UN2346	II	Only ORM-D	Prohibited	3A
1,2,4-Butanetriol trinitrate	Forbidden			Prohibited		
Butanols	3	UN1120	II, III	Only ORM-D	Prohibited	3A
<i>Tert-Butoxycarbonyl azide</i>	Forbidden			Prohibited		
Butyl acetates	3	UN1123	II, III	Only ORM-D	Prohibited	3A
Butyl acid phosphate	8	UN1718	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Butyl acrylates, stabilized	3	UN2348	III	Only ORM-D	Prohibited	3A
<i>Butyl alcohols, see Butanols</i>						
Butyl benzenes	3	UN2709	III	Only ORM-D	Prohibited	3A
<i>n-Butyl bromide, see 1-Bromobutane</i>						
<i>n-Butyl chloride, see Chlorobutanes</i>						
n-Butyl chloroformate	6.1	UN2743	I	Prohibited		
secButyl chloroformate	6.1	NA2742	I	Prohibited		
<i>Butyl ethers, see Dibutyl ethers</i>						
<i>Butyl ethyl ether, see Ethyl butyl ether</i>						
n-Butyl formate	3	UN1128	II	Only ORM-D	Prohibited	3A
<i>Tert-Butyl hydroperoxide, with more than 90 percent with water</i>	Forbidden			Prohibited		
Tert-Butyl hypochlorite	4.2	UN3255	I	Prohibited		
N-n-Butyl imidazole	6.1	UN2690	II	Prohibited		
Tert-Butyl isocyanate	6.1	UN2484	I	Prohibited		
n-Butyl isocyanate	6.1	UN2485	I	Prohibited		
Butyl mercaptans	3	UN2347	II	Only ORM-D	Prohibited	3A
n-Butyl methacrylate, stabilized	3	UN2227	III	Only ORM-D	Prohibited	3A
Butyl methyl ether	3	UN2350	II	Only ORM-D	Prohibited	3A
Butyl nitrites	3	UN2351	I, II, III	Only ORM-D	Prohibited	3A
<i>tert-Butyl peroxyacetate, with more than 76 percent in solution</i>	Forbidden			Prohibited		
<i>n-Butyl peroxydicarbonate, with more than 52 percent in solution</i>	Forbidden			Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<i>tert</i> -Butyl peroxyisobutyrate, with more than 77 percent in solution	Forbidden			Prohibited		
Butyl phosphoric acid, see Butyl acid phosphate						
Butyl propionates	3	UN1914	III	Only ORM-D	Prohibited	3A
5- <i>tert</i> -Butyl-2,4,6-trinitro- <i>m</i> -xylene or Musk xylene	4.1	UN2956	III	Prohibited		
Butyl vinyl ether, stabilized	3	UN2352	II	Only ORM-D	Prohibited	3A
<i>n</i> -Butylamine	3	UN1125	II	Prohibited		
<i>N</i> -Butylaniline	6.1	UN2378	II	Prohibited		
<i>tert</i> -Butylcyclohexylchloroformate	6.1	UN2747	III	Only ORM-D or Consumer Commodity	6A	6A
Butylene see also Petroleum gases, liquified	2.1	UN1012	n/a	Prohibited		
1,2-Butylene oxide, stabilized	3	UN3022	II	Only ORM-D	Prohibited	3A
Butyltoluenes	6.1	UN2667	III	Only ORM-D or Consumer Commodity	6A	6A
Butyltrichlorosilane	8	UN1747	II	Prohibited		
1,4-Butynediol	6.1	UN2716	III	Prohibited		
Butyraldehyde	3	UN1129	II	Only ORM-D	Prohibited	3A
Butyraldoxime	3	UN2840	III	Only ORM-D	Prohibited	3A
Butyric acid	8	UN2820	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Butyric anhydride	8	UN2739	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Butyronitrile	3	UN2411	II	Prohibited		
Butyryl chloride	3	UN2353	II	Prohibited		
<b>C</b>						
Cacodylic acid	6.1	UN1572	II	Prohibited		
Cadmium compounds	6.1	UN2570	I, II	Prohibited		
Cadmium compounds	6.1	UN2570	III	Only ORM-D or Consumer Commodity	6A	6A
Caesium hydroxide	8	UN2682	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Caesium hydroxide solution	8	UN2681	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Calcium	4.3	UN1401	II	Only ORM-D	Prohibited	4A

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
Calcium arsenate	6.1	UN1573	II	Prohibited		
Calcium arsenate and calcium arsenite, mixtures, solid	6.1	UN1574	II	Prohibited		
Calcium arsenite, solid	6.1	NA1574	II	Prohibited		
<i>Calcium bisulfite solution, see Bisulfites, aqueous solutions, n.o.s.</i>						
Calcium carbide	4.3	UN1402	I	Prohibited		
Calcium carbide	4.3	UN1402	II	Only ORM-D	Prohibited	4A
Calcium chlorate	5.1	UN1452	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Calcium chlorate aqueous solution	5.1	UN2429	II, III	Only ORM-D or Mailable Limited Quantity	5A	5A
Calcium chlorite	5.1	UN1453	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Calcium cyanamide <i>with more than 0.1 percent of calcium carbide</i>	4.3	UN1403	III	Only ORM-D	Prohibited	4A
Calcium cyanide	6.1	UN1575	I	Prohibited		
Calcium dithionite or Calcium hydrosulfite	4.2	UN1923	II	Prohibited		
Calcium hydride	4.3	UN1404	I	Prohibited		
Calcium hydrosulfite, <i>see</i> Calcium dithionite						
Calcium hypochlorite, dry, corrosive or Calcium hypochlorite mixtures, dry, corrosive with more than 39 percent available chlorine (8.8 percent available oxygen)	5.1	UN3485	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Calcium hypochlorite, dry or Calcium hypochlorite mixtures dry <i>with more than 39 percent available chlorine (8.8 percent available oxygen)</i>	5.1	UN1748	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Calcium hypochlorite, hydrated, corrosive or Calcium hypochlorite, hydrated mixture, corrosive with not less than 5.5 percent but not more than 16 percent water	5.1	UN3487	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Calcium hypochlorite, hydrated or Calcium hypochlorite, hydrated mixtures, <i>with not less than 5.5 percent but not more than 16 percent water</i>	5.1	UN2880	II, III	Only ORM-D or Mailable Limited Quantity	5A	5A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Calcium hypochlorite mixture, dry, corrosive with more than 10 percent but not more than 39 percent available chlorine	5.1	UN3486	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Calcium hypochlorite mixtures, dry, with more than 10 percent but not more than 39 percent available chlorine	5.1	UN2208	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Calcium manganese silicon	4.3	UN2844	III	Only ORM-D	Prohibited	4A
Calcium nitrate	5.1	UN1454	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Calcium oxide	8	UN1910	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Calcium perchlorate	5.1	UN1455	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Calcium permanganate	5.1	UN1456	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Calcium peroxide	5.1	UN1457	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Calcium phosphide	4.3	UN1360	I	Prohibited		
Calcium, pyrophoric or Calcium alloys, pyrophoric	4.2	UN1855	I	Prohibited		
Calcium resinate	4.1	UN1313	III	Prohibited		
Calcium resinate, fused	4.1	UN1314	III	Prohibited		
Calcium selenate, see Selenates or Selenites						
Calcium silicide	4.3	UN1405	II, III	Only ORM-D	Prohibited	4A
Camphor oil	3	UN1130	III	Only ORM-D	Prohibited	3A
Camphor, synthetic	4.1	UN2717	III	Prohibited		
Cannon primers, see Primers, tubular						
Capacitor, electric double layer (with an energy storage capacity greater than 0.3 Wh)	9	UN3499	n/a	Only ORM-D	Prohibited	9C
Caproic acid	8	UN2829	III	Only ORM-D	8A	8A
Caps, blasting, see Detonators, etc.						
Carbamate pesticides, liquid, flammable, toxic, flashpoint less than 23° C	3	UN2758	I, II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Carbamate pesticides, liquid, toxic	6.1	UN2992	I, II	Prohibited		
Carbamate pesticides, liquid, toxic	6.1	UN2992	III	Only ORM-D or Consumer Commodity	6A	6A
Carbamate pesticide, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN2991	I, II	Prohibited		
Carbamate pesticide, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN2991	III	Only ORM-D or Consumer Commodity	6A	6A
Carbamate pesticides, solid, toxic	6.1	UN2757	I, II	Prohibited		
Carbamate pesticides, solid, toxic	6.1	UN2757	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Carbolic acid, see Phenol, solid or Phenol, molten</i>						
<i>Carbolic acid solutions, see Phenol solutions</i>						
Carbon, <i>animal or vegetable origin</i>	4.2	UN1361	II, III	Prohibited		
Carbon, activated	4.2	UN1362	III	Prohibited		
Carbon bisulfide, see Carbon disulfide						
Carbon dioxide	2.2	UN1013	n/a	Only ORM-D or Consumer Commodity	2B	2B
Carbon dioxide, refrigerated liquid	2.2	UN2187	n/a	Only ORM-D or Consumer Commodity	2B	2B
Carbon dioxide, solid, or Dry ice	9	UN1845	III	Mailable per 349.23	9A	9A
Carbon disulfide	3	UN1131	I	Prohibited		
Carbon monoxide, compressed	2.3	UN1016	n/a	Prohibited		
Carbon monoxide, refrigerated liquid ( <i>cryogenic liquid</i> )	2.3	NA9202	n/a	Prohibited		
Carbon tetrabromide	6.1	UN2516	III	Only ORM-D or Consumer Commodity	6A	6A
Carbon tetrachloride	6.1	UN1846	II	Prohibited		
<i>Carbonyl chloride, see Phosgene</i>						
Carbonyl fluoride	2.3	UN2417	n/a	Prohibited		
Carbonyl sulfide	2.3	UN2204	n/a	Prohibited		
<i>Cartridge cases, empty primed, see Cases, cartridge, empty, with primer</i>						
<i>Cartridges, actuating, for aircraft ejector seat catapult, fire extinguisher, canopy removal or apparatus, see Cartridges, power device</i>						



<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
<i>Cartridges, explosive, see Charges, demolition</i>						
Cartridges, flash	1.1G	UN0049	II	Prohibited		
Cartridges, flash	1.3G	UN0050	II	Prohibited		
Cartridges for weapons, blank	1.1C	UN0326	II	Prohibited		
Cartridges for weapons, blank	1.2C	UN0413	II	Prohibited		
Cartridges for weapons, blank <i>or</i> Cartridges, small arms, blank	1.3C	UN0327	II	Prohibited		
Cartridges for weapons, blank <i>or</i> Cartridges, small arms, blank	1.4C	UN0338	II	Prohibited		
Cartridges for weapons, blank <i>or</i> Cartridges, small arms, blank	1.4S	UN0014	II	Prohibited		
Cartridges for weapons, inert projectile	1.2C	UN0328	II	Prohibited		
Cartridges for weapons, inert projectile <i>or</i> Cartridges, small arms	1.3C	UN0417	II	Prohibited		
Cartridges for weapons, inert projectile <i>or</i> Cartridges, small arms	1.4C	UN0339	II	Prohibited		
Cartridges for weapons, inert projectile <i>or</i> Cartridges, small arms	1.4S	UN0012	II	Prohibited		
Cartridges for weapons, <i>with bursting charge</i>	1.1E	UN0006	II	Prohibited		
Cartridges for weapons, <i>with bursting charge</i>	1.1F	UN0005	II	Prohibited		
Cartridges for weapons, <i>with bursting charge</i>	1.2E	UN0321	II	Prohibited		
Cartridges for weapons, <i>with bursting charge</i>	1.2F	UN0007	II	Prohibited		
Cartridges for weapons, <i>with bursting charge</i>	1.4E	UN0412	II	Prohibited		
Cartridges for weapons, <i>with bursting charge</i>	1.4F	UN0348	II	Prohibited		
Cartridges, oil well	1.3C	UN0277	II	Prohibited		
Cartridges, oil well	1.4C	UN0278	II	Prohibited		
Cartridges, power device	1.2C	UN0381	II	Prohibited		
Cartridges, power device	1.3C	UN0275	II	Prohibited		
Cartridges, power device	1.4C	UN0276	II	Prohibited		
Cartridges, power device	1.4S	UN0323	II	Prohibited		
<i>Cartridges, safety, blank, see Cartridges for weapons, blank (UN0014)</i>						
<i>Cartridges, safety, see Cartridges for weapons, other than blank or Cartridges, power device (UN0323)</i>						
Cartridges, signal	1.3G	UN0054	II	Prohibited		
Cartridges, signal	1.4G	UN0312	II	Prohibited		
Cartridges, signal	1.4S	UN0405	II	Prohibited		

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
Cartridges, small arms	ORM-D			Prohibited		
<i>Cartridges, sporting, see Cartridges for weapons, inert projectile, or Cartridges, small arms</i>						
<i>Cartridges, starter, jet engine, see Cartridges, power device</i>						
Cases, cartridge, empty with primer	1.4S	UN0055	II	Prohibited		
Cases, cartridges, empty with primer	1.4C	UN0379	II	Prohibited		
Cases, combustible, empty, without primer	1.4C	UN0446	II	Prohibited		
Cases, combustible, empty, without primer	1.3C	UN0447	II	Prohibited		
<i>Casinghead gasoline see Gasoline</i>						
Castor beans or Castor meal or Castor pomace or Castor flake	9	UN2969	II	Only ORM-D or Consumer Commodity	9C	9C
Caustic alkali liquids, n.o.s.	8	UN1719	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Caustic potash, see Potassium hydroxide etc.</i>						
<i>Caustic soda, etc., see Sodium hydroxide etc.</i>						
Cells, containing sodium	4.3	UN3292	II	Prohibited		
Celluloid, <i>in block, rods, rolls, sheets, tubes, etc., except scrap</i>	4.1	UN2000	III	Prohibited		
Celluloid, scrap	4.2	UN2002	III	Prohibited		
<i>Cement, see Adhesives, containing flammable liquid</i>						
Cerium, <i>slabs, ingots, or rods</i>	4.1	UN1333	II	Prohibited		
Cerium, <i>turnings or gritty powder</i>	4.3	UN3078	II	Only ORM-D	Prohibited	4A
Cesium or Caesium	4.3	UN1407	I	Prohibited		
Cesium nitrate or Caesium nitrate	5.1	UN1451	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Charcoal <i>briquettes, shell, screenings, wood, etc.</i>	4.2	NA1361	III	Only ORM-D	Prohibited	4A
Charges, bursting, plastics bonded	1.1D	UN0457	II	Prohibited		
Charges, bursting, plastics bonded	1.2D	UN0458	II	Prohibited		
Charges, bursting, plastics bonded	1.4D	UN0459	II	Prohibited		
Charges, bursting, plastics bonded	1.4S	UN0460	II	Prohibited		
Charges, demolition	1.1D	UN0048	II	Prohibited		
Charges, depth	1.1D	UN0056	II	Prohibited		

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
<i>Charges, expelling, explosive, for fire extinguishers, see Cartridges, power device</i>						
Charges, explosive, commercial <i>without detonator</i>	1.1D	UN0442	II	Prohibited		
Charges, explosive, commercial <i>without detonator</i>	1.2D	UN0443	II	Prohibited		
Charges, explosive, commercial <i>without detonator</i>	1.4D	UN0444	II	Prohibited		
Charges, explosive, commercial <i>without detonator</i>	1.4S	UN0445	II	Prohibited		
Charges, propelling	1.1C	UN0271	II	Prohibited		
Charges, propelling	1.2C	UN0415	II	Prohibited		
Charges, propelling	1.3C	UN0272	II	Prohibited		
Charges, propelling	1.4C	UN0491	II	Prohibited		
Charges, propelling, for cannon	1.1C	UN0279	II	Prohibited		
Charges, propelling, for cannon	1.2C	UN0414	II	Prohibited		
Charges, propelling, for cannon	1.3C	UN0242	II	Prohibited		
Charges, shaped, <i>without detonator</i>	1.1D	UN0059	II	Prohibited		
Charges, shaped, <i>without detonator</i>	1.2D	UN0439	II	Prohibited		
Charges, shaped, <i>without detonator</i>	1.4D	UN0440	II	Prohibited		
Charges, shaped, <i>without detonator</i>	1.4S	UN0441	II	Prohibited		
Charges, shaped, flexible, linear	1.1D	UN0288	II	Prohibited		
Charges, shaped, flexible, linear	1.4D	UN0237	II	Prohibited		
Charges, supplementary explosive	1.1D	UN0060	II	Prohibited		
Chemical kit	8	NA1760	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Chemical kits	9	UN3316	n/a	Prohibited		
Chemical under pressure, corrosive, n.o.s.	2.1	UN3503	n/a	Only ORM-D	Prohibited	2B
Chemical under pressure, flammable, corrosive, n.o.s.	2.1	UN3505		Prohibited		
Chemical under pressure, flammable, n.o.s.	2.1	UN3501		Prohibited		
Chemical under pressure, flammable, toxic, n.o.s.	2.1	UN3504		Prohibited		
Chemical under pressure, n.o.s	2.2	UN3500		Only ORM-D	Prohibited	2B
Chemical under pressure, toxic, n.o.s	2.2	UN3502		Only ORM-D	Prohibited	2B
Chloral, anhydrous, inhibited	6.1	UN2075	II	Prohibited		
Chlorate and borate mixtures	5.1	UN1458	II, III	Only ORM-D or Mailable Limited Quantity	5A	5A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Chlorate and magnesium chloride mixture solid	5.1	UN1459	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Chlorate and magnesium chloride mixture solution	5.1	UN3407	II, III	Only ORM-D or Mailable Limited Quantity	5A	5A
<i>Chlorate of potash, see Potassium chlorate</i>						
<i>Chlorate of soda, see Sodium chlorate</i>						
Chlorates, inorganic, aqueous solutions, n.o.s.	5.1	UN3210	II, III	Only ORM-D or Mailable Limited Quantity	5A	5A
Chlorates, inorganic, n.o.s.	5.1	UN1461	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Chloric acid aqueous solution, with not more than 10 percent chloric acid	5.1	UN2626	II	Prohibited		
<i>Chloride of phosphorus, see Phosphorus trichloride</i>						
<i>Chloride of sulfur, see Sulfur chloride</i>						
<i>Chlorinated lime, see Calcium hypochlorite mixtures, etc.</i>						
Chlorine	2.3	UN1017	n/a	Prohibited		
<i>Chlorine azide</i>	Forbidden			Prohibited		
<i>Chlorine dioxide (not hydrate)</i>	Forbidden			Prohibited		
Chlorine dioxide, hydrate, frozen	5.1	NA9191	II	Prohibited		
Chlorine pentafluoride	2.3	UN2548	n/a	Prohibited		
Chlorine trifluoride	2.3	UN1749	n/a	Prohibited		
Chlorite solution	8	UN1908	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Chlorites, inorganic, n.o.s.	5.1	UN1462	II	Only ORM-D or Mailable Limited Quantity	5A	5A
1-Chloro-1,1-difluoroethane or Refrigerant gas R 142b	2.1	UN2517	n/a	Only ORM-D	Prohibited	2A
3-Chloro-4-methylphenyl isocyanate, liquid	6.1	UN2236	II	Prohibited		
3-Chloro-4-methylphenyl isocyanate, solid	6.1	UN3428	II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
1-Chloro-1,2,2,2-tetrafluoroethane or Refrigerant gas R 124	2.2	UN1021	n/a	Only ORM-D or Consumer Commodity	2B	2B
4-Chloro-o-toluidine hydrochloride, solid	6.1	UN1579	III	Only ORM-D or Consumer Commodity	6A	6A
4-Chloro-o-toluidine hydrochloride, solution	6.1	UN3410	III	Only ORM-D or Consumer Commodity	6A	6A
1-Chloro-2,2,2-trifluoroethane or Refrigerant gas R 133a	2.2	UN1983	n/a	Only ORM-D or Consumer Commodity	2B	2B
Chloroacetic acid, molten	6.1	UN3250	II	Prohibited		
Chloroacetic acid, solid	6.1	UN1751	II	Prohibited		
Chloroacetic acid, solution	6.1	UN1750	II	Prohibited		
Chloroacetone, stabilized	6.1	UN1695	I	Prohibited		
<i>Chloroacetone (unstabilized)</i>	Forbidden			Prohibited		
Chloroacetonitrile	6.1	UN2668	II	Prohibited		
Chloroacetophenone (CN), liquid	6.1	UN3416	II	Prohibited		
Chloroacetophenone (CN), solid	6.1	UN1697	II	Prohibited		
Chloroacetyl chloride	6.1	UN1752	I	Prohibited		
Chloroanilines, liquid	6.1	UN2019	II	Prohibited		
Chloroanilines, solid	6.1	UN2018	II	Prohibited		
Chloroanisidines	6.1	UN2233	III	Only ORM-D or Consumer Commodity	6A	6A
Chlorobenzene	3	UN1134	III	Only ORM-D	Prohibited	3A
<i>Chlorobenzol</i> , see Chlorobenzene						
Chlorobenzotrifluorides	3	UN2234	III	Only ORM-D	Prohibited	3A
Chlorobenzyl chlorides, liquid	6.1	UN2235	III	Only ORM-D or Consumer Commodity	6A	6A
Chlorobenzyl chlorides, solid	6.1	UN3427	III	Only ORM-D or Consumer Commodity	6A	6A
Chlorobutanes	3	UN1127	II	Only ORM-D	Prohibited	3A
Chlorocresols, solution	6.1	UN2669	II, III	Prohibited		
Chlorocresols, solid	6.1	UN3437	II	Prohibited		
Chlorodifluorobromomethane or Refrigerant gas R 12B1	2.2	UN1974	n/a	Only ORM-D or Consumer Commodity	2B	2B
Chlorodifluoromethane or Refrigerant gas R 22	2.2	UN1018	n/a	Only ORM-D or Consumer Commodity	2B	2B

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Chlorodifluoromethane and chloropentafluoroethane mixture <i>or</i> Refrigerant gas R 502 <i>with fixed boiling point, with approximately 49 percent chlorodifluoromethane</i>	2.2	UN1973	n/a	Only ORM-D or Consumer Commodity	2B	2B
Chlorodinitrobenzenes, liquid	6.1	UN1577	II	Prohibited		
Chlorodinitrobenzenes, solid	6.1	UN3441	II	Prohibited		
2-Chloroethanal	6.1	UN2232	I	Prohibited		
Chloroform	6.1	UN1888	III	Only ORM-D or Consumer Commodity	6A	6A
Chloroformates, toxic, corrosive, flammable, n.o.s.	6.1	UN2742	II	Prohibited		
Chloroformates, toxic, corrosive, n.o.s.	6.1	UN3277	II	Prohibited		
Chloromethyl chloroformate	6.1	UN2745	II	Prohibited		
Chloromethyl ethyl ether	3	UN2354	II	Prohibited		
Chloronitroanilines	6.1	UN2237	III	Only ORM-D or Consumer Commodity	6A	6A
Chloronitrobenzene, <i>liquid</i>	6.1	UN3409	II	Prohibited		
Chloronitrobenzenes, <i>solid</i>	6.1	UN1578	II	Prohibited		
Chloronitrotoluenes, <i>liquid</i>	6.1	UN2433	III	Only ORM-D or Consumer Commodity	6A	6A
Chloronitrotoluenes, <i>solid</i>	6.1	UN3457	III	Only ORM-D or Consumer Commodity	6A	6A
Chloropentafluoroethane <i>or</i> Refrigerant gas R 115	2.2	UN1020	n/a	Only ORM-D or Consumer Commodity	2B	2B
Chlorophenolates, liquid <i>or</i> Phenolates, liquid	8	UN2904	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Chlorophenolates, solid <i>or</i> Phenolates, solid	8	UN2905	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Chlorophenols, liquid	6.1	UN2021	III	Only ORM-D or Consumer Commodity	6A	6A
Chlorophenols, solid	6.1	UN2020	III	Only ORM-D or Consumer Commodity	6A	6A
Chlorophenyltrichlorosilane	8	UN1753	II	Prohibited		
Chloropicrin	6.1	UN1580	I	Prohibited		
Chloropicrin and methyl bromide mixtures	2.3	UN1581	n/a	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Chloropicrin and methyl chloride mixtures	2.3	UN1582	n/a	Prohibited		
<i>Chloropicrin mixture, flammable (pressure not exceeding 14.7 psia at 115° F flashpoint below 100° F) see Toxic liquids, flammable, etc.</i>						
Chloropicrin mixtures, n.o.s.	6.1	UN1583	I, II, III	Prohibited		
Chloropivaloyl chloride	6.1	NA9263	I	Prohibited		
Chloroplatinic acid, solid	8	UN2507	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Chloroprene, stabilized	3	UN1991	I	Prohibited		
<i>Chloroprene, uninhibited</i>	Forbidden			Prohibited		
1-Chloropropane	3	UN1278	II	Prohibited		
2-Chloropropane	3	UN2356	I	Only ORM-D	Prohibited	3A
3-Chloropropanol-1	6.1	UN2849	III	Only ORM-D or Consumer Commodity	6A	6A
2-Chloropropene	3	UN2456	I	Only ORM-D	Prohibited	3A
2-Chloropropionic acid	8	UN2511	III	Only ORM-D or Mailable Limited Quantity	8A	8A
2-Chloropyridine	6.1	UN2822	II	Prohibited		
Chlorosilanes, corrosive, flammable, n.o.s.	8	UN2986	II	Prohibited		
Chlorosilanes, corrosive, n.o.s.	8	UN2987	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Chlorosilanes, flammable, corrosive, n.o.s.	3	UN2985	II	Prohibited		
Chlorosilanes, toxic, corrosive, flammable, n.o.s.	6.1	UN3362	II	Prohibited		
Chlorosilanes, toxic, corrosive, n.o.s.	6.1	UN3361	II	Prohibited		
Chlorosilanes, water-reactive, flammable, corrosive, n.o.s.	4.3	UN2988	I	Prohibited		
Chlorosulfonic acid ( <i>with or without sulfur trioxide</i> )	8	UN1754	I	Prohibited		
Chlorotoluenes	3	UN2238	III	Only ORM-D	Prohibited	3A
Chlorotoluidines, <i>liquid</i>	6.1	UN3429	III	Only ORM-D or Consumer Commodity	6A	6A
Chlorotoluidines, <i>solid</i>	6.1	UN2239	III	Only ORM-D or Consumer Commodity	6A	6A

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
Chlorotrifluoromethane <i>or</i> Refrigerant gas R 13	2.2	UN1022	n/a	Only ORM-D or Consumer Commodity	2B	2B
Chlorotrifluoromethane and trifluoromethane azeotropic mixture <i>or</i> Refrigerant gas R 503 <i>with approximately 60 percent chlorotrifluoromethane</i>	2.2	UN2599	n/a	Only ORM-D or Consumer Commodity	2B	2B
Chromic acid, solid	5.1	NA1463	II	Prohibited		
Chromic acid solution	8	UN1755	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Chromic anhydride, see Chromium trioxide, anhydrous</i>						
Chromic fluoride, solid	8	UN1756	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Chromic fluoride, solution	8	UN1757	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Chromium nitrate	5.1	UN2720	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Chromium oxychloride	8	UN1758	I	Prohibited		
Chromium trioxide, anhydrous	5.1	UN1463	II	Prohibited		
Chromosulfuric acid	8	UN2240	I	Prohibited		
<i>Chromyl chloride, see Chromium oxychloride</i>						
<i>Cigar and cigarette lighters, charged with fuel, see Lighters or Lighter refills containing flammable gas</i>						
Coal briquettes, hot	Forbidden			Prohibited		
Coal gas, compressed	2.3	UN1023	n/a	Prohibited		
Coal tar distillates, flammable	3	UN1136	II, III	Only ORM-D	Prohibited	3A
<i>Coal tar dye, corrosive, liquid, n.o.s., see Dyes, liquid or solid, n.o.s. or Dye intermediates, liquid or solid, n.o.s., corrosive</i>						
Coating solution ( <i>includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining</i> )	3	UN1139	I, II, III	Only ORM-D	Prohibited	3A
Cobalt naphthenates, powder	4.1	UN2001	III	Only ORM-D	Prohibited	4A
Cobalt resinate, precipitated	4.1	UN1318	III	Only ORM-D	Prohibited	4A



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<i>Coke, hot</i>	Forbidden			Prohibited		
<i>Collodion, see Nitrocellulose etc.</i>						
Combustible liquid, n.o.s.	3	NA1993	III	Only ORM-D or Consumer Commodity	Mailable only per 343	3B
Components, explosive train, n.o.s.	1.1B	UN0461	II	Prohibited		
Components, explosive train, n.o.s.	1.2B	UN0382	II	Prohibited		
Components, explosive train, n.o.s.	1.4B	UN0383	II	Prohibited		
Components, explosive train, n.o.s.	1.4S	UN0384	II	Prohibited		
<i>Composition B, see Hexolite, etc.</i>						
Compounds, cleaning liquid	8	NA1760	I	Prohibited		
Compounds, cleaning liquid	8	NA1760	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Compounds, cleaning liquid	3	NA1993	I, II, III	Only ORM-D or Consumer Commodity	8A	8A
Compounds, tree killing liquid or Compounds, weed killing, liquid	3	NA1993	I, II, III	Only ORM-D	Prohibited	3A
Compounds, tree killing liquid or Compounds, weed killing, liquid	6.1	NA2810	I, II	Prohibited		
Compounds, tree killing liquid or Compounds, weed killing, liquid	6.1	NA2810	III	Only ORM-D or Consumer Commodity	6A	6A
Compounds, tree killing liquid or Compounds, weed killing, liquid	8	NA1760	I	Prohibited		
Compounds, tree killing liquid or Compounds, weed killing, liquid	8	NA1760	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Compressed gas, flammable, n.o.s.	2.1	UN1954	n/a	Only ORM-D	Prohibited	2A
Compressed gas, n.o.s.	2.2	UN1956	n/a	Only ORM-D or Consumer Commodity	2B	2B
Compressed gas, oxidizing, n.o.s.	2.2	UN3156	n/a	Only ORM-D or Consumer Commodity	2B	2B
Compressed gas, toxic, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>	2.3	UN1955	n/a	Prohibited		
Compressed gas, toxic, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>	2.3	UN3304	n/a	Prohibited		
Compressed gas, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>	2.3	UN1953	n/a	Prohibited		
Compressed gas, toxic, flammable, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>	2.3	UN3305	n/a	Prohibited		

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Compressed gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>	2.3	UN3306	n/a	Prohibited		
Compressed gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>	2.3	UN3303	n/a	Prohibited		
Consumer Commodity	ORM-D					
Consumer Commodity	9	ID8000				
Contrivances, wateractivated, <i>with burster, expelling charge, or propelling charge</i>	1.2L	UN0248	II	Prohibited		
Contrivances, wateractivated, <i>with burster, expelling charge, or propelling charge</i>	1.3L	UN0249	II	Prohibited		
Copper acetoarsenite	6.1	UN1585	II	Prohibited		
<i>Copper acetylide</i>	Forbidden			Prohibited		
<i>Copper amine azide</i>	Forbidden			Prohibited		
Copper arsenite	6.1	UN1586	II	Prohibited		
Copper based pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>	3	UN2776	I, II	Prohibited		
Copper based pesticides, liquid, toxic	6.1	UN3010	I, II	Prohibited		
Copper based pesticides, liquid, toxic	6.1	UN3010	III	Only ORM-D or Consumer Commodity	6A	6A
Copper based pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN3009	I, II	Prohibited		
Copper based pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23°C</i>	6.1	UN3009	III	Only ORM-D or Consumer Commodity	6A	6A
Copper based pesticides, solid, toxic	6.1	UN2775	I, II	Prohibited		
Copper based pesticides, solid, toxic	6.1	UN2775	III	Only ORM-D or Consumer Commodity	6A	6A
Copper chlorate	5.1	UN2721	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Copper chloride	8	UN2802	III	Only ORM-D	8A	8A
Copper cyanide	6.1	UN1587	II	Prohibited		
<i>Copper selenate, see Selenates or Selenites</i>						
<i>Copper selenite, see Selenates or Selenites</i>						
<i>Copper tetramine nitrate</i>	Forbidden			Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Copra	4.2	UN1363	III	Prohibited		
Cord, detonating or Fuse, detonating <i>metal clad</i>	1.1D	UN0290	II	Prohibited		
Cord detonating or Fuse detonating <i>metal clad</i>	1.2D	UN0102	II	Prohibited		
Cord, detonating, <i>flexible</i>	1.1D	UN0065	II	Prohibited		
Cord, detonating, <i>flexible</i>	1.4D	UN0289	II	Prohibited		
Cord, detonating, mild effect or Fuse, detonating, mild effect <i>metal clad</i>	1.4D	UN0104	II	Prohibited		
Cord, igniter	1.4G	UN0066	II	Prohibited		
<i>Cordeau detonat fuse, see Cord, detonating, etc.; Cord, detonating, flexible</i>						
<i>Cordite, see Powder, smokeless</i>						
Corrosive liquid, acidic, inorganic, n.o.s.	8	UN3264	I	Prohibited		
Corrosive liquid, acidic, inorganic, n.o.s.	8	UN3264	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Corrosive liquid, acidic, organic, n.o.s.	8	UN3265	I	Prohibited		
Corrosive liquid, acidic, organic, n.o.s.	8	UN3265	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Corrosive liquid, basic, inorganic, n.o.s.	8	UN3266	I	Prohibited		
Corrosive liquid, basic, inorganic, n.o.s.	8	UN3266	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Corrosive liquid, basic, organic, n.o.s.	8	UN3267	I	Prohibited		
Corrosive liquid, basic, organic, n.o.s.	8	UN3267	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Corrosive liquids, self-heating, n.o.s.	8	UN3301	I	Prohibited		
Corrosive liquids, self-heating, n.o.s.	8	UN3301	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Corrosive liquids, flammable, n.o.s.	8	UN2920	I, II	Prohibited		
Corrosive liquids, n.o.s.	8	UN1760	I	Prohibited		

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
Corrosive liquids, n.o.s.	8	UN1760	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Corrosive liquids, oxidizing, n.o.s.	8	UN3093	I, II	Prohibited		
Corrosive liquids, toxic, n.o.s.	8	UN2922	I, II	Prohibited		
Corrosive liquids, toxic, n.o.s.	8	UN2922	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Corrosive liquids, water-reactive, n.o.s.	8	UN3094	I, II	Prohibited		
Corrosive solid, acidic, inorganic, n.o.s.	8	UN3260	I	Prohibited		
Corrosive solid, acidic, inorganic, n.o.s.	8	UN3260	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Corrosive solid, acidic, organic, n.o.s.	8	UN3261	I	Prohibited		
Corrosive solid, acidic, organic, n.o.s.	8	UN3261	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Corrosive solid, basic, inorganic, n.o.s.	8	UN3262	I	Prohibited		
Corrosive solid, basic, inorganic, n.o.s.	8	UN3262	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Corrosive solid, basic, organic, n.o.s.	8	UN3263	I	Prohibited		
Corrosive solid, basic, organic, n.o.s.	8	UN3263	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Corrosive solids, flammable, n.o.s.	8	UN2921	I, II	Prohibited		
Corrosive solids, n.o.s.	8	UN1759	I	Prohibited		
Corrosive solids, n.o.s.	8	UN1759	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Corrosive solids, oxidizing, n.o.s.	8	UN3084	I, II	Prohibited		
Corrosive solids, self-heating, n.o.s.	8	UN3095	I, II	Prohibited		
Corrosive solids, toxic, n.o.s.	8	UN2923	I, II	Prohibited		
Corrosive solids, toxic, n.o.s.	8	UN2923	III	Only ORM-D or Mailable Limited Quantity	8A	8A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Corrosive solids, water-reactive, n.o.s.	8	UN3096	I, II	Prohibited		
Cotton	9	NA1365	n/a	Prohibited		
Cotton waste, oily	4.2	UN1364	III	Prohibited		
Cotton, wet	4.2	UN1365	III	Prohibited		
Coumarin derivative pesticides, liquid, flammable, toxic, <i>flashpoint less than 23°C</i>	3	UN3024	I, II	Prohibited		
Coumarin derivative pesticides, liquid, toxic	6.1	UN3026	I, II	Prohibited		
Coumarin derivative pesticides, liquid, toxic	6.1	UN3026	III	Only ORM-D or Consumer Commodity	6A	6A
Coumarin derivative pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN3025	I, II	Prohibited		
Coumarin derivative pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN3025	III	Only ORM-D or Consumer Commodity	6A	6A
Coumarin derivative pesticides, solid, toxic	6.1	UN3027	I, II	Prohibited		
Coumarin derivative pesticides, solid, toxic	6.1	UN3027	III	Only ORM-D or Consumer Commodity	6A	6A
Cresols, liquid	6.1	UN2076	II	Prohibited		
Cresols, solid	6.1	UN3455	II	Prohibited		
Cresylic acid	6.1	UN2022	II	Prohibited		
Crotonaldehyde or Crotonaldehyde, stabilized	6.1	UN1143	I	Prohibited		
Crotonic acid, <i>liquid</i>	8	UN3472	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Crotonic acid, <i>solid</i>	8	UN2823	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Crotonylene	3	UN1144	I	Only ORM-D	Prohibited	3A
Cupriethylenediamine solution	8	UN1761	II	Prohibited		
Cupriethylenediamine solution	8	UN1761	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Cutters, cable, explosive	1.4S	UN0070	II	Prohibited		
<i>Cyanide, or cyanide mixtures, dry, see Cyanides, inorganic, solid, n.o.s.</i>						
Cyanide solutions, n.o.s.	6.1	UN1935	I, II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Cyanide solutions, n.o.s.	6.1	UN1935	III	Only ORM-D or Consumer Commodity	6A	6A
Cyanides, inorganic, solid, n.o.s.	6.1	UN1588	I, II	Prohibited		
Cyanides, inorganic, solid, n.o.s.	6.1	UN1588	III	Only ORM-D or Consumer Commodity	6A	6A
Cyanogen	2.3	UN1026	n/a	Prohibited		
Cyanogen bromide	6.1	UN1889	I	Prohibited		
Cyanogen chloride, stabilized	2.3	UN1589	n/a	Prohibited		
Cyanuric chloride	8	UN2670	II	Prohibited		
<i>Cyanuric triazide</i>	Forbidden			Prohibited		
Cyclobutane	2.1	UN2601	n/a	Only ORM-D	Prohibited	2A
Cyclobutyl chloroformate	6.1	UN2744	II	Prohibited		
1,5,9-Cyclododecatiene	6.1	UN2518	III	Only ORM-D or Consumer Commodity	6A	6A
Cycloheptane	3	UN2241	II	Only ORM-D	Prohibited	3A
Cycloheptatriene	3	UN2603	II	Prohibited		
Cycloheptene	3	UN2242	II	Only ORM-D	Prohibited	3A
Cyclohexane	3	UN1145	II	Only ORM-D	Prohibited	3A
Cyclohexanone	3	UN1915	III	Only ORM-D	Prohibited	3A
Cyclohexene	3	UN2256	II	Only ORM-D	Prohibited	3A
Cyclohexenyltrichlorosilane	8	UN1762	II	Prohibited		
Cyclohexyl acetate	3	UN2243	III	Only ORM-D	Prohibited	3A
Cyclohexyl isocyanate	6.1	UN2488	I	Prohibited		
Cyclohexyl mercaptan	3	UN3054	III	Only ORM-D	Prohibited	3A
Cyclohexylamine	8	UN2357	II	Prohibited		
Cyclohexyltrichlorosilane	8	UN1763	II	Prohibited		
Cyclonite and cyclotetramethylenetetranitramine mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized, etc.						
Cyclonite and HMX mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc.						
Cyclonite and octogen mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc.						
Cyclonite, see cyclotrimethylenetrinitramine, etc.						
Cyclooctadiene phosphines, see 9-Phosphabicyclononanes						
Cyclooctadienes	3	UN2520	III	Only ORM-D	Prohibited	3A
Cyclooctatetraene	3	UN2358	II	Only ORM-D	Prohibited	3A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Cyclopentane	3	UN1146	II	Only ORM-D	Prohibited	3A
<i>Cyclopentane, methyl, see Methylcyclopentane</i>						
Cyclopentanol	3	UN2244	III	Only ORM-D	Prohibited	3A
Cyclopentanone	3	UN2245	III	Only ORM-D	Prohibited	3A
Cyclopentene	3	UN2246	II	Only ORM-D	Prohibited	3A
Cyclopropane	2.1	UN1027	n/a	Only ORM-D	Prohibited	2A
<i>Cyclotetramethylene tetranitramine (dry or unphlegmatized) (HMX)</i>	Forbidden			Prohibited		
Cyclotetramethylenetetranitramine, desensitized or Octogen, desensitized or HMX, desensitized	1.1D	UN0484	II	Prohibited		
Cyclotetramethylenetetranitramine, wetted or HMX, wetted or Octogen, wetted with not less than 15 percent water, by mass	1.1D	UN0226	II	Prohibited		
Cyclotrimethylenenitramine and octogen, mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc.						
Cyclotrimethylenetrinitramine and cyclotetramethylenetetranitramine mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc.						
Cyclotrimethylenetrinitramine and HMX mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc.						
Cyclotrimethylenetrinitramine, desensitized or Cyclonite, desensitized or Hexogen, desensitized or RDX, desensitized	1.1D	UN0483	II	Prohibited		
Cyclotrimethylenetrinitramine, wetted or Cyclonite, wetted or Hexogen, wetted or RDX, wetted with not less than 15 percent water by mass	1.1D	UN0072	II	Prohibited		
Cymenes	3	UN2046	III	Only ORM-D	Prohibited	3A
<b>D</b>						
Dangerous Goods in Machinery or Dangerous Goods in Apparatus	9	UN3363	n/a	Prohibited		
Decaborane	4.1	UN1868	II	Prohibited		
Decahydronaphthalene	3	UN1147	III	Only ORM-D	Prohibited	3A
n-Decane	3	UN2247	III	Only ORM-D	Prohibited	3A
Deflagrating metal salts of aromatic nitroderivatives, n.o.s.	1.3C	UN0132	II	Prohibited		
<i>Delay electric igniter, see Igniters</i>						
Denatured alcohol	3	NA1987	II, III	Only ORM-D	Prohibited	3A

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
<i>Depth charges, see Charges, depth</i>						
Desensitized explosives, liquid, n.o.s.	3	UN3379	I	Prohibited		
Desensitized explosives, solid, n.o.s.	4.1	UN3380	I	Prohibited		
<i>Detonating relays, see Detonators, etc.</i>						
Detonator assemblies, non-electric <i>for blasting</i>	1.1B	UN0360	II	Prohibited		
Detonator assemblies, non-electric <i>for blasting</i>	1.4B	UN0361	II	Prohibited		
Detonator assemblies, non-electric <i>for blasting</i>	1.4S	UN0500	II	Prohibited		
Detonators, electric, <i>for blasting</i>	1.1B	UN0030	II	Prohibited		
Detonators, electric, <i>for blasting</i>	1.4B	UN0255	II	Prohibited		
Detonators, electric, <i>for blasting</i>	1.4S	UN0456	II	Prohibited		
Detonators for ammunition	1.1B	UN0073	II	Prohibited		
Detonators for ammunition	1.2B	UN0364	II	Prohibited		
Detonators for ammunition	1.4B	UN0365	II	Prohibited		
Detonators for ammunition	1.4S	UN0366	II	Prohibited		
Detonators, non-electric, <i>for blasting</i>	1.1B	UN0029	II	Prohibited		
Detonators, non-electric, <i>for blasting</i>	1.4B	UN0267	II	Prohibited		
Detonators, non-electric, <i>for blasting</i>	1.4S	UN0455	II	Prohibited		
Deuterium, compressed	2.1	UN1957	n/a	Only ORM-D	Prohibited	2A
Devices, small, hydrocarbon gas powered <i>or</i> Hydrocarbon gas refills for small devices <i>with release device</i>	2.1	UN3150	n/a	Only ORM-D	Prohibited	2A
Di-n-amylamine	3	UN2841	III	Only ORM-D	Prohibited	3A
<i>Di-n-butyl peroxydicarbonate, with more than 52 percent in solution</i>	Forbidden			Prohibited		
Di-n-butylamine	8	UN2248	II	Prohibited		
<i>2,2-Di-(tert-butylperoxy) butane, with more than 55 percent in solution</i>	Forbidden			Prohibited		
<i>D-i(tert-butylperoxy) phthalate, with more than 55 percent in solution</i>	Forbidden			Prohibited		
<i>2,2-Di-(4,4-di-tert-butylperoxycyclohexyl) propane, with more than 42 percent with inert solid</i>	Forbidden			Prohibited		
<i>D-i2,4-dichlorobenzoyl peroxide, with more than 75 percent with water</i>	Forbidden			Prohibited		
1,2-Di-(dimethylamino)ethane	3	UN2372	II	Only ORM-D	Prohibited	3A
<i>Di-2-ethylhexyl phosphoric acid, see Diisooctyl acid phosphate</i>						
<i>Di-(1-hydroxytetrazole) (dry)</i>	Forbidden			Prohibited		
<i>Di-(1-naphthoyl) peroxide</i>	Forbidden			Prohibited		
<i>Di-(beta-nitroxyethyl) ammonium nitrate</i>	Forbidden			Prohibited		



Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<i>a,a'-Di-(nitroxy) methylether</i>	Forbidden			Prohibited		
Diacetone alcohol	3	UN1148	II, III	Only ORM-D	Prohibited	3A
<i>Diacetone alcohol peroxides, with more than 57 percent in solution with more than 9 percent hydrogen peroxide, less than 26 percent diacetone alcohol and less than 9 percent water; total active oxygen content more than 9 percent by mass</i>	Forbidden			Prohibited		
<i>Diacetyl, see Butanedione</i>						
<i>Diacetyl peroxide, solid, or with more than 25 percent in solution</i>	Forbidden			Prohibited		
Diallylamine	3	UN2359	II	Prohibited		
Diallylether	3	UN2360	II	Prohibited		
4,4'-Diaminodiphenyl methane	6.1	UN2651	III	Only ORM-D or Consumer Commodity	6A	
<i>p-Diazidobenzene</i>	Forbidden			Prohibited		
<i>1,2-Diazidoethane</i>	Forbidden			Prohibited		
<i>1,1'-Diazoaminonaphthalene</i>	Forbidden			Prohibited		
<i>Diazoaminotetrazole (dry)</i>	Forbidden			Prohibited		
<i>Diazodinitrophenol (dry)</i>	Forbidden			Prohibited		
<i>Diazodinitrophenol, wetted with not less than 40 percent water or mixture of alcohol and water, by mass</i>	1.1A	UN0074	II	Prohibited		
<i>Diazodiphenylmethane</i>	Forbidden			Prohibited		
<i>Diazonium nitrates (dry)</i>	Forbidden			Prohibited		
<i>Diazonium perchlorates (dry)</i>	Forbidden			Prohibited		
<i>1,3-Diazopropane</i>	Forbidden			Prohibited		
<i>Dibenzyl peroxydicarbonate, with more than 87 percent with water</i>	Forbidden			Prohibited		
Dibenzylchlorosilane	8	UN2434	II	Only ORM-D or Mailable Limited Quantity	8A	
Diborane	2.3	UN1911	n/a	Prohibited		
Diborane mixtures	2.1	NA1911	n/a	Prohibited	Prohibited	
<i>Dibromoacetylene</i>	Forbidden			Prohibited		
1,2-Dibromobutan-3-one	6.1	UN2648	II	Prohibited		
Dibromochloropropane	6.1	UN2872	III	Only ORM-D or Consumer Commodity	6A	
Dibromodifluoromethane, <i>R12B2</i>	9	UN1941	III	Only ORM-D or Consumer Commodity	9C	
<i>1,2-Dibromoethane, see Ethylene dibromide</i>						

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Dibromomethane	6.1	UN2664	III	Only ORM-D or Consumer Commodity	6A	
Dibutyl ethers	3	UN1149	III	Only ORM-D	Prohibited	
Dibutylaminoethanol	6.1	UN2873	III	Only ORM-D or Consumer Commodity	6A	
N,N'-Dichlorazodicarbonamidine (salts of) (dry)	Forbidden			Prohibited		
1,1-Dichloro-1-nitroethane	6.1	UN2650	II	Prohibited		
3,5-Dichloro-2,4,6-trifluoropyridine	6.1	NA9264	I	Prohibited		
Dichloroacetic acid	8	UN1764	II	Only ORM-D	8A	
1,3-Dichloroacetone	6.1	UN2649	II	Prohibited		
Dichloroacetyl chloride	8	UN1765	II	Only ORM-D or Mailable Limited Quantity	8A	
<i>Dichloroacetylene</i>	Forbidden			Prohibited		
Dichloroanilines, liquid	6.1	UN1590	II	Prohibited		
Dichloroanilines, solid	6.1	UN3442	II	Prohibited		
o-Dichlorobenzene	6.1	UN1591	III	Only ORM-D or Consumer Commodity	6A	
Dichlorobutene	8	NA2920	I	Prohibited		
2,2'-Dichlorodiethyl ether	6.1	UN1916	II	Prohibited		
Dichlorodifluoromethane or Refrigerant gas R 12	2.2	UN1028	n/a	Only ORM-D or Consumer Commodity	2B	
Dichlorodifluoromethane and difluoroethane azeotropic mixture or Refrigerant gas R 500 with approximately 74 percent dichlorodifluoromethane	2.2	UN2602	n/a	Only ORM-D or Consumer Commodity	2B	
Dichlorodimethyl ether, symmetrical	6.1	UN2249	I	Prohibited		
1,1-Dichloroethane	3	UN2362	II	Only ORM-D	Prohibited	
<i>1,2-Dichloroethane, see Ethylene dichloride</i>						
<i>Dichloroethyl sulfide</i>	Forbidden			Prohibited		
1,2-Dichloroethylene	3	UN1150	II	Only ORM-D	Prohibited	
Dichlorofluoromethane or Refrigerant gas R 21	2.2	UN1029	n/a	Only ORM-D or Consumer Commodity	2B	
Dichloroisocyanuric acid, dry or Dichloroisocyanuric acid salts	5.1	UN2465	II	Only ORM-D or Mailable Limited Quantity	5A	
Dichlorodisopropyl ether	6.1	UN2490	II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Dichloromethane	6.1	UN1593	III	Only ORM-D or Consumer Commodity	6A	
Dichloropentanes	3	UN1152	III	Only ORM-D	Prohibited	
Dichlorophenyl isocyanates	6.1	UN2250	II	Prohibited		
Dichlorophenyltrichlorosilane	8	UN1766	II	Prohibited		
1,2-Dichloropropane	3	UN1279	II	Only ORM-D	Prohibited	
1,3-Dichloropropanol2	6.1	UN2750	II	Prohibited		
<i>Dichloropropene and propylene dichloride mixture, see 1,2-Dichloropropane</i>						
Dichloropropenes	3	UN2047	II, III	Only ORM-D	Prohibited	
Dichlorosilane	2.3	UN2189	n/a	Prohibited		
1,2-Dichloro-1,1,2,2-Tetrafluoroethane or Refrigerant gas R 114	2.2	UN1958	n/a	Only ORM-D or Consumer Commodity	2B	
<i>Dichlorovinylchloroarsine</i>	Forbidden			Prohibited		
<i>Dicycloheptadiene, see Bicyclo [2,2,1]hepta-2,5-diene, stabilized</i>						
Dicyclohexylamine	8	UN2565	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Dicyclohexylammonium nitrate	4.1	UN2687	III	Only ORM-D	Prohibited	4A
Dicyclopentadiene	3	UN2048	III	Only ORM-D	Prohibited	3A
Didymium nitrate	5.1	UN1465	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Diesel fuel	3	NA1993 UN1202	III	Only ORM-D	Prohibited	3A
<i>Diethanol nitrosamine dinitrate (dry)</i>	Forbidden			Prohibited		
Diethoxymethane	3	UN2373	II	Only ORM-D	Prohibited	3A
3,3-Diethoxypropene	3	UN2374	II	Only ORM-D	Prohibited	3A
Diethyl carbonate	3	UN2366	III	Only ORM-D	Prohibited	3A
<i>Diethyl cellosolve, see Ethylene glycol diethyl ether</i>						
Diethyl ether or Ethyl ether	3	UN1155	I	Only ORM-D	Prohibited	3A
Diethyl ketone	3	UN1156	II	Only ORM-D	Prohibited	3A
<i>Diethyl peroxydicarbonate, with more than 27 percent in solution</i>	Forbidden			Prohibited		
Diethyl sulfate	6.1	UN1594	II	Prohibited		
Diethyl sulfide	3	UN2375	II	Prohibited		
Diethylamine	3	UN1154	II	Prohibited		
2-Diethylaminoethanol	8	UN2686	II	Prohibited		
3-Diethylamino-propylamine	3	UN2684	III	Only ORM-D	Prohibited	3A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
N,N-Diethylaniline	6.1	UN2432	III	Only ORM-D or Consumer Commodity	6A	6A
Diethylbenzene	3	UN2049	III	Only ORM-D	Prohibited	3A
Diethyldichlorosilane	8	UN1767	II	Prohibited	8A	8A
Diethylene glycol dinitrate	Forbidden			Prohibited		
Diethyleneglycol dinitrate, desensitized <i>with not less than 25 percent nonvolatile water-insoluble phlegmatizer, by mass</i>	1.1D	UN0075	II	Prohibited		
Diethylenetriamine	8	UN2079	II	Only ORM-D or Mailable Limited Quantity	8A	8A
N,N-Diethylethylenediamine	8	UN2685	II	Prohibited		
<i>Diethylgold bromide</i>	Forbidden			Prohibited		
Diethylthiophosphoryl chloride	8	UN2751	II	Prohibited		
<i>Difluorochloroethanes, see 1-Chloro-1,1-difluoroethanes</i>						
1,1-Difluoroethane or Refrigerant gas R 152a	2.1	UN1030	n/a	Only ORM-D	Prohibited	2A
1,1-Difluoroethylene or Refrigerant gas R 1132a	2.1	UN1959	n/a	Only ORM-D	Prohibited	2A
Difluoromethane or Refrigerant gas R 32	2.1	UN3252	n/a	Only ORM-D	Prohibited	2A
Difluorophosphoric acid, anhydrous	8	UN1768	II	Prohibited		
2,3-Dihydropyran	3	UN2376	II	Only ORM-D	Prohibited	3A
<i>1,8-Dihydroxy-2,4,5,7-tetranitroanthraquinone (chrysamminic acid)</i>	Forbidden			Prohibited		
<i>Diiodoacetylene</i>	Forbidden			Prohibited		
Diisobutyl ketone	3	UN1157	III	Only ORM-D	Prohibited	3A
Diisobutylamine	3	UN2361	III	Only ORM-D	Prohibited	3A
Diisobutylene, isomeric compounds	3	UN2050	II	Only ORM-D	Prohibited	3A
Diisooctyl acid phosphate	8	UN1902	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Diisopropyl ether	3	UN1159	II	Only ORM-D	Prohibited	3A
Diisopropylamine	3	UN1158	II	Prohibited		
<i>Diisopropylbenzene hydroperoxide, with more than 72 percent in solution</i>	Forbidden			Prohibited		
Diketene, stabilized	6.1	UN2521	I	Prohibited		
1,2-Dimethoxyethane	3	UN2252	II	Only ORM-D	Prohibited	3A
1,1-Dimethoxyethane	3	UN2377	II	Only ORM-D	Prohibited	3A
Dimethyl carbonate	3	UN1161	II	Only ORM-D	Prohibited	3A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<i>Dimethyl chlorothiophosphate, see Dimethyl thiophosphoryl chloride</i>						
<i>2,5-Dimethyl-2,5-dihydroperoxy hexane, with more than 82 percent with water</i>	Forbidden			Prohibited		
Dimethyl disulfide	3	UN2381	II	Only ORM-D	Prohibited	3A
Dimethyl ether	2.1	UN1033	n/a	Only ORM-D	Prohibited	2A
Dimethyl sulfate	6.1	UN1595	I	Prohibited		
Dimethyl sulfide	3	UN1164	II	Prohibited		
Dimethyl thiophosphoryl chloride	6.1	UN2267	II	Prohibited		
Dimethyl-N-propylamine	3	UN2266	II	Prohibited		
Dimethylamine, anhydrous	2.1	UN1032	n/a	Prohibited		
Dimethylamine solution	3	UN1160	II	Prohibited		
2-Dimethylaminoacetonitrile	3	UN2378	II	Prohibited		
2-Dimethylaminoethanol	8	UN2051	II	Only ORM-D or Mailable Limited Quantity	8A	8A
2-Dimethylaminoethyl acrylate	6.1	UN3302	II	Prohibited		
2-Dimethylaminoethyl methacrylate	6.1	UN2522	II	Prohibited		
N,N-Dimethylaniline	6.1	UN2253	II	Prohibited		
2,3-Dimethylbutane	3	UN2457	II	Only ORM-D	Prohibited	3A
1,3-Dimethylbutylamine	3	UN2379	II	Prohibited		
Dimethylcardamoyl chloride	8	UN2262	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Dimethylcyclohexanes	3	UN2263	II	Only ORM-D	Prohibited	3A
N,N-Dimethylcyclohexylamine	8	UN2264	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Dimethyldichlorosilane	3	UN1162	II	Prohibited		
Dimethyldiethoxysilane	3	UN2380	II	Only ORM-D	Prohibited	3A
Dimethyldioxanes	3	UN2707	II, III	Only ORM-D	Prohibited	3A
N,N-Dimethylformamide	3	UN2265	III	Only ORM-D	Prohibited	3A
<i>Dimethylhexane dihydroperoxide (dry)</i>	Forbidden			Prohibited		
Dimethylhydrazine, symmetrical	6.1	UN2382	I	Prohibited		
Dimethylhydrazine, unsymmetrical	6.1	UN1163	I	Prohibited		
2,2-Dimethylpropane	2.1	UN2044	n/a	Only ORM-D	Prohibited	2A
Dintro-o-cresol	6.1	UN1598	II	Prohibited		
<i>1,4-Dinitro-1,1,4,4-tetramethylolbutanetetranitrate (dry)</i>	Forbidden			Prohibited		
<i>2,4-Dinitro-1,3,5-trimethylbenzene</i>	Forbidden			Prohibited		
<i>1,3-Dinitro-4,5-dinitrosobenzene</i>	Forbidden			Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<i>1,3-Dinitro-5,5-dimethyl hydantoin</i>	Forbidden			Prohibited		
<i>Dinitro-7,8-dimethylglycoluril (dry)</i>	Forbidden			Prohibited		
Dinitroanilines	6.1	UN1596	II	Prohibited		
Dinitrobenzenes, <i>liquid</i>	6.1	UN1597	II	Prohibited		
Dinitrobenzenes, <i>solid</i>	6.1	UN3443	II	Prohibited		
<i>Dinitrochlorobenzene, see Chlorodinitrobenzenes</i>						
<i>1,2-Dinitroethane</i>	Forbidden			Prohibited		
<i>1,1-Dinitroethane (dry)</i>	Forbidden			Prohibited		
Dinitrogen tetroxide	2.3	UN1067	n/a	Prohibited		
Dinitroglycoluril or Dingu	1.1D	UN0489	II	Prohibited		
<i>Dinitromethane</i>	Forbidden			Prohibited		
Dinitrophenol, <i>dry or wetted with less than 15 percent water, by mass</i>	1.1D	UN0076	II	Prohibited		
Dinitrophenol solutions	6.1	UN1599	II	Prohibited		
Dinitrophenol, <i>wetted with not less than 15 percent water, by mass</i>	4.1	UN1320	I	Prohibited		
Dinitrophenolates <i>alkali metals, dry or wetted with less than 15 percent water, by mass</i>	1.3C	UN0077	II	Prohibited		
Dinitrophenolates, <i>wetted with not less than 15 percent water, by mass</i>	4.1	UN1321	I	Prohibited		
<i>Dinitropropylene glycol</i>	Forbidden			Prohibited		
<i>2,-4Dinitroresorcinol (heavy metal salts of) (dry)</i>	Forbidden			Prohibited		
<i>4,6-Dinitroresorcinol (heavy metal salts of) (dry)</i>	Forbidden			Prohibited		
Dinitroresorcinol, <i>dry or wetted with less than 15 percent water, by mass</i>	1.1D	UN0078	II	Prohibited		
Dinitroresorcinol, <i>wetted with not less than 15 percent water, by mass</i>	4.1	UN1322	I	Prohibited		
<i>3,5-Dinitrosalicylic acid (lead salt) (dry)</i>	Forbidden			Prohibited		
Dinitrosobenzene	1.3C	UN0406	II	Prohibited		
<i>Dinitrosobenzylamidine and salts of (dry)</i>	Forbidden			Prohibited		
<i>2,2-Dinitrostilbene</i>	Forbidden			Prohibited		
Dinitrotoluenes, <i>liquid</i>	6.1	UN2038	II	Prohibited		
Dinitrotoluenes, <i>molten</i>	6.1	UN1600	II	Prohibited		
Dinitrotoluenes, <i>solid</i>	6.1	UN3454	II	Prohibited		
<i>1,9-Dinitroxy pentamethylene2,4,6,8tetramine (dry)</i>	Forbidden			Prohibited		
Dioxane	3	UN1165	II	Only ORM-D	Prohibited	3A
Dioxolane	3	UN1166	II	Only ORM-D	Prohibited	3A
Dipentene	3	UN2052	III	Only ORM-D	Prohibited	3A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Diphenylamine chloroarsine	6.1	UN1698	I	Prohibited		
Diphenylchloroarsine, liquid	6.1	UN1699	I	Prohibited		
Diphenylchloroarsine, solid	6.1	UN3450	I	Prohibited		
Diphenyldichlorosilane	8	UN1769	II	Prohibited		
Diphenylmethyl bromide	8	UN1770	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Dipicryl sulfide, <i>dry or wetted with less than 10 percent water, by mass</i>	1.1D	UN0401	II	Prohibited		
Dipicryl sulfide, <i>wetted with not less than 10 percent water, by mass</i>	4.1	UN2852	I	Prohibited		
Dipicrylamine, see Hexanitrodiphenylamine						
Dipropionyl peroxide, <i>with more than 28 percent in solution</i>	Forbidden			Prohibited		
Di-n-propyl ether	3	UN2384	II	Only ORM-D	Prohibited	3A
Dipropyl ketone	3	UN2710	III	Only ORM-D	Prohibited	3A
Dipropylamine	3	UN2383	II	Prohibited		
Disinfectants, liquid, corrosive, n.o.s.	8	UN1903	I	Prohibited		
Disinfectants, liquid, corrosive, n.o.s.	8	UN1903	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Disinfectants, liquid, toxic, n.o.s.	6.1	UN3142	I, II	Prohibited		
Disinfectants, liquid, toxic, n.o.s.	6.1	UN3142	III	Only ORM-D or Consumer Commodity	6A	6A
Disinfectants, solid, toxic, n.o.s.	6.1	UN1601	II	Prohibited		
Disinfectants, solid, toxic, n.o.s.	6.1	UN1601	III	Only ORM-D or Consumer Commodity	6A	6A
Disodium trioxosilicate	8	UN3253	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Dispersant gases, n.o.s. see Refrigerant gases, n.o.s.						
Divinyl ether, stabilized	3	UN1167	I	Prohibited		
Dodecyltrichlorosilane	8	UN1771	II	Prohibited		
Dry ice, see Carbon dioxide, solid						
Dyes, liquid, corrosive, n.o.s. or Dye intermediates, liquid, corrosive, n.o.s.	8	UN2801	I	Prohibited		
Dyes, liquid, corrosive, n.o.s. or Dye intermediates, liquid, corrosive, n.o.s.	8	UN2801	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Dyes, liquid, toxic, n.o.s. <i>or</i> Dye intermediates, liquid, toxic, n.o.s.	6.1	UN1602	II	Prohibited		
Dyes, liquid, toxic, n.o.s. <i>or</i> Dye intermediates, liquid, toxic, n.o.s.	6.1	UN1602	III	Only ORM-D or Consumer Commodity	6A	6A
Dyes, solid, corrosive, n.o.s. <i>or</i> Dye intermediates, solid, corrosive, n.o.s.	8	UN3147	I	Prohibited		
Dyes, solid, corrosive, n.o.s. <i>or</i> Dye intermediates, solid, corrosive, n.o.s.	8	UN3147	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Dyes, solid, toxic, n.o.s. <i>or</i> Dye intermediates, solid, toxic, n.o.s.	6.1	UN3143	I, II	Prohibited		
Dyes, solid, toxic, n.o.s. <i>or</i> Dye intermediates, solid, toxic, n.o.s.	6.1	UN3143	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Dynamite, see</i> Explosive, blasting, type A						
<b>E</b>						
Electrolyte ( <i>acid or alkali</i> ) <i>for batteries, see</i> Battery fluid, acid <i>or</i> Battery fluid, alkali						
Elevated temperature liquid, flammable, n.o.s., <i>with flashpoint above 37.8° C, at or above its flashpoint</i>	3	UN3256	III	Prohibited		
Elevated temperature liquid, n.o.s., <i>at or above 100° C and below its flashpoint (including molten metals, molten salts, etc.)</i>	9	UN3257	III	Prohibited		
Elevated temperature solid, n.o.s., <i>at or above 240° C, see 49 CFR 173.247(h)(4)</i>	9	UN3258	III	Prohibited		
Engines, internal combustion, <i>flammable gas powered</i>	9	UN3166	n/a	Prohibited		
Engines, internal combustion, <i>flammable liquid powered</i>	9	UN3166	n/a	Prohibited		
Environmentally hazardous substances, liquid, n.o.s.	9	UN3082	III	Only ORM-D or Consumer Commodity	9C	9C
Environmentally hazardous substances, solid, n.o.s.	9	UN3077	III	Only ORM-D or Consumer Commodity	9C	9C
Epibromohydrin	6.1	UN2558	I	Prohibited		
Epichlorohydrin	6.1	UN2023	II	Prohibited		
1,2-Epoxy-3-ethoxypropane	3	UN2752	III	Only ORM-D	Prohibited	3A
Esters, n.o.s.	3	UN3272	II, III	Only ORM-D	Prohibited	3A
<i>Etching acid, liquid, n.o.s., see</i> Hydrofluoric acid, <i>solution etc.</i>						



Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Ethane	2.1	UN1035	n/a	Only ORM-D	Prohibited	2A
EthanePropane mixture, refrigerated liquid	2.1	NA1961	n/a	Prohibited		
Ethane, refrigerated liquid	2.1	UN1961	n/a	Prohibited		
Ethanol or Ethyl alcohol or Ethanol solutions or Ethyl alcohol solutions	3	UN1170	II, III	Only ORM-D	Mailable only per 343.27	3A
<i>Ethanol amine dinitrate</i>	Forbidden			Prohibited		
Ethanol and gasoline mixture or Ethanol and motor spirit mixture or Ethanol and petrol mixture, with more than 10% ethanol.	3	UN3475	II	Prohibited		
Ethanolamine or Ethanolamine solutions	8	UN2491	III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Ether, see Diethyl ether</i>						
Ethers, n.o.s.	3	UN3271	II, III	Only ORM-D	Prohibited	3A
Ethyl acetate	3	UN1173	II	Only ORM-D	Prohibited	3A
Ethyl acrylate, stabilized	3	UN1917	II	Only ORM-D	Prohibited	3A
Ethyl alcohol, see Ethanol						
<i>Ethyl aldehyde, see Acetaldehyde</i>						
Ethyl amyl ketone	3	UN2271	III	Only ORM-D	Prohibited	3A
N-Ethylbenzyltoluidines, solid	6.1	UN3460	III	Only ORM-D or Consumer Commodity	6A	6A
N-Ethyl-N-benzylaniline	6.1	UN2274	III	Only ORM-D or Consumer Commodity	6A	6A
Ethyl borate	3	UN1176	II	Only ORM-D	Prohibited	3A
Ethyl bromide	6.1	UN1891	II	Prohibited		
Ethyl bromoacetate	6.1	UN1603	II	Prohibited		
Ethyl butyl ether	3	UN1179	II	Only ORM-D	Prohibited	3A
Ethyl butyrate	3	UN1180	III	Only ORM-D	Prohibited	3A
Ethyl chloride	2.1	UN1037	n/a	Prohibited		
Ethyl chloroacetate	6.1	UN1181	II	Prohibited		
Ethyl chloroformate	6.1	UN1182	I	Prohibited		
Ethyl 2-chloropropionate	3	UN2935	III	Only ORM-D	Prohibited	3A
Ethyl chlorothioformate	8	UN2826	II	Prohibited		
Ethyl crotonate	3	UN1862	II	Only ORM-D	Prohibited	3A
Ethyl ether, see Diethyl ether						
Ethyl fluoride or Refrigerant gas R 161	2.1	UN2453	n/a	Only ORM-D	Prohibited	2A
Ethyl formate	3	UN1190	II	Only ORM-D	Prohibited	3A
<i>Ethyl hydroperoxide</i>	Forbidden			Prohibited		
Ethyl isobutyrate	3	UN2385	II	Only ORM-D	Prohibited	3A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Ethyl isocyanate	3	UN2481	I	Prohibited		
Ethyl lactate	3	UN1192	III	Only ORM-D	Prohibited	3A
Ethyl mercaptan	3	UN2363	I	Prohibited		
Ethyl methacrylate, stabilized	3	UN2277	II	Only ORM-D	Prohibited	3A
Ethyl methyl ether	2.1	UN1039	n/a	Prohibited		
Ethyl methyl ketone or Methyl ethyl ketone	3	UN1193	II	Only ORM-D	Prohibited	3A
Ethyl nitrate solutions	3	UN1194	I	Prohibited		
Ethyl orthoformate	3	UN2524	III	Only ORM-D	Prohibited	3A
Ethyl oxalate	6.1	UN2525	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Ethyl perchlorate</i>	Forbidden			Prohibited		
Ethyl phosphonothioic dichloride, anhydrous	6.1	NA2927	I	Prohibited		
Ethyl phosphonous dichloride, anhydrous <i>pyrophoric liquid</i>	6.1	NA2845	I	Prohibited		
Ethyl phosphorodichloridate	6.1	NA2927	I	Prohibited		
Ethyl propionate	3	UN1195	II	Only ORM-D	Prohibited	3A
Ethyl propyl ether	3	UN2615	II	Only ORM-D	Prohibited	3A
<i>Ethyl silicate, see Tetraethyl silicate</i>						
Ethylacetylene, stabilized	2.1	UN2452	n/a	Prohibited		
Ethylamine	2.1	UN1036	n/a	Prohibited		
Ethylamine, aqueous solution <i>with not less than 50 percent but not more than 70 percent ethylamine</i>	3	UN2270	II	Prohibited		
N-Ethylaniline	6.1	UN2272	III	Only ORM-D or Consumer Commodity	6A	6A
2-Ethylaniline	6.1	UN2273	III	Only ORM-D or Consumer Commodity	6A	6A
Ethylbenzene	3	UN1175	II	Only ORM-D	Prohibited	3A
N-Ethylbenzyltoluidines liquid	6.1	UN2753	III	Only ORM-D or Consumer Commodity	6A	6A
2-Ethylbutanol	3	UN2275	III	Only ORM-D	Prohibited	3A
2-Ethylbutyl acetate	3	UN1177	III	Only ORM-D	Prohibited	3A
2-Ethylbutyraldehyde	3	UN1178	II	Only ORM-D	Prohibited	3A
Ethylchloroarsine	6.1	UN1892	I	Prohibited		
Ethylchlorosilane	4.3	UN1183	I	Prohibited		
Ethylene, acetylene and propylene in mixture, refrigerated liquid <i>with at least 71.5 percent ethylene with not more than 22.5 percent acetylene and not more than 6 percent propylene</i>	2.1	UN3138	n/a	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Ethylene chlorohydrin	6.1	UN1135	I	Prohibited		
Ethylene	2.1	UN1962	n/a	Only ORM-D	Prohibited	2A
<i>Ethylene diamine diperchlorate</i>	Forbidden			Prohibited		
Ethylene dibromide	6.1	UN1605	I	Prohibited		
<i>Ethylene dibromide and methyl bromide liquid mixtures, see Methyl bromide and ethylene dibromide mixtures, liquid</i>						
Ethylene dichloride	3	UN1184	II	Prohibited		
Ethylene glycol diethyl ether	3	UN1153	III	Only ORM-D	Prohibited	3A
<i>Ethylene glycol dinitrate</i>	Forbidden			Prohibited		
Ethylene glycol monoethyl ether	3	UN1171	III	Only ORM-D	Prohibited	3A
Ethylene glycol monoethyl ether acetate	3	UN1172	III	Only ORM-D	Prohibited	3A
Ethylene glycol monomethyl ether	3	UN1188	III	Only ORM-D	Prohibited	3A
Ethylene glycol monomethyl ether acetate	3	UN1189	III	Only ORM-D	Prohibited	3A
Ethylene oxide or Ethylene oxide with nitrogen up to a total pressure of 1MPa (10 bar) at 50° C	2.3	UN1040	n/a	Prohibited		
Ethylene oxide and carbon dioxide mixtures with more than 87 percent ethylene oxide	2.3	UN3300	n/a	Prohibited		
Ethylene oxide and carbon dioxide mixtures with more than 9 percent but not more than 87 percent ethylene oxide	2.1	UN1041	n/a	Only ORM-D	Prohibited	2A
Ethylene oxide and carbon dioxide mixtures with not more than 9 percent ethylene oxide	2.2	UN1952	n/a	Only ORM-D or Consumer Commodity	2B	2B
Ethylene oxide and chlorotetrafluoroethane mixture with not more than 8.8 percent ethylene oxide	2.2	UN3297	n/a	Only ORM-D or Consumer Commodity	2B	2B
Ethylene oxide and dichlorodifluoromethane mixture with not more than 12.5 percent ethylene oxide	2.2	UN3070	n/a	Only ORM-D or Consumer Commodity	2B	2B
Ethylene oxide and pentafluoroethane mixture with not more than 7.9 percent ethylene oxide	2.2	UN3298	n/a	Only ORM-D or Consumer Commodity	2B	2B
Ethylene oxide and propylene oxide mixtures with not more than 30 percent ethylene oxide	3	UN2983	I	Prohibited		
Ethylene oxide and tetrafluoroethane mixture with not more than 5.6 percent ethylene oxide	2.2	UN3299	n/a	Only ORM-D or Consumer Commodity	2B	2B

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Ethylene, refrigerated liquid ( <i>cryogenic liquid</i> )	2.1	UN1038	n/a	Prohibited		
Ethylenediamine	8	UN1604	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Ethyleneimine, stabilized	6.1	UN1185	I	Prohibited		
<i>Ethylhexaldehyde, see Octyl aldehydes etc.</i>						
2-Ethylhexyl chloroformate	6.1	UN2748	II	Prohibited		
2-Ethylhexylamine	3	UN2276	III	Only ORM-D	Prohibited	3A
Ethylphenyldichlorosilane	8	UN2435	II	Prohibited		
1-Ethylpiperidine	3	UN2386	II	Prohibited		
N-Ethyltoluidines	6.1	UN2754	II	Prohibited		
Ethyltrichlorosilane	3	UN1196	II	Prohibited		
<i>Etiologic agent, see Infectious substances, etc.</i>						
<i>Explosive articles, see Articles, explosive, n.o.s. etc.</i>						
Explosive, blasting, type A	1.1D	UN0081	II	Prohibited		
Explosive, blasting, type B	1.1D	UN0082	II	Prohibited		
Explosive, blasting, type B or Agent blasting, Type B	1.5D	UN0331	II	Prohibited		
Explosive, blasting, type C	1.1D	UN0083	II	Prohibited		
Explosive, blasting, type D	1.1D	UN0084	II	Prohibited		
Explosive, blasting, type E	1.1D	UN0241	II	Prohibited		
Explosive, blasting, type E or Agent blasting, Type E	1.5D	UN0332	II	Prohibited		
<i>Explosive, forbidden. See 49 CFR 173.54</i>	Forbidden			Prohibited		
<i>Explosive substances, see Substances, explosive, n.o.s. etc.</i>						
<i>Explosives, slurry, see Explosive, blasting, type E</i>						
<i>Explosives, water gels, see Explosive, blasting, type E</i>						
Extracts, aromatic, liquid	3	UN1169	II, III	Only ORM-D	Prohibited	3A
Extracts, flavoring, liquid	3	UN1197	II, III	Only ORM-D	Prohibited	3A
<b>F</b>						
<i>Fabric with animal or vegetable oil, see Fibers or Fabrics, etc.</i>						
Ferric arsenate	6.1	UN1606	II	Prohibited		
Ferric arsenite	6.1	UN1607	II	Prohibited		
Ferric chloride, anhydrous	8	UN1773	III	Only ORM-D or Mailable Limited Quantity	8A	8A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Ferric chloride, solution	8	UN2582	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Ferric nitrate	5.1	UN1466	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Ferrocenium	4.1	UN1323	II	Only ORM-D	Prohibited	4A
Ferrosilicon, with 30 percent or more but less than 90 percent silicon	4.3	UN1408	III	Only ORM-D	Prohibited	4A
Ferrous arsenate	6.1	UN1608	II	Prohibited		
Ferrous chloride, solid	8	NA1759	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Ferrous chloride, solution	8	NA1760	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Ferrous metal borings or Ferrous metal shavings or Ferrous metal turnings or Ferrous metal cuttings in a form liable to self-heating	4.2	UN2793	III	Prohibited		
Fertilizer ammoniating solution with free ammonia	2.2	UN1043	n/a	Only ORM-D or Consumer Commodity	2B	2B
Fibers, animal or Fibers, vegetable burnt, wet or damp	4.2	UN1372	III	Prohibited		
Fiber, vegetable, dry	4.1	UN3360	III	Prohibited		
Fibers or Fabrics impregnated with weakly nitrated nitrocellulose, n.o.s.	4.1	UN1353	III	Prohibited		
Fibers or Fabrics, animal or vegetable or Synthetic, n.o.s. with animal or vegetable oil	4.2	UN1373	III	Prohibited		
Films, nitrocellulose base, gelatine coated (except scrap)	4.1	UN1324	III	Prohibited		
Films, nitrocellulose base, from which gelatine has been removed; film scrap, see Celluloid scrap						
Fire extinguisher charges, corrosive liquid	8	UN1774	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Fire extinguisher charges, expelling, explosive, see Cartridges, power device						

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
Fire extinguishers <i>containing compressed or liquified gas</i>	2.2	UN1044	n/a	Mailable only per 342.22d Only ORM-D or Consumer Commodity	2C	2C
Firelighters, solid <i>with flammable liquid</i>	4.1	UN2623	III	Prohibited		
Fireworks	1.1G	UN0333	II	Prohibited		
Fireworks	1.2G	UN0334	II	Prohibited		
Fireworks	1.3G	UN0335	II	Prohibited		
Fireworks	1.4G	UN0336	II	Prohibited		
Fireworks	1.4S	UN0337	II	Prohibited		
First aid kits	9	UN3316		Only ORM-D	Prohibited	9C
Fish meal, stabilized <i>or</i> Fish scrap, stabilized	9	UN2216	III	Only ORM-D or Consumer Commodity	9C	9C
Fish meal, unstabilized <i>or</i> Fish scrap, unstabilized	4.2	UN1374	II	Prohibited		
<i>Flammable compressed gas (small receptacles not fitted with a dispersion device, not refillable), see Receptacles, etc.</i>						
<i>Flammable compressed gas, see Compressed or liquified gas, flammable, etc.</i>						
<i>Flammable gas in lighters, see Lighters or lighter refills, cigarettes, containing flammable gas</i>						
Flammable liquid, toxic, corrosive, n.o.s.	3	UN3286	I, II	Prohibited		
Flammable liquids, corrosive, n.o.s.	3	UN2924	I, II	Prohibited		
Flammable liquids, corrosive, n.o.s.	3	UN2924	III	Only ORM-D	Prohibited	3A
Flammable liquids, n.o.s.	3	UN1993	I, II, III	Only ORM-D	Prohibited	3A
Flammable liquids, toxic, n.o.s.	3	UN1992	I, II	Prohibited		
Flammable liquids, toxic, n.o.s.	3	UN1992	III	Only ORM-D	Prohibited	3A
Flammable solid, corrosive, inorganic, n.o.s.	4.1	UN3180	II, III	Only ORM-D	Prohibited	4A
Flammable solid, inorganic, n.o.s.	4.1	UN3178	II, III	Only ORM-D	Prohibited	4A
Flammable solid, organic, molten, n.o.s.	4.1	UN3176	II, III	Only ORM-D	Prohibited	4A
Flammable solid, oxidizing, n.o.s.	4.1	UN3097	II, III	Prohibited		
Flammable solid, toxic, inorganic, n.o.s.	4.1	UN3179	II, III	Only ORM-D	Prohibited	4A
Flammable solids, corrosive, organic, n.o.s.	4.1	UN2925	II	Prohibited		
Flammable solids, corrosive, organic, n.o.s.	4.1	UN2925	III	Only ORM-D	Prohibited	4A
Flammable solids, organic, n.o.s.	4.1	UN1325	II, III	Only ORM-D	Prohibited	4A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Flammable solids, toxic, organic, n.o.s.	4.1	UN2926	II	Prohibited		
Flammable solids, toxic, organic, n.o.s.	4.1	UN2926	III	Only ORM-D	Prohibited	4A
Flares, aerial	1.1G	UN0420	II	Prohibited		
Flares, aerial	1.2G	UN0421	II	Prohibited		
Flares, aerial	1.3G	UN0093	II	Prohibited		
Flares, aerial	1.4G	UN0403	II	Prohibited		
Flares, aerial	1.4S	UN0404	II	Prohibited		
<i>Flares, airplane, see</i> Flares, aerial						
<i>Flares, signal, see</i> Cartridges, signal						
Flares, surface	1.1G	UN0418	II	Prohibited		
Flares, surface	1.2G	UN0419	II	Prohibited		
Flares, surface	1.3G	UN0092	II	Prohibited		
<i>Flares, water-activated, see</i> Contrivances, water-activated, etc.						
Flash powder	1.1G	UN0094	II	Prohibited		
Flash powder	1.3G	UN0305	II	Prohibited		
<i>Flue dusts, poisonous, see</i> Arsenical dust						
<i>Fluoric acid, see</i> Hydrofluoric acid, solution, etc.						
Fluorine, compressed	2.3	UN1045	n/a	Prohibited		
Fluoroacetic acid	6.1	UN2642	I	Prohibited		
Fluoroanilines	6.1	UN2941	III	Only ORM-D or Consumer Commodity	6A	6A
Fluorobenzene	3	UN2387	II	Only ORM-D	Prohibited	3A
Fluoroboric acid	8	UN1775	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Fluorophosphoric acid anhydrous	8	UN1776	II	Prohibited		
Fluorosilicates, n.o.s.	6.1	UN2856	III	Only ORM-D or Consumer Commodity	6A	6A
Fluorosilicic acid	8	UN1778	II	Prohibited		
Fluorosulfonic acid	8	UN1777	I	Prohibited		
Fluorotoluenes	3	UN2388	II	Only ORM-D	Prohibited	3A
<i>Forbidden materials, see 49 CFR 173.21</i>	Forbidden			Prohibited		
Formaldehyde, solutions, with not less than 25 percent formaldehyde	8	UN2209	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Formaldehyde, solutions, flammable	3	UN1198	III	Only ORM-D	Prohibited	3A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Formaldehyde solutions (with not less than 10 percent and less than 25 percent formaldehyde), see Aviation regulated liquids, n.o.s. or Other regulated substances, liquid, n.o.s.						
<i>Formalin</i> , see Formaldehyde, solutions, etc.						
Formic acid with not less than 10 percent but not more than 85 percent acid by mass	8	UN3412	II	Prohibited		
Formic acid with not less than 5 percent but less than 10 percent acid by mass	8	UN3412	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Formic acid	8	UN1779	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Fracturing devices, explosives, without detonators for oil wells	1.1D	UN0099	II	Prohibited		
Fuel, aviation, turbine engine	3	UN1863	I, II, III	Only ORM-D	Prohibited	3A
Fuel cell cartridges or Fuel cell cartridges contained in equipment or Fuel cell cartridges packed with equipment containing corrosive substances	8	UN3477		Only ORM-D or Mailable Limited Quantity	8A	8A
Fuel cell cartridges or Fuel cell cartridges contained in equipment or Fuel cell cartridges packed with equipment containing flammable liquids	3	UN3473		Only ORM-D	Prohibited	3A
Fuel cell cartridges or Fuel cell cartridges contained in equipment or Fuel cell cartridges packed with equipment containing hydrogen in metal hydride	2.1	UN3479		Prohibited		
Fuel cell cartridges or Fuel cell cartridges contained in equipment or Fuel cell cartridges packed with equipment containing liquified flammable gas	2.1	UN3478		Prohibited		
Fuel cell cartridges or Fuel cell cartridges contained in equipment or Fuel cell cartridges packed with equipment containing water-reactive substances	4.3	UN3476		Prohibited		
Fuel oil (No. 1, 2, 4, 5, or 6)	3	NA1993	III	Only ORM-D	Prohibited	3A



Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<i>Fuel system components (including fuel control units(FCU), carburetors, fuel lines, fuel pumps) see Dangerous Goods in Apparatus or Dangerous Goods in Machinery</i>						
<i>Fulminate of mercury (dry)</i>	Forbidden			Prohibited		
<i>Fulminate of mercury, wet, see Mercury fulminate, etc.</i>						
<i>Fulminating gold</i>	Forbidden			Prohibited		
<i>Fulminating mercury</i>	Forbidden			Prohibited		
<i>Fulminating platinum</i>	Forbidden			Prohibited		
<i>Fulminating silver</i>	Forbidden			Prohibited		
<i>Fulminic acid</i>	Forbidden			Prohibited		
Fumaryl chloride	8	UN1780	II	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Fumigated lading, see 49 CFR 172.302(g), 173.9, and 176.76(h)</i>				Prohibited		
Fumigated transport vehicle or freight containers see 49 CFR 173.9						
Furaldehydes	6.1	UN1199	II	Prohibited		
Furan	3	UN2389	I	Prohibited		
Furfuryl alcohol	6.1	UN2874	III	Only ORM-D or Consumer Commodity	6A	6A
Furfurylamine	3	UN2526	III	Only ORM-D	Prohibited	3A
Fuse, detonating, <i>metal clad</i> , see Cord, detonating, <i>metal clad</i>						
Fuse, detonating, mild effect, <i>metal clad</i> , see Cord, detonating, mild effect, <i>metal clad</i>						
Fuse, igniter <i>tubular metal clad</i>	1.4G	UN0103	II	Prohibited		
Fuse, non-detonating ( <i>instantaneous or quickmatch</i> )	1.3G	UN0101	II	Prohibited		
Fuse, safety	1.4S	UN0105	II	Mailable only with approval per 341.22b	Prohibited	1B
Fusee ( <i>railway or highway</i> )	4.1	NA1325	II	Prohibited		
Fusel oil	3	UN1201	II, III	Only ORM-D	Prohibited	3A
<i>Fuses, tracer, see Tracers for ammunition</i>						
<i>Fuzes, combination, percussion and time, see Fuzes, detonating (UN0257, UN0367); Fuzes, igniting (UN0317, UN0368)</i>						
Fuzes, detonating	1.1B	UN0106	II	Prohibited		
Fuzes, detonating	1.2B	UN0107	II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Fuzes, detonating	1.4B	UN0257	II	Prohibited		
Fuzes, detonating	1.4S	UN0367	II	Prohibited		
Fuzes, detonating, <i>with protective features</i>	1.1D	UN0408	II	Prohibited		
Fuzes, detonating, <i>with protective features</i>	1.2D	UN0409	II	Prohibited		
Fuzes, detonating, <i>with protective features</i>	1.4D	UN0410	II	Prohibited		
Fuzes, igniting	1.3G	UN0316	II	Prohibited		
Fuzes, igniting	1.4G	UN0317	II	Prohibited		
Fuzes, igniting	1.4S	UN0368	II	Prohibited		
<b>G</b>						
<i>Galactsan trinitrate</i>	Forbidden			Prohibited		
Gallium	8	UN2803	III	Prohibited		
Gas cartridges ( <i>flammable</i> ) <i>without a release device, non-refillable</i>	2.1	UN2037	n/a	Only ORM-D	Prohibited	2A
Gas identification set	2.3	NA9035	n/a	Prohibited		
Gas oil or Diesel fuel or Heating oil, light	3	UN1202	III	Only ORM-D	Prohibited	3A
Gas, refrigerated liquid, flammable, n.o.s. ( <i>cryogenic liquid</i> )	2.1	UN3312	n/a	Prohibited		
Gas, refrigerated liquid, n.o.s. ( <i>cryogenic liquid</i> )	2.2	UN3158	n/a	Prohibited		
Gas, refrigerated liquid, oxidizing, n.o.s. ( <i>cryogenic liquid</i> )	2.2	UN3311	n/a	Prohibited		
Gas sample, nonpressurized, flammable, n.o.s., <i>not refrigerated liquid</i>	2.1	UN3167	n/a	Only ORM-D	Prohibited	2A
Gas sample, nonpressurized, toxic, flammable, n.o.s., <i>not refrigerated liquid</i>	2.3	UN3168	n/a	Prohibited		
Gas sample, nonpressurized, toxic, n.o.s., <i>not refrigerated liquid</i>	2.3	UN3169	n/a	Prohibited		
Gasohol gasoline mixed with ethyl alcohol, with not more than 10 percent alcohol	3	NA1203	II	Only ORM-D	Prohibited	3A
Gasoline includes gasoline mixed with ethyl alcohol, with not more than 10 percent alcohol	3	UN1203	II	Prohibited per 343.23		
Gasoline, casinghead, see Gasoline						
Gelatine, blasting, see Explosive, blasting, type A						
Gelatine dynamites, see Explosive, blasting, type A						
Germane	2.3	UN2192	n/a	Prohibited		
Glycerol-1,3-dinitrate	Forbidden			Prohibited		
Glycerol gluconate trinitrate	Forbidden			Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<i>Glycerol lactate trinitrate</i>	Forbidden			Prohibited		
Glycerol alpha-monochlorohydrin	6.1	UN2689	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Glyceryl trinitrate, see Nitroglycerin, etc.</i>						
Glycidaldehyde	3	UN2622	II	Only ORM-D	Prohibited	3A
Grenades, <i>hand or rifle, with bursting charge</i>	1.1D	UN0284	II	Prohibited		
Grenades, <i>hand or rifle, with bursting charge</i>	1.1F	UN0292	II	Prohibited		
Grenades, <i>hand or rifle, with bursting charge</i>	1.2D	UN0285	II	Prohibited		
Grenades, <i>hand or rifle, with bursting charge</i>	1.2F	UN0293	II	Prohibited		
<i>Grenades, illuminating, see Ammunition, illuminating, etc.</i>						
Grenades, practice, <i>hand or rifle</i>	1.2G	UN0372	II	Prohibited		
Grenades, practice, <i>hand or rifle</i>	1.3G	UN0318	II	Prohibited		
Grenades, practice, <i>hand or rifle</i>	1.4G	UN0452	II	Prohibited		
Grenades, practice, <i>hand or rifle</i>	1.4S	UN0110	II	Prohibited		
<i>Grenades, smoke, see Ammunition, smoke, etc.</i>						
Guanidine nitrate	5.1	UN1467	III	Only ORM-D or Mailable Limited Quantity	5A	5A
<i>Guanyl nitrosaminoguanylidene hydrazine (dry)</i>	Forbidden			Prohibited		
Guanyl nitrosaminoguanylidene hydrazine, wetted with not less than 30 percent water, by mass	1.1A	UN0113	II	Prohibited		
<i>Guanyl nitrosaminoguanyltetrazene (dry)</i>	Forbidden			Prohibited		
Guanyl nitrosaminoguanyltetrazene, wetted or Tetrazene, wetted with not less than 30 percent water or mixture of alcohol and water, by mass	1.1A	UN0114	II	Prohibited		
<i>Gunpowder, granular or as a meal, see Black powder, etc. (UN0027)</i>						
<i>Gunpowder, compressed or Gunpowder in pellets, see Black powder, etc. (UN0028)</i>						

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<b>H</b>						
Hafnium powder, dry	4.2	UN2545	I, II, III	Prohibited		
Hafnium powder, wetted <i>with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns</i>	4.1	UN1326	II	Prohibited		
Hand signal device, see Signal devices, hand						
Hazardous substances, liquid or solid, n.o.s., see Environmentally hazardous substances, etc.						
Hazardous waste, liquid, n.o.s.	9	NA3082	III	Prohibited		
Hazardous waste, solid, n.o.s.	9	NA3077	III	Prohibited		
Heating oil, light	3	UN1202	III	Only ORM-D	Prohibited	3A
Helium, compressed	2.2	UN1046	n/a	Only ORM-D or Consumer Commodity	2B	2B
Helium, refrigerated liquid ( <i>cyrogenic liquid</i> )	2.2	UN1963	n/a	Prohibited		
Heptafluoropropane or Refrigerant gas R 227	2.2	UN3296	n/a	Only ORM-D or Consumer Commodity	2B	2B
n-Heptaldehyde	3	UN3056	III	Only ORM-D	Prohibited	3A
Heptanes	3	UN1206	II	Only ORM-D	Prohibited	3A
n-Heptane	3	UN2278	II	Only ORM-D	Prohibited	3A
Hexachloroacetone	6.1	UN2661	III	Only ORM-D or Consumer Commodity	6A	6A
Hexachlorobenzene	6.1	UN2729	III	Only ORM-D or Consumer Commodity	6A	6A
Hexachlorobutadiene	6.1	UN2279	III	Only ORM-D or Consumer Commodity	6A	6A
Hexachlorocyclopentadiene	6.1	UN2646	I	Prohibited		
Hexachlorophene	6.1	UN2875	III	Only ORM-D or Consumer Commodity	6A	6A
Hexadecyltrichlorosilane	8	UN1781	II	Prohibited		
Hexadienes	3	UN2458	II	Prohibited		
Hexaethyl tetraphosphate and compressed gas mixtures	2.3	UN1612	n/a	Prohibited		
Hexaethyl tetraphosphate, <i>liquid</i>	6.1	UN1611	II	Prohibited		
Hexaethyl tetraphosphate, <i>solid</i>	6.1	UN1611	II	Prohibited		
Hexafluoroacetone	2.3	UN2420	n/a	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Hexafluoroacetone hydrate, liquid	6.1	UN2552	II	Prohibited		
Hexafluoroacetone hydrate, solid	6.1	UN3436	II	Prohibited		
Hexafluoroethane, compressed or Refrigerant gas R 116	2.2	UN2193	n/a	Only ORM-D or Consumer Commodity	2B	2B
Hexafluorophosphoric acid	8	UN1782	II	Prohibited		
Hexafluoropropylene, compressed or Refrigerant gas R 1216	2.2	UN1858	n/a	Only ORM-D or Consumer Commodity	2B	2B
Hexaldehyde	3	UN1207	III	Only ORM-D	Prohibited	3A
Hexamethylene diisocyanate	6.1	UN2281	II	Prohibited		
<i>Hexamethylene triperoxide diamine (dry)</i>	Forbidden			Prohibited		
Hexamethylenediamine solution	8	UN1783	II	Prohibited		
Hexamethylenediamine solution	8	UN1783	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Hexamethylenediamine, solid	8	UN2280	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Hexamethyleneimine	3	UN2493	II	Prohibited		
Hexamethylenetetramine	4.1	UN1328	III	Only ORM-D	Prohibited	4A
<i>Hexamethylol benzene hexanitrate</i>	Forbidden			Prohibited		
Hexanes	3	UN1208	II	Only ORM-D	Prohibited	3A
<i>2,2',4,4',6,6'-Hexanitro-3,3'-dihydroxyazobenzene (dry)</i>	Forbidden			Prohibited		
<i>Hexanitroazoxy benzene</i>	Forbidden			Prohibited		
<i>Hexanitrodiphenyl urea</i>	Forbidden			Prohibited		
<i>N,N'-(hexanitrodiphenyl) ethylene dinitramine (dry)</i>	Forbidden			Prohibited		
Hexanitrodiphenylamine or Dipicrylamine or Hexyl	1.1D	UN0079	II	Prohibited		
<i>2,2',3',4,4',6-Hexanitrodiphenylamine</i>	Forbidden			Prohibited		
<i>2,3',4,4',6,6'-Hexanitrodiphenylether</i>	Forbidden			Prohibited		
<i>Hexanitroethane</i>	Forbidden			Prohibited		
<i>Hexanitrooxanilide</i>	Forbidden			Prohibited		
Hexanitrostilbene	1.1D	UN0392	II	Prohibited		
<i>Hexanoic acid, see Corrosive liquids, n.o.s.</i>						
Hexanols	3	UN2282	III	Only ORM-D	Prohibited	3A
1-Hexene	3	UN2370	II	Only ORM-D	Prohibited	3A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Hexogen and cyclotetramethylenetetranitramine mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized <i>etc.</i>						
Hexogen and HMX mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized <i>etc.</i>						
Hexogen and octogen mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized <i>etc.</i>						
Hexogen, see Cyclotrimethylenetrinitramine, <i>etc.</i>						
Hexolite, or Hexotol dry or wetted with less than 15 percent water, by mass	1.1D	UN0118	II	Prohibited		
Hexotonal	1.1D	UN0393	II	Prohibited		
Hexyl, see Hexanitrodiphenylamine						
Hexyltrichlorosilane	8	UN1784	II	Prohibited		
<i>High explosives, see individual explosives' entries</i>						
HMX, see Cyclotetramethylenetetranitramine, <i>etc.</i>						
Hydrazine, anhydrous or Hydrazine aqueous solutions with more than 64 percent hydrazine, by mass	8	UN2029	I	Prohibited		
Hydrazine, aqueous solution with not more than 37 percent hydrazine, by mass	6.1	UN3293	III	Only ORM-D or Consumer Commodity	6A	
Hydrazine aqueous solution, flammable with more than 37 percent hydrazine, by mass	8	UN3484	I	Prohibited		
Hydrazine aqueous solution, with more than 37 percent hydrazine, by mass	8	UN2030	II	Prohibited		
<i>Hydrazine azide</i>	Forbidden			Prohibited		
<i>Hydrazine chlorate</i>	Forbidden			Prohibited		
<i>Hydrazine decarbonic acid diazide</i>	Forbidden			Prohibited		
<i>Hydrazine perchlorate</i>	Forbidden			Prohibited		
<i>Hydrazine selenate</i>	Forbidden			Prohibited		
Hydriodic acid	8	UN1787	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Hydriodic acid, anhydrous, see Hydrogen iodide, anhydrous</i>						
Hydrobromic acid, with more than 49 percent hydrobromic acid	8	UN1788	II, III	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Hydrobromic acid, <i>with not more than 49 percent hydrobromic acid</i>	8	UN1788	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Hydrobromic acid, anhydrous, see Hydrogen bromide, anhydrous</i>						
Hydrocarbon gas mixture, compressed, n.o.s.	2.1	UN1964	n/a	Only ORM-D	Prohibited	2A
Hydrocarbon gas mixtures, liquified, n.o.s.	2.1	UN1965	n/a	Only ORM-D	Prohibited	2A
Hydrocarbons, liquid, n.o.s.	3	UN3295	I, II, III	Only ORM-D	Prohibited	3A
Hydrochloric acid	8	UN1789	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Hydrochloric acid, anhydrous, see Hydrogen chloride, anhydrous</i>						
<i>Hydrocyanic acid, anhydrous, see Hydrogen cyanide, etc.</i>						
Hydrocyanic acid, aqueous solutions or Hydrogen cyanide, aqueous solutions <i>with not more than 20 percent hydrogen cyanide</i>	6.1	UN1613	I	Prohibited		
Hydrocyanic acid, aqueous solutions <i>with less than 5 percent hydrogen cyanide</i>	6.1	NA1613	II	Prohibited		
<i>Hydrocyanic acid, liquified, see Hydrogen cyanide, etc.</i>						
<i>Hydrocyanic acid (prussic) unstabilized</i>	Forbidden			Prohibited		
Hydrofluoric acid and Sulfuric acid mixtures	8	UN1786	I	Prohibited		
<i>Hydrofluoric acid, anhydrous, see Hydrogen fluoride, anhydrous</i>						
Hydrofluoric acid, <i>with more than 60 percent strength</i>	8	UN1790	I	Prohibited		
Hydrofluoric acid, <i>with not more than 60 percent strength</i>	8	UN1790	II	Prohibited		
<i>Hydrofluoroboric acid, see Fluoroboric acid</i>						
<i>Hydrofluorosilicic acid, see Fluorosilicic acid</i>						
Hydrogen and Methane mixtures, compressed	2.1	UN2034	n/a	Only ORM-D	Prohibited	2A
Hydrogen bromide, anhydrous	2.3	UN1048	n/a	Prohibited		
Hydrogen chloride, anhydrous	2.3	UN1050	n/a	Prohibited		
Hydrogen chloride, refrigerated liquid	2.3	UN2186	n/a	Prohibited		
Hydrogen, compressed	2.1	UN1049	n/a	Only ORM-D	Prohibited	2A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Hydrogen, cyanide, solution in alcohol <i>with not more than 45 percent hydrogen cyanide</i>	6.1	UN3294	I	Prohibited		
Hydrogen cyanide, stabilized <i>with less than 3 percent water</i>	6.1	UN1051	I	Prohibited		
Hydrogen cyanide, stabilized <i>with less than 3 percent water and absorbed in a porous inert material</i>	6.1	UN1614	I	Prohibited		
Hydrogen fluoride, anhydrous	8	UN1052	I	Prohibited		
Hydrogen in a metal hydride storage system <i>or</i> Hydrogen in a metal hydride storage system contained in equipment <i>or</i> Hydrogen in a metal hydride storage system packed with equipment	2.1	UN3468	n/a	Prohibited		
Hydrogen iodide, anhydrous	2.3	UN2197	n/a	Prohibited		
<i>Hydrogen iodide solution, see Hydriodic acid, solution</i>						
Hydrogendifluoride solutions, n.o.s.	8	UN3471	II	Prohibited		
Hydrogendifluoride solutions, n.o.s.	8	UN3471	III	Only ORM-D	Prohibited	8A
Hydrogen peroxide and peroxyacetic acid mixtures, stabilized <i>with acids, water, and not more than 5 percent peroxyacetic acid</i>	5.1	UN3149	II	Prohibited		
Hydrogen peroxide, aqueous solutions <i>with more than 40 percent but not more than 60 percent hydrogen peroxide (stabilized as necessary)</i>	5.1	UN2014	II	Prohibited		
Hydrogen peroxide, aqueous solutions <i>with not less than 20 percent but not more than 40 percent hydrogen peroxide (stabilized as necessary)</i>	5.1	UN2014	II	Prohibited		
Hydrogen peroxide, aqueous solutions <i>with not less than 8 percent but less than 20 percent hydrogen peroxide (stabilized as necessary)</i>	5.1	UN2984	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Hydrogen peroxide, stabilized <i>or</i> Hydrogen peroxide aqueous solutions, stabilized <i>with more than 60 percent hydrogen peroxide</i>	5.1	UN2015	I	Prohibited		
Hydrogen, refrigerated liquid ( <i>cryogenic liquid</i> )	2.1	UN1966	n/a	Prohibited		
Hydrogen selenide, anhydrous	2.3	UN2202	n/a	Prohibited		
<i>Hydrogen sulfate, see Sulfuric acid, etc.</i>						
Hydrogen sulfide	2.3	UN1053	n/a	Prohibited		



Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Hydrogendifluorides, n.o.s. <i>solid</i>	8	UN1740	II	Prohibited		
Hydrogendifluorides, n.o.s. <i>solid</i>	8	UN1740	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Hydrogendifluorides, n.o.s. <i>solutions</i>	8	UN3471	II	Prohibited		
Hydrogendifluorides, n.o.s. <i>solutions</i>	8	UN3471	III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Hydrosilicofluoric acid, see Fluorosilicic acid</i>						
1-Hydroxybenzotriazole, anhydrous, <i>dry or wetted with less than 20 percent water, by mass</i>	1.3C	UN0508	n/a	Prohibited		
1-Hydroxybenzotriazole, monohydrate	4.1	UN3474	I	Prohibited		
<i>Hydroxyl amine iodide</i>	Forbidden			Prohibited		
Hydroxylamine sulfate	8	UN2865	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Hypochlorite solutions	8	UN1791	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Hypochlorites, inorganic, n.o.s.	5.1	UN3212	II	Only ORM-D	5A	5A
<i>Hyponitrous acid</i>	Forbidden			Prohibited		
<b>I</b>						
<i>Igniter fuse, metal clad, see Fuse, igniter tubular metal clad</i>						
Igniters	1.1G	UN0121	II	Prohibited		
Igniters	1.2G	UN0314	II	Prohibited		
Igniters	1.3G	UN0315	II	Prohibited		
Igniters	1.4G	UN0325	II	Prohibited		
Igniters	1.4S	UN0454	II	Mailable only with approval per 341.22a	Prohibited	1A
3,3'-Iminodipropylamine	8	UN2269	III	Only ORM-D	8A	8A
Infectious substances, affecting animals <i>only</i>	6.2	UN2900	n/a	Prohibited		
Infectious substances, affecting humans <i>only</i>	6.2	UN2814	n/a	Prohibited		
<i>Inflammable, see Flammable</i>						
<i>Initiating explosives (dry)</i>	Forbidden			Prohibited		
<i>Inosital hexanitrate (dry)</i>	Forbidden			Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Insecticide gases, n.o.s.	2.2	UN1968	n/a	Only ORM-D or Consumer Commodity	2B	2B
Insecticide gases, flammable, n.o.s	2.1	UN3354	n/a	Only ORM-D	Prohibited	2A
Insecticide gases, toxic, n.o.s.	2.3	UN1967	n/a	Prohibited		
Insecticide gases, toxic, flammable, n.o.s., <i>Inhalation hazard A, B, C or D</i>	2.3	UN3355	n/a	Prohibited		
<i>Inulin trinitrate (dry)</i>	Forbidden			Prohibited		
Iodine	8	UN3495	III	Prohibited		
<i>Iodine azide (dry)</i>	Forbidden			Prohibited		
Iodine monochloride, liquid	8	UN3498	II	Prohibited		
Iodine monochloride, solid	8	UN1792	II	Prohibited		
Iodine pentafluoride	5.1	UN2495	I	Prohibited		
2-Iodobutane	3	UN2390	II	Only ORM-D	Prohibited	3A
Iodomethylpropanes	3	UN2391	II	Only ORM-D	Prohibited	3A
Iodopropanes	3	UN2392	III	Only ORM-D	Prohibited	3A
<i>Iodoxy compounds (dry)</i>	Forbidden			Prohibited		
<i>Iridium nitratopentamine iridium nitrate</i>	Forbidden			Prohibited		
<i>Iron chloride, see Ferric chloride, etc.</i>						
Iron oxide, spent, or Iron sponge, spent <i>obtained from coal gas purification</i>	4.2	UN1376	III	Prohibited		
Iron pentacarbonyl	6.1	UN1994	I	Prohibited		
<i>Iron sesquichloride, see Ferric chloride</i>						
<i>Irritating material, see Tear gas substances, etc.</i>						
Isobutane <i>see also</i> Petroleum gases, liquified	2.1	UN1969	n/a	Only ORM-D	Prohibited	2A
Isobutanol or Isobutyl alcohol	3	UN1212	III	Only ORM-D	Prohibited	3A
Isobutyl acetate	3	UN1213	II	Only ORM-D	Prohibited	3A
Isobutyl acrylate, stabilized	3	UN2527	III	Only ORM-D	Prohibited	3A
Isobutyl alcohol, <i>see</i> Isobutanol						
Isobutyl aldehyde, <i>see</i> Isobutyraldehyde						
Isobutyl formate	3	UN2393	II	Only ORM-D	Prohibited	3A
Isobutyl isobutyrate	3	UN2528	III	Only ORM-D	Prohibited	3A
Isobutyl isocyanate	3	UN2486	I	Prohibited		
Isobutyl methacrylate, stabilized	3	UN2283	III	Only ORM-D	Prohibited	3A
Isobutyl propionate	3	UN2394	III	Only ORM-D	Prohibited	3A
Isobutylamine	3	UN1214	II	Prohibited		
Isobutylene <i>see also</i> Petroleum gases, liquified	2.1	UN1055	n/a	Only ORM-D	Prohibited	2A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Isobutyraldehyde <i>or</i> Isobutyl aldehyde	3	UN2045	II	Only ORM-D	Prohibited	3A
Isobutyric acid	3	UN2529	III	Only ORM-D	Prohibited	3A
Isobutyronitrile	3	UN2284	II	Prohibited		
Isobutyryl chloride	3	UN2395	II	Prohibited		
Isocyanates, flammable, toxic, n.o.s. <i>or</i> Isocyanate solutions, flammable, toxic, n.o.s. <i>flashpoint less than 23°C</i>	3	UN2478	II	Prohibited		
Isocyanates, toxic, flammable, n.o.s. <i>or</i> Isocyanate solutions, toxic, flammable, n.o.s. <i>flashpoint not less than 23° C but not more than 61° C and boiling point less than 300° C</i>	6.1	UN3080	II	Prohibited		
Isocyanates, toxic, n.o.s. <i>or</i> Isocyanate solutions, toxic, n.o.s. <i>flashpoint more than 61° C and boiling point less than 300° C</i>	6.1	UN2206	II	Prohibited		
Isocyanates, toxic, n.o.s. <i>or</i> Isocyanate solutions, toxic, n.o.s. <i>flashpoint more than 61° C and boiling point less than 300° C</i>	6.1	UN2206	III	Only ORM-D or Consumer Commodity	6A	6A
Isocyanatobenzotrifluorides	6.1	UN2285	II	Prohibited		
Isoheptenes	3	UN2287	II	Only ORM-D	Prohibited	3A
Isohexenes	3	UN2288	II	Only ORM-D	Prohibited	3A
<i>Isooctane, see Octanes</i>						
Isooctenes	3	UN1216	II	Only ORM-D	Prohibited	3A
<i>Isopentane, see Pentanes</i>						
<i>Isopentanoic acid, see Corrosive liquids, n.o.s.</i>						
Isopentenes	3	UN2371	I	Only ORM-D	Prohibited	3A
Isophorone diisocyanate	6.1	UN2290	III	Only ORM-D or Consumer Commodity	6A	6A
Isophoronediamine	8	UN2289	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Isoprene, stabilized	3	UN1218	I	Only ORM-D	Prohibited	3A
Isopropanol <i>or</i> Isopropyl alcohol	3	UN1219	II	Only ORM-D	Prohibited	3A
Isopropenyl acetate	3	UN2403	II	Only ORM-D	Prohibited	3A
Isopropenylbenzene	3	UN2303	III	Only ORM-D	Prohibited	3A
Isopropyl acetate	3	UN1220	II	Only ORM-D	Prohibited	3A
Isopropyl acid phosphate	8	UN1793	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Isopropyl alcohol, <i>see</i> Isopropanol						
Isopropyl butyrate	3	UN2405	III	Only ORM-D	Prohibited	3A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Isopropyl chloroacetate	3	UN2947	III	Only ORM-D	Prohibited	3A
Isopropyl chloroformate	6.1	UN2407	I	Prohibited		
Isopropyl 2-chloropropionate	3	UN2934	III	Only ORM-D	Prohibited	3A
Isopropyl isobutyrate	3	UN2406	II	Only ORM-D	Prohibited	3A
Isopropyl isocyanate	3	UN2483	I	Prohibited	Prohibited	3A
<i>Isopropyl mercaptan, see Propanethiols</i>						
Isopropyl nitrate	3	UN1222	II	Only ORM-D	Prohibited	3A
<i>Isopropyl phosphoric acid, see Isopropyl acid phosphate</i>						
Isopropyl propionate	3	UN2409	II	Only ORM-D	Prohibited	3A
Isopropylamine	3	UN1221	I	Prohibited		
Isopropylbenzene	3	UN1918	III	Only ORM-D	Prohibited	3A
<i>Isopropylcumyl hydroperoxide, with more than 72 percent in solution</i>	Forbidden			Prohibited		
<i>Isosorbide dinitrate mixture with not less than 60 percent lactose, mannose, starch or calcium hydrogen phosphate</i>	4.1	UN2907	II	Prohibited		
Isosorbide5mononitrate	4.1	UN3251	III	Only ORM-D	Prohibited	3A
<i>Isothiocyanic acid</i>	Forbidden			Prohibited		

**J**

<i>Jet fuel, see Fuel, aviation, turbine engine</i>						
Jet, perforating guns, charged <i>oil well, with detonator</i>	1.1D	NA0124	II	Prohibited		
Jet, perforating guns, charged <i>oil well, with detonator</i>	1.4D	NA0494	II	Prohibited		
Jet, perforating guns, charged <i>oil well, without detonator</i>	1.1D	UN0124	II	Prohibited		
Jet, perforating guns, charged <i>oil well, without detonator</i>	1.4D	UN0494	II	Prohibited		
<i>Jet, perforators, see Charges, shaped, commercial etc.</i>						
<i>Jet tappers, without detonator, see Charges, shaped, commercial, etc.</i>						
<i>Jet thrust igniters, for rocket motors or Jato, see Igniters</i>						
Jet thrust unit (Jato), <i>see Rockets motors</i>						

**K**

Kerosene	3	UN1223	III	Only ORM-D	Prohibited	3A
Ketones, liquid, n.o.s.	3	UN1224	I	Prohibited		
Ketones, liquid, n.o.s.	3	UN1224	II, III	Only ORM-D	Prohibited	3A
Krill meal	4.2	UN3497	II, III	Only ORM-D	Prohibited	4A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Krypton, compressed	2.2	UN1056	n/a	Only ORM-D or Consumer Commodity	2B	2B
Krypton, refrigerated liquid (cryogenic liquid)	2.2	UN1970	n/a	Prohibited		
<b>L</b>						
Lacquer base or lacquer chips, nitrocellulose, dry, see Nitrocellulose, etc. (UN2557)						
Lacquer base or lacquer chips, plastic, wet with alcohol or solvent, see Nitrocellulose (UN2059, UN2555, UN2556, UN2557) or Paint etc. (UN1263)						
Lead acetate	6.1	UN1616	III	Only ORM-D or Consumer Commodity	6A	6A
Lead arsenates	6.1	UN1617	II	Prohibited		
Lead arsenites	6.1	UN1618	II	Prohibited		
Lead azide (dry)	Forbidden			Prohibited		
Lead azide, wetted with not less than 20 percent water or mixture of alcohol and water, by mass	1.1A	UN0129	II	Prohibited		
Lead compounds, soluble, n.o.s.	6.1	UN2291	III	Only ORM-D or Consumer Commodity	6A	6A
Lead cyanide	6.1	UN1620	II	Prohibited		
Lead dioxide	5.1	UN1872	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Lead dross, see Lead sulfate with more than 3 percent free acid						
Lead nitrate	5.1	UN1469	II	Prohibited		
Lead nitroresorcinate (dry)	Forbidden			Prohibited		
Lead perchlorate, solid	5.1	UN1470	II	Prohibited		
Lead perchlorate, solution	5.1	UN3408	II, III	Prohibited		
Lead peroxide, see Lead dioxide						
Lead phosphite, dibasic	4.1	UN2989	II	Prohibited		
Lead phosphite, dibasic	4.1	UN2989	III	Only ORM-D	Prohibited	4A
Lead picrate (dry)	Forbidden			Prohibited		
Lead styphnate (dry)	Forbidden			Prohibited		
Lead styphnate, wetted or Lead trinitroresorcinate, wetted with not less than 20 percent water or mixture of alcohol and water, by mass	1.1A	UN0130	II	Prohibited		

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
Lead sulfate with more than 3 percent free acid	8	UN1794	II	Only ORM-D and per 348.2	8A	8A
Lead trinitroresorcinate, see Lead styphnate, etc.						
Lifesaving appliances, not self-inflating containing dangerous goods as equipment	9	UN3072	n/a	Prohibited		
Lifesaving appliances, self-inflating	9	UN2990	n/a	Prohibited		
Lighters, new or empty, purged of all residual fuel and vapors	n/a					
Lighter replacement cartridges containing liquified petroleum gases, see Lighter refills containing flammable gas						
Lighters containing flammable gas	2.1	UN1057	n/a	Mailable only with PCSC approval per 343.25	Prohibited	3C
Lighter refills containing flammable gas not exceeding 4 fluid ounces (7.22 cubic inches) and 65 grams of flammable gas	2.1	UN1057	n/a	Mailable only with PCSC approval per 343.25	Prohibited	3C
Lighters, non-pressurized, containing flammable liquid	3	NA1057	II	Prohibited		
Lighter replacement cartridges containing liquified petroleum gases see Lighter refills containing flammable gas. Etc.						
Lighters, fuse	1.4S	UN0131	II	Prohibited		
Lime, unslaked, see Calcium oxide						
Liquified gas, flammable, n.o.s.	2.1	UN3161	n/a	Only ORM-D	Prohibited	2A
Liquified gas, n.o.s.	2.2	UN3163	n/a	Only ORM-D or Consumer Commodity	2B	2B
Liquified gas, oxidizing, n.o.s.	2.2	UN3157	n/a	Only ORM-D or Consumer Commodity	2B	2B
Liquified gas, toxic, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>	2.3	UN3308	n/a	Prohibited		
Liquified gas, toxic, flammable, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>	2.3	UN3309	n/a	Prohibited		
Liquified gas, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>	2.3	UN3160	n/a	Prohibited		
Liquified gas, toxic, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>	2.3	UN3162	n/a	Prohibited		
Liquified gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>	2.3	UN3310	n/a	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Liquified gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>	2.3	UN3307	n/a	Prohibited		
Liquified gases, <i>nonflammable charged with nitrogen, carbon dioxide, or air</i>	2.2	UN1058	n/a	Only ORM-D or Consumer Commodity	2B	2B
<i>Liquified hydrocarbon gas, see Hydrocarbon gas mixtures, liquified, n.o.s., etc.</i>						
<i>Liquified natural gas, see Methane, etc. (UN1972)</i>						
Liquified petroleum gas, <i>see Petroleum gases, liquified</i>						
Lithium	4.3	UN1415	I	Prohibited	Prohibited	4A
Lithium-ion batteries (including lithium polymer batteries)	9	UN3480	N/A	Only as permitted in 349.22	9D	9D
Lithium-ion batteries (including lithium polymer batteries) contained in equipment	9	UN3481	N/A	Only as permitted in 349.22	9D	9D
Lithium-ion batteries (including lithium polymer batteries) packed with equipment	9	UN3481	N/A	Only as permitted in 349.22	9D	9D
<i>Lithium acetylide ethylenediamine complex, see Water reactive solid etc.</i>						
Lithium aluminum hydride	4.3	UN1410	I	Prohibited		
Lithium aluminum hydride, ethereal	4.3	UN1411	I	Prohibited		
Lithium battery	9	UN3090	II	Only as permitted in 348.22b and 349.22	Prohibited	9D
Lithium borohydride	4.3	UN1413	I	Prohibited		
Lithium ferrosilicon	4.3	UN2830	II	Only ORM-D	Prohibited	4A
Lithium hydride	4.3	UN1414	I	Prohibited	Prohibited	4A
Lithium hydride, fused solid	4.3	UN2805	II	Only ORM-D	Prohibited	4A
Lithium hydroxide, monohydrate <i>or</i> Lithium hydroxide, solid	8	UN2680	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Lithium hydroxide, solution	8	UN2679	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Lithium hypochlorite, dry <i>or</i> Lithium hypochlorite mixtures, dry	5.1	UN1471	II	Only ORM-D or Mailable Limited Quantity	5A	5A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Lithium metal batteries (including lithium alloy batteries)	9	UN3090	N/A	Only as permitted in 349.22	Prohibited	9D
Lithium metal batteries (including lithium alloy batteries) contained in equipment	9	UN3091	N/A	Only as permitted in 349.22	9D	9D
Lithium metal batteries (including lithium alloy batteries) packed with equipment	9	UN3091	N/A	Only as permitted in 349.22	9D	9D
Lithium peroxide	5.1	UN1472	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Lithium silicon	4.3	UN1417	II	Only ORM-D	Prohibited	5A
<i>LNG, see Methane etc. (UN1972)</i>						
London purple	6.1	UN1621	II	Prohibited	6A	6A
<i>LPG, see Petroleum gases, liquified</i>						
<i>Lye, see Sodium hydroxide solutions</i>						
<b>M</b>						
Magnesium or Magnesium alloys with more than 50 percent magnesium in pellets, turnings, or ribbons	4.1	UN1869	III	Only ORM-D	Prohibited	4A
Magnesium aluminum phosphide	4.3	UN1419	I	Prohibited		
Magnesium arsenate	6.1	UN1622	II	Prohibited		
<i>Magnesium bisulfite solution, see Bisulfites, aqueous solutions, n.o.s.</i>						
Magnesium bromate	5.1	UN1473	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Magnesium chlorate	5.1	UN2723	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Magnesium diamide	4.2	UN2004	II	Prohibited		
<i>Magnesium dross, wet or hot</i>	Forbidden			Prohibited		
Magnesium fluorosilicate	6.1	UN2853	III	Only ORM-D or Consumer Commodity	6A	6A
Magnesium granules, coated <i>particle size not less than 149 microns</i>	4.3	UN2950	III	Prohibited		
Magnesium hydride	4.3	UN2010	I	Prohibited		
Magnesium nitrate	5.1	UN1474	III	Only ORM-D or Mailable Limited Quantity	5A	5A



Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Magnesium perchlorate	5.1	UN1475	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Magnesium peroxide	5.1	UN1476	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Magnesium phosphide	4.3	UN2011	I	Prohibited		
Magnesium, powder or Magnesium alloys, powder	4.3	UN1418	I	Prohibited		
Magnesium, powder or Magnesium alloys, powder	4.3	UN1418	II, III	Prohibited		
<i>Magnesium scrap, see Magnesium etc. (UN1869)</i>						
Magnesium silicide	4.3	UN2624	II	Prohibited		
Maleic anhydride	8	UN2215	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Maleic anhydride, molten	8	UN2215	III	Prohibited		
Malononitrile	6.1	UN2647	II	Prohibited		
<i>Mancozeb (manganese ethylenebisdithiocarbamate complex with zinc) see Maneb etc.</i>						
Maneb or Maneb preparations with not less than 60 percent maneb	4.2	UN2210	III	Prohibited		
Maneb stabilized or Maneb preparations, stabilized against self-heating	4.3	UN2968	III	Prohibited		
Manganese nitrate	5.1	UN2724	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Manganese resinate	4.1	UN1330	III	Only ORM-D	Prohibited	4A
<i>Mannitan tetranitrate</i>	Forbidden			Prohibited		
<i>Mannitol hexanitrate (dry)</i>	Forbidden			Prohibited		
Mannitol hexanitrate, wetted or Nitromannite, wetted with not less than 40 percent water, or mixture of alcohol and water, by mass	1.1D	UN0133	II	Prohibited		
<i>Marine pollutants, liquid or solid, n.o.s., see Environmentally hazardous substances, liquid or solid, n.o.s.</i>						
<i>Matches, block, see Matches, strike anywhere</i>						
Matches, fusee	4.1	UN2254	III	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Matches, safety ( <i>book, card, or strike on box</i> )	4.1	UN1944	III	Mailable per 344.22	Prohibited	4B
Matches, strike anywhere	4.1	UN1331	III	Prohibited		
Matches, wax, Vesta	4.1	UN1945	III	Prohibited		
<i>Matting acid, see Sulfuric acid etc.</i>						
Medicine, liquid, flammable, toxic, n.o.s.	3	UN3248	II	Prohibited		
Medicine, liquid, flammable, toxic, n.o.s.	3	UN3248	III	Only ORM-D	Prohibited	3A
Medicine, liquid, toxic, n.o.s.	6.1	UN1851	II, III	Only ORM-D or Consumer Commodity	6A	6A
Medicine, solid, toxic, n.o.s.	6.1	UN3249	II, III	Only ORM-D or Consumer Commodity	6A	6A
<i>Mentetrahydrophthalic anhydride, see Corrosive liquids, n.o.s.</i>						
Mercaptans, liquid, flammable, n.o.s. or Mercaptan mixture, liquid, flammable, n.o.s.	3	UN3336	I, II, III	Only ORM-D	Prohibited	3A
Mercaptans, liquid, flammable, toxic, n.o.s. or Mercaptan mixtures, liquid, flammable, toxic, n.o.s.	3	UN1228	II	Prohibited		
Mercaptans, liquid, flammable, toxic, n.o.s. or Mercaptan mixtures, liquid, flammable, toxic, n.o.s.	3	UN1228	III	Only ORM-D	Prohibited	3A
Mercaptans, liquid, toxic, flammable, n.o.s. or Mercaptan mixtures, liquid, toxic, flammable, n.o.s., <i>flashpoint not less than 23° C</i>	6.1	UN3071	II	Prohibited		
5-Mercaptotetrazol-1-acetic acid	1.4C	UN0448	II	Prohibited		
Mercuric arsenate	6.1	UN1623	II	Prohibited		
Mercuric chloride	6.1	UN1624	II	Prohibited		
<i>Mercuric compounds, see Mercury compounds, etc.</i>						
Mercuric nitrate	6.1	UN1625	II	Prohibited		
Mercuric potassium cyanide	6.1	UN1626	I	Prohibited		
<i>Mercuric sulfocyanate, see Mercury thiocyanate</i>						
<i>Mercuriol, see Mercury nucleate</i>						
<i>Mercurous azide</i>	Forbidden			Prohibited		
<i>Mercurous compounds, see Mercury compounds, etc.</i>						
Mercurous nitrate	6.1	UN1627	II	Prohibited		
Mercury	8	UN2809	III	Prohibited		
Mercury acetate	6.1	UN1629	II	Prohibited		
<i>Mercury acetylde</i>	Forbidden			Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Mercury ammonium chloride	6.1	UN1630	II	Prohibited		
Mercury based pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>	3	UN2778	I, II	Prohibited		
Mercury based pesticides, liquid, toxic	6.1	UN3012	I, II	Prohibited		
Mercury based pesticides, liquid, toxic	6.1	UN3012	III	Only ORM-D or Consumer Commodity	6A	6A
Mercury based pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN3011	I, II	Prohibited		
Mercury based pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN3011	III	Only ORM-D	6A	6A
Mercury based pesticides, solid, toxic	6.1	UN2777	I, II	Prohibited		
Mercury based pesticides, solid, toxic	6.1	UN2777	III	Only ORM-D or Consumer Commodity	6A	6A
Mercury benzoate	6.1	UN1631	II	Prohibited		
Mercury bromides	6.1	UN1634	II	Prohibited		
Mercury compounds, liquid, n.o.s.	6.1	UN2024	I, II	Prohibited		
Mercury compounds, liquid, n.o.s.	6.1	UN2024	III	Only ORM-D or Consumer Commodity	6A	6A
Mercury compounds, solid, n.o.s.	6.1	UN2025	I, II	Prohibited		
Mercury compounds, solid, n.o.s.	6.1	UN2025	III	Only ORM-D or Consumer Commodity	6A	6A
Mercury contained in manufactured articles	8	UN3506	III	Only as permitted in 348.22g	8C	8C
Mercury cyanide	6.1	UN1636	II	Prohibited		
Mercury fulminate, wetted with not less than 20 percent water, or mixture of alcohol and water, by mass	1.1A	UN0135	II	Prohibited		
Mercury gluconate	6.1	UN1637	II	Prohibited		
Mercury iodide aquabasic ammonobasic (iodide of Millon's base)	Forbidden			Prohibited		
Mercury iodide	6.1	UN1638	II	Prohibited		
Mercury nitride	Forbidden			Prohibited		
Mercury nucleate	6.1	UN1639	II	Prohibited		
Mercury oleate	6.1	UN1640	II	Prohibited		
Mercury oxide	6.1	UN1641	II	Prohibited		
Mercury oxycyanide, desensitized	6.1	UN1642	II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<i>Mercury oxycyanide</i>	Forbidden			Prohibited		
Mercury potassium iodide	6.1	UN1643	II	Prohibited		
Mercury salicylate	6.1	UN1644	II	Prohibited		
Mercury sulfates	6.1	UN1645	II	Prohibited		
Mercury thiocyanate	6.1	UN1646	II	Prohibited		
Mesityl oxide	3	UN1229	III	Prohibited		
Metal carbonyls, liquid, n.o.s.	6.1	UN3281	I, II	Prohibited		
Metal carbonyls, liquid, n.o.s.	6.1	UN3281	III	Only ORM-D or Consumer Commodity	6A	6A
Metal carbonyls, solid, n.o.s.	6.1	UN3466	I, II	Prohibited		
Metal carbonyls, solid, n.o.s.	6.1	UN3466	III	Only ORM-D or Consumer Commodity	6A	6A
Metal catalyst, dry	4.2	UN2881	I, II	Prohibited		
Metal catalyst, dry	4.2	UN2881	III	Only ORM-D	Prohibited	4A
Metal catalyst, wetted <i>with a visible excess of liquid</i>	4.2	UN1378	II	Prohibited		
Metal hydrides, flammable, n.o.s.	4.1	UN3182	II, III	Only ORM-D	Prohibited	3A
Metal hydrides, water reactive, n.o.s.	4.3	UN1409	I	Prohibited		
Metal hydrides, water reactive, n.o.s.	4.3	UN1409	II	Prohibited		
Metal powder, self-heating, n.o.s.	4.2	UN3189	II, III	Prohibited		
Metal powders, flammable, n.o.s.	4.1	UN3089	II, III	Only ORM-D	Prohibited	4A
<i>Metal salts of methyl nitramine (dry)</i>	Forbidden			Prohibited		
Metal salts of organic compounds, flammable, n.o.s.	4.1	UN3181	II, III	Only ORM-D	Prohibited	4A
Metaldehyde	4.1	UN1332	III	Only ORM-D	Prohibited	4A
Metallic substances, water reactive, n.o.s.	4.3	UN3208	I, II, III	Prohibited		
Metallic substance, water reactive, self-heating, n.o.s.	4.3	UN3209	I, II, III	Prohibited		
Methacrylaldehyde, inhibited	3	UN2396	II	Prohibited		
Methacrylic acid, inhibited	8	UN2531	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Methacrylonitrile, inhibited	3	UN3079	I	Prohibited		
Methallyl alcohol	3	UN2614	III	Only ORM-D	Prohibited	3A
<i>Methane and hydrogen, mixtures, see Hydrogen and methane, mixtures etc.</i>						
Methane, compressed or Natural gas, compressed ( <i>with high methane content</i> )	2.1	UN1971	n/a	Only ORM-D	Prohibited	2A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Methane, refrigerated liquid ( <i>cryogenic liquid</i> ) or Natural gas, refrigerated liquid ( <i>cryogenic liquid</i> ), with high methane content	2.1	UN1972	n/a	Prohibited	Prohibited	2A
Methanesulfonyl chloride	6.1	UN3246	I	Prohibited		
Methanol	3	UN1230	II	Only ORM-D	Prohibited	3A
<i>Methazoic acid</i>	Forbidden			Prohibited		
4-Methoxy-4-methylpentan-2-one	3	UN2293	III	Only ORM-D	Prohibited	3A
1-Methoxy-2-propanol	3	UN3092	III	Only ORM-D	Prohibited	3A
Methoxymethyl isocyanate	6.1	UN2605	I	Prohibited		
Methyl-2-chloropropionate	3	UN2933	III	Only ORM-D	Prohibited	3A
Methyl acetate	3	UN1231	II	Only ORM-D	Prohibited	3A
Methyl acetylene and propadiene mixtures, stabilized	2.1	UN1060	n/a	Only ORM-D	Prohibited	2A
Methyl acrylate, stabilized	3	UN1919	II	Only ORM-D	Prohibited	3A
<i>Methyl alcohol</i> , see Methanol						
Methyl allyl chloride	3	UN2554	II	Only ORM-D	Prohibited	3A
<i>Methyl amyl ketone</i> , see Amyl methyl ketone						
Methyl bromide	2.3	UN1062	n/a	Prohibited		
<i>Methyl bromide and chloropicrin mixtures with more than 2 percent chloropicrin</i> , see Chloropicrin and methyl bromide mixtures						
<i>Methyl bromide and chloropicrin mixtures with not more than 2 percent chloropicrin</i> , see Methyl bromide						
Methyl bromide and ethylene dibromide mixtures, liquid	6.1	UN1647	I	Prohibited		
Methyl bromoacetate	6.1	UN2643	II	Prohibited		
2-Methyl-1-butene	3	UN2459	I	Prohibited		
2-Methyl-2-butene	3	UN2460	II	Prohibited		
3-Methyl-1-butene	3	UN2561	I	Prohibited		
Methyl tertbutyl ether	3	UN2398	II	Only ORM-D	Prohibited	3A
Methyl butyrate	3	UN1237	II	Only ORM-D	Prohibited	3A
Methyl chloride, or Refrigerant gas R 40	2.1	UN1063		Only ORM-D	Prohibited	2A
<i>Methyl chloride and chloropicrin mixtures</i> , see Chloropicrin and methyl chloride mixtures						
Methyl chloride and methylene chloride mixtures	2.1	UN1912	n/a	Only ORM-D	Prohibited	2A
Methyl chloroacetate	6.1	UN2295	I	Prohibited		
<i>Methyl chlorocarbonate</i> , see Methyl chloroformate						

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
<i>Methyl chloroform, see 1,1,1-Trichloroethane</i>						
Methyl chloroformate	6.1	UN1238	I	Prohibited		
Methyl chloromethyl ether	6.1	UN1239	I	Prohibited		
Methyl dichloroacetate	6.1	UN2299	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Methyl ethyl ether, see Ethyl methyl ether</i>						
<i>Methyl ethyl ketone peroxide, in solution with more than 9 percent by mass active oxygen</i>	Forbidden			Prohibited		
2-Methyl-5-ethylpyridine	6.1	UN2300	III	Only ORM-D or Consumer Commodity	6A	6A
Methyl ethyl ketone, see Ethyl methyl ketone						
Methyl fluoride, or Refrigerant gas R 41	2.1	UN2454	n/a	Only ORM-D	Prohibited	2A
Methyl formate	3	UN1243	I	Only ORM-D	Prohibited	3A
2-Methyl-2-heptanethiol	6.1	UN3023	I	Prohibited		
Methyl iodide	6.1	UN2644	I	Prohibited		
Methyl isobutyl carbinol	3	UN2053	III	Only ORM-D	Prohibited	3A
Methyl isobutyl ketone	3	UN1245	II	Only ORM-D	Prohibited	3A
<i>Methyl isobutyl ketone peroxide, in solution with more than 9 percent by mass active oxygen</i>	Forbidden			Prohibited		
Methyl isocyanate	6.1	UN2480	I	Prohibited		
Methyl isopropenyl ketone, inhibited	3	UN1246	II	Only ORM-D	Prohibited	3A
Methyl isothiocyanate	6.1	UN2477	I	Prohibited		
Methyl isovalerate	3	UN2400	II	Only ORM-D	Prohibited	3A
Methyl magnesium bromide, in ethyl ether	4.3	UN1928	I	Prohibited		
Methyl mercaptan	2.3	UN1064	n/a	Prohibited		
<i>Methyl mercaptopropionaldehyde, see 4-Thiapentanal</i>						
Methyl methacrylate monomer, stabilized	3	UN1247	II	Only ORM-D	Prohibited	3A
<i>Methyl nitramine (dry)</i>	Forbidden			Prohibited		
<i>Methyl nitrate</i>	Forbidden			Prohibited		
<i>Methyl nitrite</i>	Forbidden			Prohibited		
<i>Methyl norbornene dicarboxylic anhydride, see Corrosive liquids, n.o.s.</i>						
Methyl orthosilicate	6.1	UN2606	I	Prohibited		
Methyl phosphonic dichloride	6.1	NA9206	I	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<i>Methyl phosphonothioic dichloride, anhydrous, see Corrosive liquids, n.o.s.</i>						
Methyl phosphonous dichloride, <i>pyrophoric liquid</i>	6.1	NA2845	I	Prohibited		
<i>Methyl picric acid (heavy metal salts of)</i>	Forbidden			Prohibited		
Methyl propionate	3	UN1248	II	Only ORM-D	Prohibited	3A
Methyl propyl ether	3	UN2612	II	Only ORM-D	Prohibited	3A
Methyl propyl ketone	3	UN1249	II	Only ORM-D	Prohibited	3A
<i>Methyl sulfate, see Dimethyl sulfate</i>						
<i>Methyl sulfide, see Dimethyl sulfide</i>						
Methyl trichloroacetate	6.1	UN2533	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Methyl trimethylol methane trinitrate</i>	Forbidden			Prohibited		
Methyl vinyl ketone, stabilized	6.1	UN1251	I	Prohibited		
Methylal	3	UN1234	II	Prohibited		
Methylamine, anhydrous	2.1	UN1061	n/a	Only ORM-D	Prohibited	2A
Methylamine, aqueous solution	3	UN1235	II	Only ORM-D	Prohibited	3A
<i>Methylamine dinitramine and dry salts thereof</i>	Forbidden			Prohibited		
<i>Methylamine nitroform</i>	Forbidden			Prohibited		
<i>Methylamine perchlorate (dry)</i>	Forbidden			Prohibited		
Methylamyl acetate	3	UN1233	III	Only ORM-D	Prohibited	3A
N-Methylaniline	6.1	UN2294	III	Only ORM-D or Consumer Commodity	6A	6A
alpha-Methylbenzyl alcohol, solid	6.1	UN3438	III	Only ORM-D or Consumer Commodity	6A	6A
alpha-Methylbenzyl alcohol, liquid	6.1	UN2937	III	Only ORM-D or Consumer Commodity	6A	6A
3-Methylbutan-2-one	3	UN2397	II	Only ORM-D	Prohibited	3A
N-Methylbutylamine	3	UN2945	II	Prohibited		
Methylchlorosilane	2.3	UN2534	n/a	Prohibited		
Methylcyclohexane	3	UN2296	II	Only ORM-D	Prohibited	3A
Methylcyclohexanols, <i>flammable</i>	3	UN2617	III	Only ORM-D	Prohibited	3A
Methylcyclohexanone	3	UN2297	III	Only ORM-D	Prohibited	3A
Methylcyclopentane	3	UN2298	II	Only ORM-D	Prohibited	3A
Methyldichloroarsine	6.1	NA1556	I	Prohibited		
Methyldichlorosilane	4.3	UN1242	I	Prohibited		
<i>Methylene chloride, see Dichloromethane</i>						
<i>Methylene glycol dinitrate</i>	Forbidden			Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
2-Methylfuran	3	UN2301	II	Only ORM-D	Prohibited	3A
<i>a-Methylglucoside tetranitrate</i>	Forbidden			Prohibited		
<i>a-Methylglycerol trinitrate</i>	Forbidden			Prohibited		
5-Methylhexan-2-one	3	UN2302	III	Only ORM-D	Prohibited	3A
Methylhydrazine	6.1	UN1244	I	Prohibited		
4-Methylmorpholine or n-methylmorpholine	3	UN2535	II	Prohibited		
Methylpentadienes	3	UN2461	II	Only ORM-D	Prohibited	3A
2-Methylpentan-2-ol	3	UN2560	III	Only ORM-D	Prohibited	3A
<i>Methylpentanes, see Hexanes</i>						
Methylphenyldichlorosilane	8	UN2437	II	Only ORM-D or Mailable Limited Quantity	8A	8A
1-Methylpiperidine	3	UN2399	II	Prohibited		
Methyltetrahydrofuran	3	UN2536	II	Only ORM-D	Prohibited	3A
Methyltrichlorosilane	3	UN1250	I	Prohibited		
alpha-Methylvaleraldehyde	3	UN2367	II	Only ORM-D	Prohibited	3A
<i>Mine rescue equipment containing carbon dioxide, see Carbon dioxide</i>						
<i>Mines with bursting charge</i>	1.1D	UN0137	II	Prohibited		
<i>Mines with bursting charge</i>	1.1F	UN0136	II	Prohibited		
<i>Mines with bursting charge</i>	1.2D	UN0138	II	Prohibited		
<i>Mines with bursting charge</i>	1.2F	UN0294	II	Prohibited		
<i>Mixed acid, see Nitrating acid, mixtures etc.</i>						
<i>Mobility aids, see Battery powered equipment or Battery powered vehicle</i>						
Model rocket motor	1.4C	NA0276	II	Prohibited		
Model rocket motor	1.4S	NA0323	II	Mailable only with approval per 341.22a	Prohibited	1A
Molybdenum pentachloride	8	UN2508	III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Monochloroacetone (unstabilized)</i>	Forbidden			Prohibited		
<i>Monochloroethylene, see Vinyl chloride, stabilized</i>						
<i>Monoethanolamine, see Ethanolamine solutions</i>						
<i>Monoethylamine, see Ethylamine</i>						
Morpholine	3	UN2054	III	Only ORM-D	Prohibited	3A
<i>Morpholine, aqueous, mixture, see Corrosive liquids, n.o.s.</i>						



Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Motor fuel anti-knock compounds, see Motor fuel anti-knock mixtures						
Motor fuel anti-knock mixture, flammable	6.1	UN3483	I	Prohibited		
Motor fuel anti-knock mixtures	6.1	UN1649	I	Prohibited		
Motor spirit, see Gasoline						
<i>Muriatic acid</i> , see Hydrochloric acid solution						
Musk xylene, see 5-tert-Butyl-2,4,6-trinitro-m-xylene						
<b>N</b>						
<i>Naphtha</i> see Petroleum distillates n.o.s.						
Naphthalene, crude or Naphthalene, refined	4.1	UN1334	III	Only ORM-D	Prohibited	4A
<i>Naphthalene diozonide</i>	Forbidden			Prohibited		
Naphthalene, molten	4.1	UN2304	III	Only ORM-D	Prohibited	4A
Alpha-Naphthylamine	6.1	UN2077	III	Only ORM-D or Consumer Commodity	6A	6A
Beta-Naphthylamine, solid	6.1	UN1650	II	Prohibited		
Beta-Naphthylamine, solution	6.1	UN3411	II, III	Prohibited		
<i>Naphthylamineperchlorate</i>	Forbidden			Prohibited		
Naphthylthiourea	6.1	UN1651	II	Prohibited		
Naphthylurea	6.1	UN1652	II	Prohibited		
<i>Natural gases (with high methane content)</i> , see Methane, etc. (UN1971, UN1972)						
<i>Neohexane</i> , see Hexanes						
Neon, compressed	2.2	UN1065	n/a	Only ORM-D or Consumer Commodity	2B	2B
Neon, refrigerated liquid ( <i>cryogenic liquid</i> )	2.2	UN1913	n/a	Prohibited		
<i>New explosive or explosive device</i> , see 49 CFR 173.51 and 173.56				Prohibited		
Nickel carbonyl	6.1	UN1259	I	Prohibited		
Nickel cyanide	6.1	UN1653	II	Prohibited		
Nickel nitrate	5.1	UN2725	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Nickel nitrite	5.1	UN2726	III	Only ORM-D or Mailable Limited Quantity	5A	5A
<i>Nickel picrate</i>	Forbidden			Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Nicotine	6.1	UN1654	II	Prohibited		
Nicotine compounds, liquid, n.o.s. or Nicotine preparations, liquid, n.o.s.	6.1	UN3144	I, II	Prohibited		
Nicotine compounds, liquid, n.o.s. or Nicotine preparations, liquid, n.o.s.	6.1	UN3144	III	Only ORM-D or Consumer Commodity	6A	6A
Nicotine compounds, solid, n.o.s. or Nicotine preparations, solid, n.o.s.	6.1	UN1655	I, II	Prohibited		
Nicotine compounds, solid, n.o.s. or Nicotine preparations, solid, n.o.s.	6.1	UN1655	III	Only ORM-D or Consumer Commodity	6A	6A
Nicotine hydrochloride liquid or solution	6.1	UN1656	II	Prohibited		
Nicotine hydrochloride, solid	6.1	UN3444	II	Prohibited		
Nicotine salicylate	6.1	UN1657	II	Prohibited		
Nicotine sulfate, <i>solid</i>	6.1	UN3445	II	Prohibited		
Nicotine sulfate, <i>solution</i>	6.1	UN1658	II	Prohibited		
Nicotine tartrate	6.1	UN1659	II	Prohibited		
<i>Nitrated paper (unstable)</i>	Forbidden			Prohibited		
<i>Nitrates of diazonium compounds</i>	Forbidden			Prohibited		
Nitrates, inorganic, aqueous solution, n.o.s.	5.1	UN3218	II, III	Only ORM-D or Mailable Limited Quantity	5A	5A
Nitrates, inorganic, n.o.s.	5.1	UN1477	II, III	Only ORM-D or Mailable Limited Quantity	5A	5A
Nitrating acid mixtures, <i>with more than 50 percent nitric acid</i>	8	UN1796	I	Prohibited		
Nitrating acid mixtures, <i>with not more than 50 percent nitric acid</i>	8	UN1796	II	Prohibited		
Nitrating acid mixtures, <i>spent with more than 50 percent nitric acid</i>	8	UN1826	I	Prohibited		
Nitrating acid mixtures, <i>spent with not more than 50 percent nitric acid</i>	8	UN1826	II	Prohibited		
Nitric acid <i>other than red fuming, with more than 70 percent nitric acid</i>	8	UN2031	I	Prohibited		
Nitric acid <i>other than red fuming, with not more than 70 percent nitric acid</i>	8	UN2031	II	Prohibited		
Nitric acid, red fuming	8	UN2032	I	Prohibited		
Nitric oxide, compressed	2.3	UN1660	n/a	Prohibited		
Nitric oxide and dinitrogen tetroxide mixtures or Nitric oxide and nitrogen dioxide mixtures	2.3	UN1975	n/a	Prohibited		
Nitriles, flammable, toxic, n.o.s.	3	UN3273	I, II	Prohibited		
Nitriles, toxic, flammable, n.o.s.	6.1	UN3275	I, II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Nitriles, toxic, liquid, n.o.s.	6.1	UN3276	I, II	Prohibited		
Nitriles, toxic, liquid, n.o.s.	6.1	UN3276	III	Only ORM-D or Consumer Commodity	6A	6A
Nitriles, toxic, solid, n.o.s.	6.1	UN3439	I, II,	Prohibited		
Nitriles, toxic, solid, n.o.s.	6.1	UN3439	III	Only ORM-D or Consumer Commodity	6A	6A
Nitrites, inorganic, aqueous solution, n.o.s.	5.1	UN3219	II, III	Only ORM-D or Mailable Limited Quantity	5A	5A
Nitrites, inorganic, n.o.s.	5.1	UN2627	II	Only ORM-D or Mailable Limited Quantity	5A	5A
3-Nitro-4-chlorobenzotrifluoride	6.1	UN2307	II	Prohibited		
<i>Nitro isobutane triol trinitrate</i>	Forbidden			Prohibited		
Nitro urea	1.1D	UN0147	II	Prohibited		
<i>2-Nitro-2-methylpropanol nitrate</i>	Forbidden			Prohibited		
<i>6-Nitro-4-diazotoluene-3-sulfonic acid (dry)</i>	Forbidden			Prohibited		
<i>N-Nitro-N-methylglycolamide nitrate</i>	Forbidden			Prohibited		
<i>N-Nitroaniline</i>	Forbidden			Prohibited		
Nitroanilines (o-; m-; p-;)	6.1	UN1661	II	Prohibited		
Nitroanisole, liquid	6.1	UN2730	III	Only ORM-D or Consumer Commodity	6A	6A
Nitroanisole, solid	6.1	UN3458	III	Only ORM-D or Consumer Commodity	6A	6A
Nitrobenzene	6.1	UN1662	II	Prohibited		
<i>m-Nitrobenzene diazonium perchlorate</i>	Forbidden			Prohibited		
Nitrobenzenesulfonic acid	8	UN2305	II	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Nitrobenzol, see Nitrobenzene</i>						
5-Nitrobenzotriazol	1.1D	UN0385	II	Prohibited		
Nitrobenzotrifluorides, liquid	6.1	UN2306	II	Prohibited		
Nitrobenzotrifluorides, solid	6.1	UN3431	II	Prohibited		
Nitrobromobenzenes <i>liquid</i>	6.1	UN2732	III	Only ORM-D or Consumer Commodity	6A	6A
Nitrobromobenzenes <i>solid</i>	6.1	UN3459	III	Only ORM-D or Consumer Commodity	6A	6A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Nitrocellulose, <i>with not more than 12.6 percent, by dry mass mixture with or without plasticizer, with or without pigment</i>	4.1	UN2557	II	Only ORM-D	Prohibited	4A
Nitrocellulose, <i>dry or wetted with less than 25 percent water (or alcohol), by mass</i>	1.1D	UN0340	II	Prohibited		
Nitrocellulose membrane filters, <i>with not more than 12.6 percent nitrogen, by dry mass</i>	4.1	UN3270	II	Only ORM-D	Prohibited	4A
Nitrocellulose, <i>plasticized with not less than 18 percent plasticizing substance, by mass</i>	1.3C	UN0343	II	Prohibited		
Nitrocellulose, solution, flammable <i>with not more than 12.6 percent nitrogen, by mass, and not more than 55 percent nitrocellulose</i>	3	UN2059	II, III	Only ORM-D	Prohibited	3A
Nitrocellulose, <i>unmodified or plasticized with less than 18 percent plasticizing substance, by mass</i>	1.1D	UN0341	II	Prohibited		
Nitrocellulose, <i>wetted with not less than 25 percent alcohol, by mass</i>	1.3C	UN0342	II	Prohibited		
Nitrocellulose, <i>with alcohol with not less than 25 percent alcohol, by mass, and with not more than 12.6 percent nitrogen, by dry mass</i>	4.1	UN2556	II	Only ORM-D	Prohibited	4A
Nitrocellulose <i>with water with not less than 25 percent water, by mass</i>	4.1	UN2555	II	Only ORM-D	Prohibited	4A
<i>Nitrochlorobenzene, see Chloronitrobenzenes etc.</i>						
Nitroresols, solid	6.1	UN2446	III	Only ORM-D or Consumer Commodity	6A	6A
Nitroresols, liquid	6.1	UN3434	III	Only ORM-D or Consumer Commodity	6A	6A
Nitroethane	3	UN2842	III	Only ORM-D	Prohibited	3A
<i>Nitroethyl nitrate</i>	Forbidden			Prohibited		
<i>Nitroethylene polymer</i>	Forbidden			Prohibited		
Nitrogen, compressed	2.2	UN1066	n/a	Only ORM-D or Consumer Commodity	2B	2B
<i>Nitrogen dioxide, see Dinitrogen tetroxide</i>						
<i>Nitrogen fertilizer solution, see Fertilizer ammoniating solution etc.</i>						
<i>Nitrogen peroxide, see Dinitrogen tetroxide</i>						
Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	2.2	UN1977	n/a	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<i>Nitrogen tetroxide and nitric oxide mixtures, see Nitric oxide and nitrogen tetroxide mixtures</i>						
<i>Nitrogen tetroxide, see Dinitrogen tetroxide</i>						
<i>Nitrogen trichloride</i>	Forbidden			Prohibited		
Nitrogen trifluoride,	2.2	UN2451	n/a	Prohibited		
<i>Nitrogen triiodide</i>	Forbidden			Prohibited		
<i>Nitrogen triiodide monoamine</i>	Forbidden			Prohibited		
Nitrogen trioxide	2.3	UN2421	n/a	Prohibited		
Nitroglycerin, desensitized with not less than 40 percent non-volatile water insoluble phlegmatizer, by mass	1.1D	UN0143	II	Prohibited		
<i>Nitroglycerin, liquid, not desensitized</i>	Forbidden			Prohibited		
Nitroglycerin mixture, desensitized, liquid, flammable, n.o.s. with not more than 30 percent nitroglycerin, by mass	3	UN3343	n/a	Prohibited		
Nitroglycerin mixture, desensitized, liquid, n.o.s. with not more than 30 percent nitroglycerin, by mass	3	UN3357	II	Prohibited		
Nitroglycerin mixture, desensitized, solid, n.o.s. with more than 2 percent but not more than 10 percent nitroglycerin, by mass	4.1	UN3319	II	Prohibited		
Nitroglycerin, solution in alcohol, with more than 1 percent but not more than 5 percent nitroglycerin	3	UN3064	II	Prohibited		
Nitroglycerin, solution in alcohol, with more than 1 percent but not more than 10 percent nitroglycerin	1.1D	UN0144	II	Prohibited		
Nitroglycerin, solution in alcohol, with not more than 1 percent nitroglycerin	3	UN1204	II	Prohibited		
<i>Nitroguanidine nitrate</i>	Forbidden			Prohibited		
<i>Nitroguanidine or Picrite, dry or wetted with less than 20 percent water, by mass</i>	1.1D	UN0282	II	Prohibited		
<i>Nitroguanidine, wetted or Picrite, wetted with not less than 20 percent water, by mass</i>	4.1	UN1336	I	Prohibited		
<i>1-Nitrohydantoin</i>	Forbidden			Prohibited		
Nitrohydrochloric acid	8	UN1798	I	Prohibited		
<i>Nitromannite (dry)</i>	Forbidden			Prohibited		
Nitromannite, wetted, see Mannitol hexanitrate, etc.						
Nitromethane	3	UN1261	II	Only ORM-D	Prohibited	3A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<i>Nitromuriatic acid, see Nitrohydrochloric acid</i>						
Nitronaphthalene	4.1	UN2538	III	Only ORM-D	Prohibited	4A
Nitrophenols (o-; m-; p-;)	6.1	UN1663	III	Only ORM-D or Consumer Commodity	6A	6A
<i>m</i> -Nitrophenyldinitro methane	Forbidden			Prohibited		
4-Nitrophenylhydrazine, with not less than 30 percent water, by mass	4.1	UN3376	I	Prohibited		
Nitropropanes	3	UN2608	III	Only ORM-D	Prohibited	3A
p-Nitrosodimethylaniline	4.2	UN1369	II	Prohibited		
Nitrostarch, dry or wetted with less than 20 percent water, by mass	1.1D	UN0146	II	Prohibited		
Nitrostarch, wetted with not less than 20 percent water, by mass	4.1	UN1337	I	Prohibited		
Nitrosugars (dry)	Forbidden			Prohibited		
Nitrosyl chloride	2.3	UN1069	n/a	Prohibited		
Nitrosylsulfuric acid, liquid	8	UN2308	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Nitrosylsulfuric acid, solid	8	UN3456	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Nitrotoluenes, liquid	6.1	UN1664	II	Prohibited		
Nitrotoluenes, solid	6.1	UN3446	II	Prohibited		
Nitrotoluidines (mono)	6.1	UN2660	III	Only ORM-D or Consumer Commodity	6A	6A
Nitrotriazolone or NTO	1.1D	UN0490	II	Prohibited		
Nitrous oxide	2.2	UN1070	n/a	Only ORM-D or Consumer Commodity	2B	2B
Nitrous oxide, refrigerated liquid	2.2	UN2201	n/a	Prohibited		
Nitroxylenes, liquid	6.1	UN1665	II	Prohibited		
Nitroxylenes, solid	6.1	UN3447	II	Prohibited		
Nitroxylol, see Nitroxylenes						
Nonanes	3	UN1920	III	Only ORM-D	Prohibited	3A
<i>Non-flammable gas, n.o.s., see Compressed gas, etc. or Liquified gases, etc.</i>						
<i>Nonliquified gases, see Compressed gases, etc.</i>						
<i>Nonliquified hydrocarbon gas, see Hydrocarbon gas mixture, compressed, n.o.s.</i>						
Nonyltrichlorosilane	8	UN1799	II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<i>Nordhausen acid, see Sulfuric acid, fuming etc.</i>						
<i>2,5-Norbormadiene, stabilized, see Bicyclo [2,2,1] hepta-2,5-diene, stabilized</i>						
<b>O</b>						
Octadecyltrichlorosilane	8	UN1800	II	Prohibited		
Octadiene	3	UN2309	II	Only ORM-D	Prohibited	3A
<i>1,7-Octadiene-3,5-diyne 1,8-dimethoxy- 9-octadecynoic acid</i>	Forbidden			Prohibited		
Octafluorobut-2-ene or Refrigerant gas R 1318	2.2	UN2422	n/a	Prohibited		
Octafluorocyclobutane, or Refrigerant gas RC 318	2.2	UN1976	n/a	Prohibited		
Octafluoropropane or Refrigerant gas R 218	2.2	UN2424	n/a	Prohibited		
Octanes	3	UN1262	II	Only ORM-D	Prohibited	3A
Octogen, see Cyclotetramethylene tetranitramine, etc.						
Octolite or Octol, dry or wetted with less than 15 percent water, by mass	1.1D	UN0266	II	Prohibited		
Octonal	1.1D	UN0496	n/a	Prohibited		
Octyl aldehydes	3	UN1191	III	Only ORM-D	Prohibited	3A
Octyltrichlorosilane	8	UN1801	II	Prohibited		
Oil gas, compressed	2.3	UN1071	n/a	Prohibited		
<i>Oleum, see Sulfuric acid, fuming etc.</i>						
<i>Organic peroxide, type A, liquid or solid</i>	Forbidden			Prohibited		
Organic peroxide type B, liquid	5.2	UN3101	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Organic peroxide type B, liquid, temperature controlled	5.2	UN3111	II	Prohibited		
Organic peroxide type B, solid	5.2	UN3102	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Organic peroxide type B, solid, temperature controlled	5.2	UN3112	II	Prohibited		
Organic peroxide type C, liquid	5.2	UN3103	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Organic peroxide type C, liquid, temperature controlled	5.2	UN3113	II	Prohibited		

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
Organic peroxide type C, solid	5.2	UN3104	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Organic peroxide type C, solid, temperature controlled	5.2	UN3114	II	Prohibited		
Organic peroxide type D, liquid	5.2	UN3105	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Organic peroxide type D, liquid, temperature controlled	5.2	UN3115	II	Prohibited		
Organic peroxide type D, solid	5.2	UN3106	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Organic peroxide type D, solid, temperature controlled	5.2	UN3116	II	Prohibited		
Organic peroxide type E, liquid	5.2	UN3107	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Organic peroxide type E, liquid, temperature controlled	5.2	UN3117	II	Prohibited		
Organic peroxide type E, solid	5.2	UN3108	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Organic peroxide type E, solid, temperature controlled	5.2	UN3118	II	Prohibited		
Organic peroxide type F, liquid	5.2	UN3109	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Organic peroxide type F, liquid, temperature controlled	5.2	UN3119	II	Prohibited		
Organic peroxide type F, solid	5.2	UN3110	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Organic peroxide type F, solid, temperature controlled	5.2	UN3120	II	Prohibited		
Organic phosphate, mixed with compressed gas or Organic phosphate compound, mixed with compressed gas or Organic phosphorous compound, mixed with compressed gas	2.3	NA1955	n/a	Prohibited		
Organic pigments, self-heating	4.2	UN3313	II, III	Prohibited		



Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Organoarsenic compound, liquid, n.o.s.	6.1	UN3280	I, II	Prohibited		
Organoarsenic compound, liquid, n.o.s.	6.1	UN3280	III	Only ORM-D or Consumer Commodity	6A	6A
Organoarsenic compound, solid, n.o.s.	6.1	UN3465	I, II			
Organoarsenic compound, solid, n.o.s.	6.1	UN3465	III	Only ORM-D or Consumer Commodity	6A	6A
Organochlorine pesticides liquid, flammable, toxic, <i>flashpoint less than 23° C</i>	3	UN2762	I, II	Prohibited	Prohibited	3A
Organochlorine pesticide, liquid, toxic	6.1	UN2996	I, II	Prohibited		
Organochlorine pesticide, liquid, toxic	6.1	UN2996	III	Only ORM-D or Consumer Commodity	6A	6A
Organochlorine pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN2995	I, II	Prohibited		
Organochlorine pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN2995	III	Only ORM-D or Consumer Commodity	6A	6A
Organochlorine pesticides, solid, toxic	6.1	UN2761	I, II	Prohibited		
Organochlorine pesticides, solid, toxic	6.1	UN2761	III	Only ORM-D or Consumer Commodity	6A	6A
Organometallic compound, toxic, liquid, n.o.s.	6.1	UN3282	I, II	Prohibited		
Organometallic compound, toxic, liquid, n.o.s.	6.1	UN3282	III	Only ORM-D or Consumer Commodity	6A	6A
Organometallic compound, toxic, solid, n.o.s.	6.1	UN3467	I, II	Prohibited		
Organometallic compound, toxic, solid, n.o.s.	6.1	UN3467	III	Only ORM-D or Consumer Commodity	6A	6A
Organometallic substance, liquid, pyrophoric	4.2	UN3392	I	Prohibited		
Organometallic substance, liquid, pyrophoric, water-reactive	4.2	UN3394	I	Prohibited		
Organometallic substance, liquid, pyrophoric, water-reactive	4.3	UN3398	I, II, III	Prohibited		
Organometallic substance, liquid, pyrophoric, water-reactive, flammable	4.3	UN3399	I, II, III	Prohibited		
Organometallic substance, solid, pyrophoric	4.2	UN3391	I	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Organometallic substance, solid, pyrophoric, water-reactive	4.2	UN3393	I	Prohibited		
Organometallic substance, solid, self heating	4.2	UN3400	II, III			
Organometallic substance, solid, water-reactive	4.3	UN3395	I, II, III	Prohibited		
Organometallic substance, solid, water-reactive, flammable	4.3	UN3396	I, II, III	Prohibited		
Organometallic substance, solid, water-reactive, self-heating	4.3	UN3397	I, II, III	Prohibited		
Organophosphorus compound, toxic, flammable, n.o.s.	6.1	UN3279	I, II	Prohibited		
Organophosphorus compound, toxic, liquid, n.o.s.	6.1	UN3278	I, II	Prohibited		
Organophosphorus compound, toxic, liquid, n.o.s.	6.1	UN3278	III	Only ORM-D or Consumer Commodity	6A	6A
Organophosphorus compound, toxic, solid, n.o.s.	6.1	UN3464	I, II	Prohibited		
Organophosphorus compound, toxic, solid, n.o.s.	6.1	UN3464	III	Only ORM-D or Consumer Commodity	6A	6A
Organophosphorus pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>	3	UN2784	I, II	Prohibited	Prohibited	3A
Organophosphorus pesticides, liquid, toxic	6.1	UN3018	I, II	Prohibited		
Organophosphorus pesticides, liquid, toxic	6.1	UN3018	III	Only ORMD or Consumer Commodity	6A	6A
Organophosphorus pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN3017	I, II	Prohibited		
Organophosphorus pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN3017	III	Only ORM-D or Consumer Commodity	6A	6A
Organophosphorus pesticides, solid, toxic	6.1	UN2783	I, II	Prohibited		
Organophosphorus pesticides, solid, toxic	6.1	UN2783	III	Only ORM-D or Consumer Commodity	6A	6A
Organotin compounds, liquid, n.o.s.	6.1	UN2788	I, II	Prohibited		
Organotin compounds, liquid, n.o.s.	6.1	UN2788	III	Only ORM-D or Consumer Commodity	6A	6A
Organotin compounds, solid, n.o.s.	6.1	UN3146	I, II	Prohibited		
Organotin compounds, solid, n.o.s.	6.1	UN3146	III	Only ORM-D or Consumer Commodity	6A	6A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Organotin pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>	3	UN2787	I, II	Prohibited		
Organotin pesticides, liquid, toxic	6.1	UN3020	I, II	Prohibited		
Organotin pesticides, liquid, toxic	6.1	UN3020	III	Only ORM-D or Consumer Commodity	6A	6A
Organotin pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN3019	I, II	Prohibited		
Organotin pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN3019	III	Only ORM-D or Consumer Commodity	6A	6A
Organotin pesticides, solid, toxic	6.1	UN2786	I, II	Prohibited		
Organotin pesticides, solid, toxic	6.1	UN2786	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Orthonitroaniline, see Nitroanilines etc.</i>						
Osmium tetroxide	6.1	UN2471	I	Prohibited		
Other regulated substances, liquid, n.o.s.	9	NA3082	III	Only ORM-D or Consumer Commodity	9C	9C
Other regulated substances, solid, n.o.s.	9	NA3077	III	Only ORM-D or Consumer Commodity	9C	9C
Oxidizing liquid, corrosive, n.o.s.	5.1	UN3098	I, II	Prohibited		
Oxidizing liquid, corrosive, n.o.s.	5.1	UN3098	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Oxidizing liquid, n.o.s.	5.1	UN3139	I	Prohibited		
Oxidizing liquid, n.o.s.	5.1	UN3139	II, III	Only ORM-D or Mailable Limited Quantity	5A	5A
Oxidizing liquid, toxic, n.o.s.	5.1	UN3099	I, II	Prohibited		
Oxidizing liquid, toxic, n.o.s.	5.1	UN3099	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Oxidizing solid, corrosive, n.o.s.	5.1	UN3085	I, II	Prohibited		
Oxidizing solid, corrosive, n.o.s.	5.1	UN3085	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Oxidizing solid, flammable, n.o.s.	5.1	UN3137	I	Prohibited		
Oxidizing solid, n.o.s.	5.1	UN1479	I	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Oxidizing solid, n.o.s.	5.1	UN1479	II, III	Only ORM-D or Mailable Limited Quantity	5A	5A
Oxidizing solid, selfheating, n.o.s.	5.1	UN3100	II	Prohibited		
Oxidizing solid, toxic, n.o.s.	5.1	UN3087	I, II	Prohibited		
Oxidizing solid, toxic, n.o.s.	5.1	UN3087	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Oxidizing solid, water reactive, n.o.s.	5.1	UN3121	n/a	Prohibited		
Oxygen, compressed	2.2	UN1072	n/a	Only ORM-D or Consumer Commodity	2B	2B
Oxygen difluoride, compressed	2.3	UN2190	n/a	Prohibited		
Oxygen generator, chemical (including when contained in associated equipment, e.g., passenger service units (PSUs), portable breathing equipment (PBE), etc.)	5.1	UN3356	II	Prohibited		
Oxygen generator, chemical, spent	9	NA3356	III	Prohibited		
Oxygen, refrigerated liquid (cryogenic liquid)	2.2	UN1073	n/a	Prohibited		
<b>P</b>						
Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base	3	UN1263	I, II, III	Only ORM-D	Prohibited	3A
Paint or Paint related material	8	UN3066	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Paint related material including paint thinning, drying, removing, or reducing compound	3	UN1263	I, II, III	Only ORM-D	Prohibited	8A
Paint, corrosive, flammable (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)	8	UN3470	II	Only ORM-D	Prohibited	8A
Paint related material corrosive, flammable (including paint thinning or reducing compound)	8	UN3470	II	Only ORM-D	Prohibited	8A
Paint, flammable, corrosive (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)	3	UN3469	I, II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Paint, flammable, corrosive (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)	3	UN3469	III	Only ORM-D	Prohibited	3A
Paint related material, flammable, corrosive (including paint thinning or reducing compound)	3	UN3469	I, II	Prohibited		
Paint related material, flammable, corrosive (including paint thinning or reducing compound)	3	UN3469	III	Only ORM-D	Prohibited	3A
Paper, unsaturated oil treated incompletely dried (including carbon paper)	4.2	UN1379	III	Prohibited		
Paraformaldehyde	4.1	UN2213	III	Only ORM-D	Prohibited	4A
Paraldehyde	3	UN1264	III	Only ORM-D	Prohibited	3A
Paranitroaniline, solid, see Nitroanilines etc.						
Parathion and compressed gas mixture	2.3	NA1967	n/a	Prohibited		
Paris green, solid, see Copper acetoarsenite						
PCB, see Polychlorinated biphenyls						
Pentaporane	4.2	UN1380	I	Prohibited		
Pentachloroethane	6.1	UN1669	II	Prohibited		
Pentachlorophenol	6.1	UN3155	II	Prohibited		
Pentaerythrite tetranitrate (dry)	Forbidden			Prohibited		
Pentaerythrite tetranitrate or Pentaerythritol tetranitrate or PETN, with not less than 7 percent wax by mass	1.1D	UN0411	II	Prohibited		
Pentaerythrite tetranitrate mixture, desensitized, solid, n.o.s. or Pentaerythritol tetranitrate mixture, desensitized, solid, n.o.s. or PETN mixture, desensitized, solid, n.o.s., with more than 10 percent but not more than 20 percent PETN, by mass	4.1	UN3344	II	Prohibited		
Pentaerythrite tetranitrate, wetted or Pentaerythritol tetranitrate, wetted or PETN, wetted with not less than 25 percent water, by mass, or Pentaerythrite tetranitrate, or Pentaerythritol tetranitrate, or PETN, desensitized with not less than 15 percent phlegmatizer by mass	1.1D	UN0150	II	Prohibited		
Pentaerythritol tetranitrate, see Pentaerythrite tetranitrate, etc.						

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Pentafluoroethane or Refrigerant gas R 125	2.2	UN3220	n/a	Only ORM-D or Consumer Commodity	2B	2B
Pentamethylheptane	3	UN2286	III	Only ORM-D	Prohibited	3A
Pentane-2,4-dione	3	UN2310	III	Only ORM-D	Prohibited	3A
Pentanes	3	UN1265	I, II	Only ORM-D	Prohibited	3A
<i>Pentanitroaniline (dry)</i>	Forbidden			Prohibited		
Pentanol	3	UN1105	II, III	Only ORM-D	Prohibited	3A
1-Pentene ( <i>n-amylenes</i> )	3	UN1108	I	Only ORM-D	Prohibited	3A
1-Pentol	8	UN2705	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Pentolite, dry or wetted with less than 15 percent water, by mass	1.1D	UN0151	II	Prohibited		
<i>Pepper spray, see Aerosols, etc. or Self-defense spray, non-pressurized</i>						
Perchlorates, inorganic, aqueous solution, n.o.s.	5.1	UN3211	II, III	Only ORM-D or Mailable Limited Quantity	5A	5A
Perchlorates, inorganic, n.o.s.	5.1	UN1481	II, III	Only ORM-D or Mailable Limited Quantity	5A	5A
Perchloric acid with more than 50 percent but not more than 72 percent acid, by mass	5.1	UN1873	I	Prohibited		
Perchloric acid with not more than 50 percent acid by mass	8	UN1802	II	Prohibited		
<i>Perchloric acid, with more than 72 percent acid by mass</i>	Forbidden			Prohibited		
<i>Perchloroethylene, see Tetrachloroethylene</i>						
Perchloromethyl mercaptan	6.1	UN1670	I	Prohibited		
Perchloryl fluoride	2.3	UN3083	n/a	Prohibited		
<i>Percussion caps, see Primers, cap type</i>						
Perfluoro (ethyl vinyl ether)	2.1	UN3154	n/a	Only ORM-D	Prohibited	2A
Perfluoro (methyl vinyl ether)	2.1	UN3153	n/a	Only ORM-D	Prohibited	2A
<i>Perfluoro-2-butene, see Octafluorobut-2-ene</i>						
Perfumery products with flammable solvents	3	UN1266	II, III	Only ORM-D	Prohibited	3A
Permanganates, inorganic, aqueous solution, n.o.s.	5.1	UN3214	II	Only ORM-D or Mailable Limited Quantity	5A	5A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Permanganates, inorganic, n.o.s.	5.1	UN1482	II, III	Only ORM-D or Mailable Limited Quantity	5A	5A
Peroxides, inorganic, n.o.s.	5.1	UN1483	II	Prohibited		
Peroxides, inorganic, n.o.s.	5.1	UN1483	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Permeation devices for calibrating air quality monitoring equipment see CFR 49 173.175						
<i>Peroxyacetic acid, with more than 43 percent and with more than 6 percent hydrogen peroxide</i>	Forbidden			Prohibited		
Persulfates, inorganic, aqueous solution, n.o.s.	5.1	UN3216	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Persulfates, inorganic, n.o.s.	5.1	UN3215	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>	3	UN3021	I, II	Prohibited		
Pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN2903	I, II	Prohibited		
Pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN2903	III	Only ORM-D or Consumer Commodity	6A	6A
Pesticides, liquid, toxic, n.o.s.	6.1	UN2902	I, II	Prohibited		
Pesticides, liquid, toxic, n.o.s.	6.1	UN2902	III	Only ORM-D or Consumer Commodity	6A	6A
Pesticides, solid, toxic, n.o.s.	6.1	UN2588	I, II	Prohibited		
Pesticides, solid, toxic, n.o.s.	6.1	UN2588	III	Only ORM-D or Consumer Commodity	6A	6A
PETN, see Pentaerythrite tetranitrate						
PETN/TNT, see Pentolite, etc.						
Petro, see Gasoline						
Petroleum crude oil	3	UN1267	I	Prohibited		
Petroleum crude oil	3	UN1267	II, III	Only ORM-D	Prohibited	3A
Petroleum distillates, n.o.s. or Petroleum products, n.o.s.	3	UN1268	I, II, III	Only ORM-D	Prohibited	3A
Petroleum gases, liquified or Liquified petroleum gas	2.1	UN1075	n/a	Only ORM-D	Prohibited	2A
Petroleum oil	3	NA1270	I	Prohibited		
Petroleum oil	3	NA1270	II, III	Only ORM-D	Prohibited	3A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Petroleum sour crude oil, flammable, toxic	3	UN3494	I, II, III	Prohibited		
Phenacyl bromide	6.1	UN2645	II	Prohibited		
Phenetidines	6.1	UN2311	III	Only ORM-D or Consumer Commodity	6A	6A
Phenol, molten	6.1	UN2312	II	Prohibited		
Phenol, solid	6.1	UN1671	II	Prohibited		
Phenol solutions	6.1	UN2821	II	Prohibited		
Phenol solutions	6.1	UN2821	III	Only ORM-D or Consumer Commodity	6A	6A
Phenolsulfonic acid, liquid	8	UN1803	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Phenoxyacetic acid derivative pesticide, liquid, flammable, toxic <i>flashpoint less than 23° C</i>	3	UN3346	I, II	Prohibited		
Phenoxyacetic acid derivative pesticide, liquid, toxic	6.1	UN3348	I	Prohibited		
Phenoxyacetic acid derivative pesticide, liquid, toxic	6.1	UN3348	II, III	Only ORM-D or Consumer Commodity	6A	6A
Phenoxyacetic acid derivative pesticide, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN3347	I	Prohibited		
Phenoxyacetic acid derivative pesticide, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN3347	II, III	Only ORM-D or Consumer Commodity	6A	6A
Phenoxyacetic acid derivative pesticide, solid, toxic	6.1	UN3345	I	Prohibited		
Phenoxyacetic acid derivative pesticide, solid, toxic	6.1	UN3345	II, III	Only ORM-D or Consumer Commodity	6A	6A
Phenyl chloroformate	6.1	UN2746	II	Prohibited		
Phenyl isocyanate	6.1	UN2487	I	Prohibited		
Phenyl mercaptan	6.1	UN2337	I	Prohibited		
Phenyl phosphorus dichloride	8	UN2798	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Phenyl phosphorus thiodichloride	8	UN2799	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Phenyl urea pesticides, liquid, toxic	6.1	UN3002	I, II	Prohibited		



Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Phenyl urea pesticides, liquid, toxic	6.1	UN3002	III	Only ORM-D or Consumer Commodity	6A	6A
Phenylacetonitrile, liquid	6.1	UN2470	III	Only ORM-D or Consumer Commodity	6A	6A
Phenylacetyl chloride	8	UN2577	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Phenylcarbylamine chloride	6.1	UN1672	I	Prohibited		
<i>m</i> -Phenylene diaminediperchlorate (dry)	Forbidden			Prohibited		
Phenylenediamines ( <i>o</i> -; <i>m</i> -; <i>p</i> -;)	6.1	UN1673	III	Only ORM-D or Consumer Commodity	6A	6A
Phenylhydrazine	6.1	UN2572	II	Prohibited		
Phenylmercuric acetate	6.1	UN1674	II	Prohibited		
Phenylmercuric compounds, n.o.s.	6.1	UN2026	I, II	Prohibited		
Phenylmercuric compounds, n.o.s.	6.1	UN2026	III	Only ORM-D or Consumer Commodity	6A	6A
Phenylmercuric hydroxide	6.1	UN1894	II	Prohibited		
Phenylmercuric nitrate	6.1	UN1895	II	Prohibited		
Phenyltrichlorosilane	8	UN1804	II	Prohibited		
Phosgene	2.3	UN1076		Prohibited		
9-Phosphabicyclononanes or Cyclooctadiene phosphines	4.2	UN2940	II	Prohibited		
Phosphine	2.3	UN2199		Prohibited		
Phosphoric acid solution	8	UN1805	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Phosphoric acid, solid	8	UN3453	III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Phosphoric acid triethyleneimine</i> , see Tris-(1-aziridiny)phosphine oxide, solution						
Phosphorus, amorphous	4.1	UN1338	III	Prohibited		
<i>Phosphoric anhydride</i> , see Phosphorus pentoxide						
Phosphorous acid	8	UN2834	III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Phosphorus bromide</i> , see Phosphorus tribromide						

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<i>Phosphorus chloride, see Phosphorus trichloride</i>						
Phosphorus heptasulfide, <i>free from yellow or white phosphorus</i>	4.1	UN1339	II	Prohibited		
Phosphorus oxybromide	8	UN1939	II	Prohibited		
Phosphorus oxybromide, molten	8	UN2576	II	Prohibited		
Phosphorus oxychloride	8	UN1810	II	Prohibited		
Phosphorus pentabromide	8	UN2691	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Phosphorus pentachloride	8	UN1806	II	Prohibited		
Phosphorus pentafluoride	2.3	UN2198		Prohibited		
Phosphorus pentasulfide, <i>free from yellow or white phosphorus</i>	4.3	UN1340	II	Only ORM-D	Prohibited	4A
Phosphorus pentoxide	8	UN1807	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Phosphorus sesquisulfide, <i>free from yellow or white phosphorus</i>	4.1	UN1341	II	Prohibited		
Phosphorus tribromide	8	UN1808	II	Prohibited		
Phosphorus trichloride	6.1	UN1809	I	Prohibited		
Phosphorus trioxide	8	UN2578	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Phosphorus trisulfide, <i>free from yellow or white phosphorus</i>	4.1	UN1343	II	Prohibited		
Phosphorus, white dry or Phosphorus, white, under water or Phosphorus white, in solution or Phosphorus, yellow dry or Phosphorus, yellow, under water or Phosphorus, yellow, in solution	4.2	UN1381	I	Prohibited		
Phosphorus white, molten	4.2	UN2447	I	Prohibited		
<i>Phosphorus (white or red) and a chlorate, mixtures of</i>	Forbidden			Prohibited		
<i>Phosphoryl chloride, see Phosphorus oxychloride</i>						
Phthalic anhydride <i>with more than .05 percent maleic anhydride</i>	8	UN2214	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Picolines	3	UN2313	III	Only ORM-D	Prohibited	3A
Picric acid, <i>see Trinitrophenol, etc.</i>						
Picrite, <i>see Nitroguanidine, etc.</i>						

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Picryl chloride, see Trinitrochlorobenzene						
Pine oil	3	UN1272	III	Only ORM-D	Prohibited	3A
alphaPinene	3	UN2368	III	Only ORM-D	Prohibited	3A
Piperazine	8	UN2579	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Piperidine	8	UN2401	I	Prohibited		
<i>Pivaloyl chloride, see Trimethylacetyl chloride</i>						
Plastic molding compound <i>in dough, sheet, or extruded rope form evolving flammable vapor</i>	9	UN3314	III	Only ORM-D or Consumer Commodity	9C	9C
<i>Plastic solvent, n.o.s., see Flammable liquids, n.o.s.</i>						
Plastics, nitrocellulose-based, self-heating, n.o.s.	4.2	UN2006	III	Prohibited		
<i>Poisonous gases, n.o.s., see Compressed or Liquified gases, flammable or toxic, n.o.s.</i>						
<i>Polyalkylamines, n.o.s., see Amines, etc.</i>						
Polyamines, flammable, corrosive, n.o.s. see Amines, flammable, corrosive, n.o.s.						
Polyamines, liquid, corrosive, n.o.s. see Amines, liquid, corrosive, n.o.s.						
Polyamines, liquid, corrosive, flammable, n.o.s. see Amines, liquid, corrosive, flammable, n.o.s.						
Polychlorinated biphenyls, liquid	9	UN2315	II	Only ORM-D or Consumer Commodity	9C	9C
Polychlorinated biphenyls, solid	9	UN3432	II	Only ORM-D or Consumer Commodity	9C	9C
Polyester resin kit	3	UN3269	n/a	Only ORM-D	Prohibited	3A
Polyhalogenated biphenyls, liquid or Polyhalogenated terphenyls, liquid	9	UN3151	II	Only ORM-D or Consumer Commodity	9C	9C
Polyhalogenated biphenyls, solid or Polyhalogenated terphenyls, solid	9	UN3152	II	Only ORM-D or Consumer Commodity	9C	9C
Polymeric beads, expandable, <i>evolving flammable vapor</i>	9	UN2211	III	Only ORM-D or Consumer Commodity	9C	9C
Potassium	4.3	UN2257	I	Prohibited		
Potassium arsenate	6.1	UN1677	II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Potassium arsenite	6.1	UN1678	II	Prohibited		
<i>Potassium bisulfite solution, see Bisulfites, inorganic, aqueous solutions, n.o.s.</i>						
Potassium borohydride	4.3	UN1870	I	Prohibited		
Potassium bromate	5.1	UN1484	II	Only ORM-D or Mailable Limited Quantity	5A	5A
<i>Potassium carbonyl</i>	Forbidden			Prohibited		
Potassium chlorate	5.1	UN1485	II	Only ORM-D or Mailable Limited Quantity	5A	5A
<i>Potassium chlorate mixed with mineral oil, see Explosive, blasting, type C</i>						
Potassium chlorate, aqueous solution	5.1	UN2427	II, III	Only ORM-D or Mailable Limited Quantity	5A	5A
Potassium cuprocyanide	6.1	UN1679	II	Prohibited		
Potassium cyanide, solid	6.1	UN1680	I	Prohibited		
Potassium cyanide solution	6.1	UN3413	I	Prohibited		
<i>Potassium dichloro isocyanurate or Potassium dichloro-s-triazinetrione, see Dichloroisocyanuric acid, dry or Dichloroisocyanuric acid salts etc.</i>						
Potassium dithionite or Potassium hydrosulfite	4.2	UN1929	II	Prohibited		
Potassium fluoride, solid	6.1	UN1812	III	Only ORM-D or Consumer Commodity	6A	6A
Potassium fluoride solution	6.1	UN3422	III	Only ORM-D or Consumer Commodity	6A	6A
Potassium fluoroacetate	6.1	UN2628	I	Prohibited		
Potassium fluorosilicate	6.1	UN2655	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Potassium hydrate, see Potassium hydroxide, solid</i>						
<i>Potassium hydrogen fluoride solution, see Corrosive liquid, n.o.s.</i>						
<i>Potassium hydrogen fluoride, see Potassium hydrogen difluoride</i>						

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Potassium hydrogen sulfate	8	UN2509	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Potassium hydrogendifluoride, <i>solid</i>	8	UN1811	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Potassium hydrogendifluoride, <i>solution</i>	8	UN3421	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Potassium hydrosulfite, <i>see</i> Potassium dithionite						
<i>Potassium hydroxide, liquid, see</i> Potassium hydroxide solution						
Potassium hydroxide, solid	8	UN1813	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Potassium hydroxide, solution	8	UN1814	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Potassium hypochlorite, solution, see</i> Hypochlorite solutions						
Potassium, metal alloys, liquid	4.3	UN1420	I	Prohibited	Prohibited	4A
Potassium, metal alloys, solid	4.3	UN3403	I	Prohibited		
Potassium metavanadate	6.1	UN2864	II	Prohibited		
Potassium monoxide	8	UN2033	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Potassium nitrate	5.1	UN1486	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Potassium nitrate and sodium nitrite mixtures	5.1	UN1487	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Potassium nitrite	5.1	UN1488	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Potassium perchlorate	5.1	UN1489	II	Only ORM-D or Mailable Limited Quantity	5A	5A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Potassium permanganate	5.1	UN1490	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Potassium peroxide	5.1	UN1491	I	Prohibited		
Potassium persulfate	5.1	UN1492	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Potassium phosphide	4.3	UN2012	I	Prohibited		
<i>Potassium selenate, see Selenates or Selenites</i>						
<i>Potassium selenite, see Selenates or Selenites</i>						
Potassium sodium alloys, liquid	4.3	UN1422	I	Prohibited		
Potassium sodium alloys, solid	4.3	UN3404	I	Prohibited		
Potassium sulfide, anhydrous or Potassium sulfide with less than 30 percent water of crystallization	4.2	UN1382	II	Prohibited		
Potassium sulfide, hydrated with not less than 30 percent water of crystallization	8	UN1847	II	Prohibited		
Potassium superoxide	5.1	UN2466	I	Prohibited		
Powder cake, wetted or Powder paste, wetted with not less than 25 percent water, by mass	1.3C	UN0159	II	Prohibited		
Powder cake, wetted or Powder paste, wetted with not less than 17 percent alcohol by mass	1.1C	UN0433	II	Prohibited		
Powder paste, see Powder cake, etc.						
Powder, smokeless	1.1C	UN0160	II	Prohibited		
Powder, smokeless	1.3C	UN0161	II	Prohibited		
Powder, smokeless	1.4C	UN0509	n/a	Prohibited		
Primers, cap type	1.1B	UN0377	II	Prohibited		
Primers, cap type	1.4B	UN0378	II	Prohibited		
Primers, cap type	1.4S	UN0044	II	Prohibited		
<i>Primers, small arms, see Primers, cap type</i>						
Primers, tubular	1.3G	UN0319	II	Prohibited		
Primers, tubular	1.4G	UN0320	II	Prohibited		
Primers, tubular	1.4S	UN0376	II	Prohibited		
Printing ink, flammable or Printing ink related material (including printing ink thinning or reducing compound), flammable	3	UN1210	I, II, II	Only ORM-D	Prohibited	3A
<i>Projectiles, illuminating, see Ammunition, illuminating, etc.</i>						

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Projectiles, <i>inert with tracer</i>	1.3G	UN0424	II	Prohibited		
Projectiles, <i>inert with tracer</i>	1.4G	UN0425	II	Prohibited		
Projectiles, <i>inert with tracer</i>	1.4S	UN0345	II	Prohibited		
Projectiles, <i>with burster or expelling charge</i>	1.2D	UN0346	II	Prohibited		
Projectiles, <i>with burster or expelling charge</i>	1.2F	UN0426	II	Prohibited		
Projectiles, <i>with burster or expelling charge</i>	1.2G	UN0434	II	Prohibited		
Projectiles, <i>with burster or expelling charge</i>	1.4D	UN0347	II	Prohibited		
Projectiles, <i>with burster or expelling charge</i>	1.4F	UN0427	II	Prohibited		
Projectiles, <i>with burster or expelling charge</i>	1.4G	UN0435	II	Prohibited		
Projectiles, <i>with bursting charge</i>	1.1D	UN0168	II	Prohibited		
Projectiles, <i>with bursting charge</i>	1.1F	UN0167	II	Prohibited		
Projectiles, <i>with bursting charge</i>	1.2D	UN0169	II	Prohibited		
Projectiles, <i>with bursting charge</i>	1.2F	UN0324	II	Prohibited		
Projectiles, <i>with bursting charge</i>	1.4D	UN0344	II	Prohibited		
Propadiene mixed with acetylene, see Methyl acetylene and propadiene mixtures, stabilized						
Propadiene, stabilized	2.1	UN2200	n/a	Prohibited		
Propane see also Petroleum gases, liquified	2.1	UN1978	n/a	Only ORM-D	Prohibited	2A
Propanethiols	3	UN2402	II	Only ORM-D	Prohibited	3A
n-Propanol or Propyl alcohol, normal	3	UN1274	II, III	Only ORM-D	Prohibited	3A
Propellant, liquid	1.1C	UN0497	II	Prohibited		
Propellant, liquid	1.3C	UN0495	II	Prohibited		
Propellant, solid	1.1C	UN0498	II	Prohibited		
Propellant, solid	1.3C	UN0499	II	Prohibited		
Propellant, solid	1.4C	UN0501	n/a	Prohibited		
Propionaldehyde	3	UN1275	II	Only ORM-D	Prohibited	3A
Propionic acid with not less than 90 percent acid by mass	8	UN3463	II	Only ORM-D	Prohibited	8A
Propionic acid with not less than 10 percent and less than 90 percent acid by mass	8	UN1848	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Propionic anhydride	8	UN2496	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Propionitrile	3	UN2404	II	Prohibited		
Propionyl chloride	3	UN1815	II	Prohibited		
n-Propyl acetate	3	UN1276	II	Only ORM-D	Prohibited	3A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Propyl alcohol, <i>see</i> Propanol						
n-Propyl benzene	3	UN2364	III	Only ORM-D	Prohibited	3A
<i>Propyl chloride see</i> 1-Chloropropane						
n-Propyl chloroformate	6.1	UN2740	I	Prohibited		
Propyl formates	3	UN1281	II	Only ORM-D	Prohibited	3A
n-Propyl isocyanate	6.1	UN2482	I	Prohibited		
<i>Propyl mercaptan, see</i> Propanethiols						
n-Propyl nitrate	3	UN1865	II	Only ORM-D	Prohibited	3A
Propylamine	3	UN1277	II	Prohibited		
Propylene <i>see also</i> Petroleum gases, liquified	2.1	UN1077	n/a	Only ORM-D	Prohibited	2A
Propylene chlorohydrin	6.1	UN2611	II	Prohibited		
Propylene oxide	3	UN1280	I	Prohibited		
Propylene tetramer	3	UN2850	III	Only ORM-D	Prohibited	3A
1,2-Propylenediamine	8	UN2258	II	Prohibited		
Propyleneimine, stabilized	3	UN1921	I	Prohibited		
Propyltrichlorosilane	8	UN1816	II	Prohibited		
<i>Prussic acid, see</i> Hydrogen cyanide <i>etc.</i>						
Pyrethroid pesticide, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>	3	UN3350	I, II	Prohibited		
Pyrethroid pesticide, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>	6.1	UN3351	I	Prohibited		
Pyrethroid pesticide, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>	6.1	UN3351	II, III	Only ORM-D or Consumer Commodity	6A	6A
Pyrethroid pesticide, liquid, toxic	6.1	UN3352	I	Prohibited		
Pyrethroid pesticide, liquid, toxic	6.1	UN3352	II, III	Only ORM-D or Consumer Commodity	6A	6A
Pyrethroid pesticide, solid, toxic	6.1	UN3349	I	Prohibited		
Pyrethroid pesticide, solid, toxic	6.1	UN3349	II, III	Only ORM-D or Consumer Commodity	6A	6A
Pyridine	3	UN1282	II	Prohibited		
<i>Pyridine perchlorate</i>	Forbidden			Prohibited		
Pyrophoric liquid, inorganic, n.o.s.	4.2	UN3194	I	Prohibited		
Pyrophoric liquids, organic, n.o.s.	4.2	UN2845	I	Prohibited		
Pyrophoric metals, n.o.s. <i>or</i> Pyrophoric alloys, n.o.s.	4.2	UN1383	I	Prohibited		
Pyrophoric solid, inorganic, n.o.s.	4.2	UN3200	I	Prohibited		
Pyrophoric solids, organic, n.o.s.	4.2	UN2846	I	Prohibited		



Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Pyrosulfuryl chloride	8	UN1817	II	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Pyroxylin solution or solvent, see Nitrocellulose</i>						
Pyrrolidine	3	UN1922	II	Prohibited		
<b>Q</b>						
<i>Quebrachitol pentanitrate</i>	Forbidden			Prohibited		
Quicklime, see Calcium oxide						
Quinoline	6.1	UN2656	III	Only ORM-D or Consumer Commodity	6A	6A
<b>R</b>						
<i>R 12, see Dichlorodifluoromethane</i>						
<i>R 12B1, see Chlorodifluorobromomethane</i>						
<i>R 13, see Chlorotrifluoromethane</i>						
<i>R 13B1, see Bromotrifluoromethane</i>						
<i>R 14, see Tetrafluoromethane</i>						
<i>R 21, see Dichlorofluoromethane</i>						
<i>R 22, see Chlorodifluoromethane</i>						
<i>R 114, see Dichlorotetrafluoroethane</i>						
<i>R 115, see Chloropentafluoroethane</i>						
<i>R 116, see Hexafluoroethane</i>						
<i>R 124, see Chlorotetrafluoroethane</i>						
<i>R 133a, see Chlorotrifluoroethane</i>						
<i>R 152a, see Difluoroethane</i>						
<i>R 500, see Dichlorodifluoromethane and difluoroethane, etc.</i>						
<i>R 502, see Chlorodifluoromethane and chloropentafluoroethane mixture, etc.</i>						
<i>R 503, see Chlorotrifluoromethane and trifluoromethane, etc.</i>						
Radioactive material, excepted package-articles manufactured from natural uranium or depleted uranium or natural thorium	7	UN2909	n/a	Mailable per 347		7A
Radioactive material, excepted package-empty packaging	7	UN2908	n/a	Prohibited		
Radioactive material, excepted package-instruments or articles	7	UN2911	n/a	Mailable per 347		7A
Radioactive material, excepted package-limited quantity of material	7	UN2910	n/a	Mailable per 347		7A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Radioactive material, low specific activity (LSA-I), <i>non fissile or fissile-excepted</i> .	7	UN2912	n/a	Prohibited		
Radioactive material, low specific activity (LSA-II), <i>non fissile or fissile-excepted</i> .	7	UN3321	n/a	Prohibited		
Radioactive material, low specific activity (LSA-III), <i>non fissile or fissile-excepted</i> .	7	UN3322	n/a	Prohibited		
Radioactive material, surface contaminated objects (SCO-I or SCO-II) <i>non fissile or fissile-excepted</i>	7	UN2913	n/a	Prohibited		
Radio active material, transported under special arrangement, <i>non fissile or fissile excepted</i>	7	UN2919	n/a	Prohibited		
Radioactive material, transported under special arrangement, fissile	7	UN3331	n/a	Prohibited		
Radioactive material, Type A package, fissile <i>non-special form</i>	7	UN3327	n/a	Prohibited		
Radioactive material, Type A package, fissile <i>non-special form, non fissile or fissile-excepted</i>	7	UN2915	n/a	Prohibited		
Radioactive material, Type A package, <i>non fissile or fissile-excepted</i>	7	UN3332	n/a	Prohibited		
Radioactive material, Type A package, special form, fissile	7	UN3333	n/a	Prohibited		
Radioactive material, Type B(M) package, fissile	7	UN3329	n/a	Prohibited		
Radioactive material, Type B(M) package <i>non fissile or fissile-excepted</i>	7	UN2917	n/a	Prohibited		
Radioactive material, Type B(U) package, fissile	7	UN3328	n/a	Prohibited		
Radioactive material, Type B(U) package <i>non fissile or fissile-excepted</i>	7	UN2916	n/a	Prohibited		
Radioactive material, uranium hexafluoride <i>nonfissile or fissile-excepted</i>	7	UN2978	n/a	Prohibited		
Radioactive material, uranium hexafluoride fissile	7	UN2977	n/a	Prohibited		
Rags, oily	4.2	UN1856	III	Prohibited		
<i>Railway torpedo, see Signals, railway track, explosive</i>						
<i>RC318, see Octafluorocyclobutane</i>						

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
RDX and cyclotetramethylenetetranitramine, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized						
RDX and HMX mixtures, wetted with not less than 15 percent water by mass or RDX and HMX mixtures, desensitized with not less than 10 percent phlegmatizer by mass	1.1D	UN0391	II	Prohibited		
RDX and Octogen mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized, etc.						
RDX, see Cyclotrimethylene trinitramine, etc.						
Receptacles, small, containing gas (gas cartridges) flammable, without release device, not refillable and not exceeding 1 L capacity	2.1	UN2037	n/a	Only ORM-D	Prohibited	2A
Receptacles, small, containing gas or gas cartridges (nonflammable) without release device, not refillable and not exceeding 1 L capacity	2.2	UN2037	n/a	Only ORM-D or Consumer Commodity	2B	2B
Receptacles, small, containing gas or gas cartridges (oxidizing) without release device, not refillable and not exceeding 1 L capacity	2.2	UN2037	n/a	Only ORM-D	Prohibited	2B
Red phosphorus, see Phosphorus, amorphous						
Refrigerant gas R 404A	2.2	UN3337	n/a	Only ORM-D or Consumer Commodity	2B	2B
Refrigerant gas R 407A	2.2	UN3338	n/a	Only ORM-D or Consumer Commodity	2B	2B
Refrigerant gas R 407B	2.2	UN3339	n/a	Only ORM-D or Consumer Commodity	2B	2B
Refrigerant gas R 407C	2.2	UN3340	n/a	Only ORM-D or Consumer Commodity	2B	2B
Refrigerant gases, n.o.s.	2.2	UN1078	n/a	Only ORM-D or Consumer Commodity	2B	2B
Refrigerant gases, n.o.s., or Dispersant gases, n.o.s.	2.1	NA1954	n/a	Only ORM-D	Prohibited	2A
Refrigerating machines, containing flammable, non-toxic, liquified gas	2.1	UN3358	n/a	Only ORM-D	Prohibited	2A

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
Refrigerating machines, <i>containing non-flammable, non-toxic, or ammonia solution (UN2672)</i>	2.2	UN2857	n/a	Only ORM-D or Consumer Commodity	2B	2B
Regulated medical waste ( <i>sharps</i> ), n.o.s. or Clinical waste, unspecified, n.o.s. or (BIO) Medical waste, n.o.s. or Biomedical waste, n.o.s. or Medical waste, n.o.s.	6.2	UN3291	II	Mailable only with HQ approval per 346.322	6D	Prohibited
Regulated medical waste ( <i>nonsharps</i> ), n.o.s. or Clinical waste, unspecified, n.o.s. or (BIO) Medical waste, n.o.s. or Biomedical waste, n.o.s. or Medical waste, n.o.s.	6.2	UN3291	II	Mailable only per 346.323	6E	Prohibited
Release devices, explosive	1.4S	UN0173	II	Prohibited		
Resin solution, <i>flammable</i>	3	UN1866	I, II, III	Only ORM-D	Prohibited	3A
Resorcinol	6.1	UN2876	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Rifle grenade, see Grenades, hand or rifle, etc.</i>						
<i>Rifle powder, see Powder, smokeless (UN0160)</i>						
Rivets, explosive	1.4S	UN0174	II	Prohibited		
<i>Road asphalt or tar liquid, see Tars, liquid etc.</i>						
Rocket motors	1.3C	UN0186	II	Prohibited		
Rocket motors	1.1C	UN0280	II	Prohibited		
Rocket motors	1.2C	UN0281	II	Prohibited		
Rocket motors, liquid fueled	1.2J	UN0395	II	Prohibited		
Rocket motors, liquid fueled	1.3J	UN0396	II	Prohibited		
Rocket motors with hypergolic liquids <i>with or without an expelling charge</i>	1.3L	UN0250	II	Prohibited		
Rocket motors with hypergolic liquids <i>with or without an expelling charge</i>	1.2L	UN0322	II	Prohibited		
Rockets, line-throwing	1.2G	UN0238	II	Prohibited		
Rockets, line-throwing	1.3G	UN0240	II	Prohibited		
Rockets, line-throwing	1.4G	UN0453	II	Prohibited		
Rockets, liquid fueled <i>with bursting charge</i>	1.1J	UN0397	II	Prohibited		
Rockets, liquid fueled <i>with bursting charge</i>	1.2J	UN0398	II	Prohibited		
Rockets, <i>with bursting charge</i>	1.1E	UN0181	II	Prohibited		
Rockets, <i>with bursting charge</i>	1.1F	UN0180	II	Prohibited		
Rockets, <i>with bursting charge</i>	1.2E	UN0182	II	Prohibited		
Rockets, <i>with bursting charge</i>	1.2F	UN0295	II	Prohibited		
Rockets, <i>with expelling charge</i>	1.2C	UN0436	II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Rockets, with expelling charge	1.3C	UN0437	II	Prohibited		
Rockets, with expelling charge	1.4C	UN0438	II	Prohibited		
Rockets, with inert head	1.3C	UN0183	II	Prohibited		
Rockets, with inert head	1.2C	UN0502	n/a	Prohibited		
Rosin oil	3	UN1286	II, III	Only ORM-D	Prohibited	3A
Rubber solution	3	UN1287	II, III	Only ORM-D	Prohibited	3A
Rubber scrap or shoddy, powdered or granulated, not exceeding 840 microns and rubber content exceeding 45 percent	4.1	UN1345	II	Prohibited		
Rubidium	4.3	UN1423	I	Prohibited		
Rubidium hydroxide	8	UN2678	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Rubidium hydroxide solution	8	UN2677	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
<b>S</b>						
<i>Safety fuse, see Fuse, safety</i>						
Samples, explosive, other than initiating explosives		UN0190	II	Prohibited		
<i>Sand acid, see Fluorosilicic acid</i>						
Seed cake with more than 1.5 percent oil and not more than 11 percent moisture	4.2	UN1386	III	Prohibited		
Seed cake with not more than 1.5 percent oil and not more than 11 percent moisture	4.2	UN2217	III	Prohibited		
Seed cake, containing vegetable oil solvent extractions and expelled seeds, with not more than 10 percent of oil and when the amount of moisture is higher than 11 percent, with not more than 20 percent of oil and moisture combined	4.2	UN1386	III	Prohibited		
Selenates or Selenites	6.1	UN2630	I	Prohibited		
Selenic acid	8	UN1905	I	Prohibited		
Selenium compound, liquid, n.o.s.	6.1	UN3440	I, II	Prohibited		
Selenium compound, liquid, n.o.s.	6.1	UN3440	III	Only ORM-D or Consumer Commodity	6A	6A
Selenium compound, solid, n.o.s.	6.1	UN3283	I, II	Prohibited		
Selenium compound, solid, n.o.s.	6.1	UN3283	III	Only ORM-D or Consumer Commodity	6A	6A

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
Selenium disulfide	6.1	UN2657	II	Prohibited		
Selenium hexafluoride	2.3	UN2194		Prohibited		
<i>Selenium nitride</i>	Forbidden			Prohibited		
Selenium oxychloride	8	UN2879	I	Prohibited		
<i>Self-defense spray, aerosol, see Aerosols, etc.</i>						
Self-defense spray, non-pressurized	9	NA3334	III	Only ORM-D or Consumer Commodity	9C	9C
Self-heating liquid, corrosive, inorganic, n.o.s.	4.2	UN3188	II, III	Prohibited		
Self-heating liquid, corrosive, organic, n.o.s.	4.2	UN3185	II, III	Prohibited		
Self-heating liquid, inorganic, n.o.s.	4.2	UN3186	II, III	Prohibited		
Self-heating liquid, organic, n.o.s.	4.2	UN3183	II, III	Prohibited		
Self-heating liquid, toxic, inorganic, n.o.s.	4.2	UN3187	II, III	Prohibited		
Self-heating liquid, toxic, organic, n.o.s.	4.2	UN3184	II, III	Prohibited		
Self-heating solid, corrosive, inorganic, n.o.s.	4.2	UN3192	II, III	Prohibited		
Self-heating solid, corrosive, organic, n.o.s.	4.2	UN3126	II, III	Prohibited		
Self-heating solid, inorganic, n.o.s.	4.2	UN3190	II, III	Prohibited		
Self-heating solid, organic, n.o.s.	4.2	UN3088	II, III	Prohibited		
Self-heating solid, oxidizing, n.o.s.	4.2	UN3127	n/a	Prohibited		
Self-heating solid, toxic, inorganic, n.o.s.	4.2	UN3191	II, III	Prohibited		
Self-heating solid, toxic, organic, n.o.s.	4.2	UN3128	II, III	Prohibited		
<i>Self-propelled vehicle, see Engines etc. or Batteries etc.</i>						
Self-reactive liquid type B	4.1	UN3221	II	Prohibited		
Self-reactive liquid type B, temperature controlled	4.1	UN3231	II	Prohibited		
Self-reactive liquid type C	4.1	UN3223	II	Prohibited		
Self-reactive liquid type C, temperature controlled	4.1	UN3233	II	Prohibited		
Self-reactive liquid type D	4.1	UN3225	II	Prohibited		
Self-reactive liquid type D, temperature controlled	4.1	UN3235	II	Prohibited		
Self-reactive liquid type E	4.1	UN3227	II	Prohibited		
Self-reactive liquid type E, temperature controlled	4.1	UN3237	II	Prohibited		
Self-reactive liquid type F	4.1	UN3229	II	Prohibited		
Self-reactive liquid type F, temperature controlled	4.1	UN3239	II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Self-reactive solid type B	4.1	UN3222	II	Prohibited		
Self-reactive solid type B, temperature controlled	4.1	UN3232	II	Prohibited		
Self-reactive solid type C	4.1	UN3224	II	Prohibited		
Self-reactive solid type C, temperature controlled	4.1	UN3234	II	Prohibited		
Self-reactive solid type D	4.1	UN3226	II	Prohibited		
Self-reactive solid type D, temperature controlled	4.1	UN3236	II	Prohibited		
Self-reactive solid type E	4.1	UN3228	II	Prohibited		
Self-reactive solid type E, temperature controlled	4.1	UN3238	II	Prohibited		
Self-reactive solid type F	4.1	UN3230	II	Prohibited		
Self-reactive solid type F, temperature controlled	4.1	UN3240	II	Prohibited		
Shale Oil	3	UN1288	I	Prohibited		
Shale Oil	3	UN1288	II, III	Only ORM-D	Prohibited	3A
<i>Shaped charges, see Charges, shaped, etc.</i>						
Signal devices, hand	1.4G	UN0191	II	Prohibited		
Signal devices, hand	1.4S	UN0373	II	Prohibited		
Signals, distress, <i>ship</i>	1.1G	UN0194	II	Prohibited		
Signals, distress, <i>ship</i>	1.3G	UN0195	II	Prohibited		
Signals, distress, <i>ship</i>	1.4G	UN0505	n/a	Prohibited		
Signals, distress, <i>ship</i>	1.4S	UN0506	n/a	Prohibited		
<i>Signals, highway, see Signal devices, hand</i>						
Signals, railway track, explosive	1.1G	UN0192	II	Prohibited		
Signals, railway track, explosive	1.3G	UN0492	II	Prohibited		
Signals, railway track, explosive	1.4G	UN0493	II	Prohibited		
Signals, railway track, explosive	1.4S	UN0193	II	Prohibited		
<i>Signals, ship distress, water-activated, see Contrivances, water-activated, etc.</i>						
Signals, smoke	1.1G	UN0196	II	Prohibited		
Signals, smoke	1.2G	UN0313	II	Prohibited		
Signals, smoke	1.3G	UN0487	II	Prohibited		
Signals, smoke	1.4G	UN0197	II	Prohibited		
Signals, smoke	1.4S	UN0507	n/a	Prohibited		
Silane	2.1	UN2203	n/a	Prohibited		
<i>Silicofluoric acid, see Fluorosilicic acid</i>						
<i>Silicon chloride, see Silicon tetrachloride</i>						
Silicon powder, amorphous	4.1	UN1346	III	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Silicon tetrachloride	8	UN1818	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Silicon tetrafluoride, compressed	2.3	UN1859	n/a	Prohibited		
<i>Silver acetylide (dry)</i>	Forbidden			Prohibited		
Silver arsenite	6.1	UN1683	II	Prohibited		
<i>Silver azide (dry)</i>	Forbidden			Prohibited		
<i>Silver chlorite (dry)</i>	Forbidden			Prohibited		
Silver cyanide	6.1	UN1684	II	Prohibited		
<i>Silver fulminate (dry)</i>	Forbidden			Prohibited		
Silver nitrate	5.1	UN1493	II	Only ORM-D or Mailable Limited Quantity	5A	5A
<i>Silver oxalate (dry)</i>	Forbidden			Prohibited		
<i>Silver picrate (dry)</i>	Forbidden			Prohibited		
Silver picrate, wetted with not less than 30 percent water, by mass	4.1	UN1347	I	Prohibited		
Sludge, acid	8	UN1906	II	Prohibited		
Smokeless powder for small arms (100 pounds or less)	4.1	NA3178	I	Prohibited		
Soda lime with more than 4 percent sodium hydroxide	8	UN1907	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Sodium	4.3	UN1428	I	Prohibited		
Sodium aluminate, solid	8	UN2812	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Sodium aluminate, solution	8	UN1819	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Sodium aluminum hydride	4.3	UN2835	II	Only ORM-D	Prohibited	4A
Sodium ammonium vanadate	6.1	UN2863	II	Prohibited		
Sodium arsanilate	6.1	UN2473	III	Only ORM-D or Consumer Commodity	6A	6A
Sodium arsenate	6.1	UN1685	II	Prohibited		
Sodium arsenite, aqueous solutions	6.1	UN1686	II	Prohibited		
Sodium arsenite, aqueous solutions	6.1	UN1686	III	Only ORM-D or Consumer Commodity	6A	6A
Sodium arsenite, solid	6.1	UN2027	II	Prohibited		
Sodium azide	6.1	UN1687	II	Prohibited		



Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<i>Sodium bifluoride, see Sodium hydrogendifluoride</i>						
<i>Sodium bisulfite, solution, see Bisulfites, aqueous solutions, n.o.s.</i>						
Sodium borohydride	4.3	UN1426	I	Prohibited		
Sodium borohydride and sodium hydroxide solution, <i>with not more than 12 percent sodium borohydride and not more than 40 percent sodium hydroxide by mass</i>	8	UN3320	II, III	Prohibited		
Sodium bromate	5.1	UN1494	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Sodium cacodylate	6.1	UN1688	II	Prohibited		
Sodium carbonate peroxyhydrate	5.1	UN3378	II, III	Only ORM-D or Mailable Limited Quantity	5A	5A
Sodium chlorate	5.1	UN1495	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Sodium chlorate, aqueous solution	5.1	UN2428	II, III	Only ORM-D or Mailable Limited Quantity	5A	5A
<i>Sodium chlorate mixed with dinitrotoluene, see Explosive, blasting, type C</i>						
Sodium chlorite	5.1	UN1496	II	Prohibited		
Sodium chloroacetate	6.1	UN2659	III	Only ORM-D or Consumer Commodity	6A	6A
Sodium cuprocyanide, solid	6.1	UN2316	I	Prohibited		
Sodium cuprocyanide, solution	6.1	UN2317	I	Prohibited		
Sodium cyanide, solid	6.1	UN1689	I	Prohibited		
Sodium cyanide, solution	6.1	UN3414	I, II	Prohibited		
Sodium cyanide, solution	6.1	UN3414	III	Only ORM-D	Prohibited	6A
<i>Sodium dichloroisocyanurate or Sodium dichloro-s-triazinetrione, see Dichloroisocyanuric acid etc.</i>						
Sodium dinitro-o-cresolate, <i>dry or wetted with less than 15 percent water, by mass</i>	1.3C	UN0234	II	Prohibited		
Sodium dinitro-o-cresolate, <i>wetted with not less than 10 percent water, by mass</i>	4.1	UN3369	I	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Sodium dinitro-o-cresolate, <i>wetted with not less than 15 percent water, by mass</i>	4.1	UN1348	I	Prohibited		
Sodium dithionite or Sodium hydrosulfite	4.2	UN1384	II	Prohibited		
Sodium fluoride, solid	6.1	UN1690	III	Only ORM-D or Consumer Commodity	6A	6A
Sodium fluoride, solution	6.1	UN3415	III	Only ORM-D or Consumer Commodity	6A	6A
Sodium fluoroacetate	6.1	UN2629	I	Prohibited		
Sodium fluorosilicate	6.1	UN2674	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Sodium hydrate, see Sodium hydroxide, solid</i>						
Sodium hydride	4.3	UN1427	I	Prohibited		
Sodium hydrogendifluoride	8	UN2439	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Sodium hydrosulfide, <i>with less than 25 percent water of crystallization</i>	4.2	UN2318	II	Prohibited		
Sodium hydrosulfide, <i>with not less than 25 percent water of crystallization</i>	8	UN2949	II	Prohibited		
Sodium hydrosulfite, <i>see Sodium dithionite</i>						
Sodium hydroxide, solid	8	UN1823	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Sodium hydroxide solution	8	UN1824	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Sodium hypochlorite, solution, see Hypochlorite solutions</i>						
<i>Sodium metal, liquid alloy, see Alkali metal alloys, liquid, n.o.s.</i>						
Sodium methylate	4.2	UN1431	II	Prohibited		
Sodium methylate solutions <i>in alcohol</i>	3	UN1289	II	Prohibited		
Sodium methylate solutions <i>in alcohol</i>	3	UN1289	III	Only ORM-D	Prohibited	3A
Sodium monoxide	8	UN1825	II	Only ORM-D or Mailable Limited Quantity	8A	8A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Sodium nitrate	5.1	UN1498	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Sodium nitrate and potassium nitrate mixtures	5.1	UN1499	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Sodium nitrite	5.1	UN1500	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Sodium pentachlorophenate	6.1	UN2567	II	Prohibited		
Sodium perborate monohydrate	5.1	UN3377	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Sodium perchlorate	5.1	UN1502	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Sodium permanganate	5.1	UN1503	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Sodium peroxide	5.1	UN1504	I	Prohibited		
Sodium peroxoborate, anhydrous	5.1	UN3247	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Sodium persulfate	5.1	UN1505	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Sodium phosphide	4.3	UN1432	I	Only ORM-D	Prohibited	4A
Sodium picramate, <i>dry or wetted with less than 20 percent water, by mass</i>	1.3C	UN0235	II	Prohibited		
Sodium picramate, <i>wetted with not less than 20 percent water, by mass</i>	4.1	UN1349	I	Prohibited		
Sodium picryl peroxide	Forbidden			Prohibited		
Sodium potassium alloys, <i>see</i> Potassium sodium alloys						
Sodium selenate, <i>see</i> Selenates or Selenites						
Sodium sulfide, anhydrous or Sodium sulfide <i>with less than 30 percent water of crystallization</i>	4.2	UN1385	II	Prohibited		
Sodium sulfide, <i>hydrated with not less than 30 percent water</i>	8	UN1849	II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Sodium superoxide	5.1	UN2547	I	Prohibited		
<i>Sodium tetranitride</i>	Forbidden			Prohibited		
Solids containing corrosive liquid, n.o.s.	8	UN3244	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Solids containing flammable liquid, n.o.s.	4.1	UN3175	II	Only ORM-D	Prohibited	4A
Solids containing toxic liquid, n.o.s.	6.1	UN3243	II	Prohibited		
Sounding devices, explosive	1.1D	UN0374	II	Prohibited		
Sounding devices, explosive	1.1F	UN0296	II	Prohibited		
Sounding devices, explosive	1.2D	UN0375	II	Prohibited		
Sounding devices, explosive	1.2F	UN0204	II	Prohibited		
<i>Spirits of salt, see Hydrochloric acid</i>						
<i>Squibs, see Igniters</i>						
Stannic chloride, anhydrous	8	UN1827	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Stannic chloride, pentahydrate	8	UN2440	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Stannic phosphide	4.3	UN1433	I	Prohibited		
<i>Steel swarf, see Ferrous metal borings, etc.</i>						
Stibine	2.3	UN2676	n/a	Prohibited		
<i>Storage batteries, wet, see Batteries, wet etc.</i>						
Strontium arsenite	6.1	UN1691	II	Prohibited		
Strontium chlorate	5.1	UN1506	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Strontium nitrate	5.1	UN1507	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Strontium perchlorate	5.1	UN1508	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Strontium peroxide	5.1	UN1509	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Strontium phosphide	4.3	UN2013	I	Prohibited		
Strychnine or Strychnine salts	6.1	UN1692	I	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Strychnic acid, see Trinitroresorcinol, etc.						
Styrene monomer, stabilized	3	UN2055	III	Only ORM-D	Prohibited	3A
Substances, explosive, n.o.s.	1.1A	UN0473	II	Prohibited		
Substances, explosive, n.o.s.	1.1C	UN0474	II	Prohibited		
Substances, explosive, n.o.s.	1.1D	UN0475	II	Prohibited		
Substances, explosive, n.o.s.	1.1G	UN0476	II	Prohibited		
Substances, explosive, n.o.s.	1.1L	UN0357	II	Prohibited		
Substances, explosive, n.o.s.	1.2L	UN0358	II	Prohibited		
Substances, explosive, n.o.s.	1.3C	UN0477	II	Prohibited		
Substances, explosive, n.o.s.	1.3G	UN0478	II	Prohibited		
Substances, explosive, n.o.s.	1.3L	UN0359	II	Prohibited		
Substances, explosive, n.o.s.	1.4C	UN0479	II	Prohibited		
Substances, explosive, n.o.s.	1.4D	UN0480	II	Prohibited		
Substances, explosive, n.o.s.	1.4G	UN0485	II	Prohibited		
Substances, explosive, n.o.s.	1.4S	UN0481	II	Prohibited		
Substances, explosive, very insensitive, n.o.s., or Substances, EVI, n.o.s.	1.5D	UN0482	II	Prohibited		
Substituted nitrophenol pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>	3	UN2780	I, II	Prohibited		
Substituted nitrophenol pesticides, liquid, toxic	6.1	UN3014	I, II	Prohibited		
Substituted nitrophenol pesticides, liquid, toxic	6.1	UN3014	III	Only ORM-D or Consumer Commodity	6A	6A
Substituted nitrophenol pesticides, liquid, toxic flammable <i>flashpoint not less than 23° C</i>	6.1	UN3013	I, II	Prohibited		
Substituted nitrophenol pesticides, liquid, toxic flammable <i>flashpoint not less than 23° C</i>	6.1	UN3013	III	Only ORM-D or Consumer Commodity	6A	6A
Substituted nitrophenol pesticides, solid, toxic	6.1	UN2779	I, II	Prohibited		
Substituted nitrophenol pesticides, solid, toxic	6.1	UN2779	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Sucrose octanitrate (dry)</i>	Forbidden			Prohibited		
Sulfamic acid	8	UN2967	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Sulfur	9	NA1350	III	Prohibited		
Sulfur	4.1	UN1350	III	Prohibited		
<i>Sulfur and chlorate, loose mixtures of</i>	Forbidden			Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Sulfur chlorides	8	UN1828	I	Prohibited		
<i>Sulfur dichloride, see Sulfur chlorides</i>						
Sulfur dioxide	2.3	UN1079	n/a	Prohibited		
<i>Sulfur dioxide solution, see Sulfurous acid</i>						
Sulfur hexafluoride	2.2	UN1080	n/a	Only ORM-D or Consumer Commodity		
Sulfur, molten	9	NA2448	III	Prohibited		
Sulfur, molten	4.1	UN2448	III	Prohibited		
Sulfur tetrafluoride	2.3	UN2418	n/a	Prohibited		
Sulfur trioxide, stabilized	8	UN1829	I	Prohibited		
<i>Sulfuretted hydrogen, see Hydrogen sulfide</i>						
Sulfuric acid with more than 51 percent acid	8	UN1830	II	Prohibited		
Sulfuric acid with not more than 51 percent acid	8	UN2796	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Sulfuric acid, fuming with 30 percent or more free sulfur trioxide	8	UN1831	I	Prohibited		
Sulfuric acid, fuming with less than 30 percent free sulfur trioxide	8	UN1831	I	Prohibited		
Sulfuric acid, spent	8	UN1832	II	Prohibited		
Sulfuric and hydrofluoric acid mixtures, see Hydrofluoric and sulfuric acid mixtures						
<i>Sulfuric anhydride, see Sulfur trioxide, inhibited</i>						
Sulfurous acid	8	UN1833	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Sulfuryl chloride	8	UN1834	I	Prohibited		
Sulfuryl fluoride	2.3	UN2191	n/a	Prohibited		
<b>T</b>						
Tars, liquid including road oils and cutback, bitumens	3	UN1999	II, III	Only ORM-D	Prohibited	3A
Tear gas candles	6.1	UN1700	II	Prohibited		
<i>Tear gas cartridges, see Ammunition, tearproducing, etc.</i>						
Tear gas devices with more than 2 percent tear gas substances, by mass	6.1	NA1693	I, II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
<i>Tear gas devices with not more than 2 percent tear gas substances, by mass, see Aerosols, etc.</i>						
<i>Tear gas grenades, see Tear gas candles</i>						
Tear gas substances, liquid, n.o.s.	6.1	UN1693	I, II	Prohibited		
Tear gas substances, solid, n.o.s.	6.1	UN3448	I, II	Prohibited		
Tellurium compound, n.o.s.	6.1	UN3284	I, II	Prohibited		
Tellurium compound, n.o.s.	6.1	UN3284	III	Only ORM-D or Consumer Commodity	6A	6A
Tellurium hexafluoride	2.3	UN2195	n/a	Prohibited		
Terpene hydrocarbons, n.o.s.	3	UN2319	III	Only ORM-D	Prohibited	3A
Terpinolene	3	UN2541	III	Only ORM-D	Prohibited	3A
<i>Tetraazido benzene quinone</i>	Forbidden			Prohibited		
Tetrabromoethane	6.1	UN2504	III	Only ORM-D or Consumer Commodity	6A	6A
1,1,2,2-Tetrachloroethane	6.1	UN1702	II	Prohibited		
Tetrachloroethylene	6.1	UN1897	III	Only ORM-D or Consumer Commodity	6A	6A
Tetraethyl dithiopyrophosphate	6.1	UN1704	II	Prohibited		
Tetraethyl silicate	3	UN1292	III	Only ORM-D	Prohibited	3A
<i>Tetraethylammonium perchlorate (dry)</i>	Forbidden			Prohibited		
Tetraethylenepentamine	8	UN2320	III	Only ORM-D or Mailable Limited Quantity	8A	8A
1,1,1,2-Tetrafluoroethane or Refrigerant gas R 134a	2.2	UN3159	n/a	Only ORM-D or Consumer Commodity	2B	2B
Tetrafluoroethylene, stabilized	2.1	UN1081	n/a	Only ORM-D	Prohibited	2A
Tetrafluoromethane or Refrigerant gas R 14	2.2	UN1982	n/a	Prohibited		
1,2,3,6-Tetrahydrobenzaldehyde	3	UN2498	III	Only ORM-D	Prohibited	3A
Tetrahydrofuran	3	UN2056	II	Prohibited		
Tetrahydrofurfurylamine	3	UN2943	III	Only ORM-D	Prohibited	3A
<i>Tetrahydrophthalic anhydrides with more than 0.05 percent of maleic anhydride</i>	8	UN2698	III	Only ORM-D or Mailable Limited Quantity	8A	8A
1,2,3,6-Tetrahydropyridine	3	UN2410	II	Only ORM-D	Prohibited	3A
Tetrahydrothiophene	3	UN2412	II	Only ORM-D	Prohibited	3A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Tetramethylammonium hydroxide, solid	8	UN3423	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Tetramethylammonium hydroxide, solution	8	UN1835	II	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Tetramethylene diperoxide dicarbamide</i>	Forbidden			Prohibited		
Tetramethylsilane	3	UN2749	I	Prohibited		
<i>Tetranitro diglycerin</i>	Forbidden			Prohibited		
Tetranitroaniline	1.1D	UN0207	II	Prohibited		
Tetranitromethane	5.1	UN1510	I	Prohibited		
<i>2,3,4,6-Tetranitrophenol</i>	Forbidden			Prohibited		
<i>2,3,4,6-Tetranitrophenyl methyl nitramine</i>	Forbidden			Prohibited		
<i>2,3,4,6-Tetranitrophenylnitramine</i>	Forbidden			Prohibited		
<i>Tetranitroresorcinol (dry)</i>	Forbidden			Prohibited		
<i>2,3,5,6-Tetranitroso nitrobenzene (dry)</i>	Forbidden			Prohibited		
<i>2,3,5,6-Tetranitroso-1,4-dinitrobenzene</i>	Forbidden			Prohibited		
Tetrapropylorthotitanate	3	UN2413	III	Only ORM-D	Prohibited	3A
Tetrazene, see Guanyl nitrosaminoguanilyltetrazene						
<i>Tetrazine (dry)</i>	Forbidden			Prohibited		
Tetrazol-1-acetic acid	1.4C	UN0407	II	Prohibited		
1H-Tetrazole	1.1D	UN0504	n/a	Prohibited		
<i>Tetrazolyl azide (dry)</i>	Forbidden			Prohibited		
Tetryl, see Trinitrophenylmethylnitramine						
Textile waste, wet	4.2	UN1857	III	Prohibited		
Thallium chlorate	5.1	UN2573	II	Prohibited		
Thallium compounds, n.o.s.	6.1	UN1707	II	Prohibited		
Thallium nitrate	6.1	UN2727	II	Prohibited		
4-Thiapentanal	6.1	UN2785	III	Only ORM-D or Consumer Commodity	6A	6A
Thioacetic acid	3	UN2436	II	Only ORM-D	Prohibited	3A
Thiocarbamate pesticide, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>	3	UN2772	I, II	Prohibited		
Thiocarbamate pesticide, liquid, toxic	6.1	UN3006	I, II	Prohibited		



Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Thiocarbamate pesticide, liquid, toxic	6.1	UN3006	III	Only ORM-D or Consumer Commodity	6A	6A
Thiocarbamate pesticides, liquid, flammable, toxic, <i>flashpoint not less than 23°C</i>	6.1	UN3005	I, II	Prohibited		
Thiocarbamate pesticides, liquid, flammable, toxic, <i>flashpoint not less than 23°C</i>	6.1	UN3005	III	Only ORM-D or Consumer Commodity	6A	6A
Thiocarbamate pesticides, solid, toxic	6.1	UN2771	I, II	Prohibited		
Thiocarbamate pesticides, solid, toxic	6.1	UN2771	III	Only ORM-D or Consumer Commodity	6A	6A
<i>Thiocarbonylchloride, see Thiophosgene</i>						
Thioglycol	6.1	UN2966	II	Prohibited		
Thioglycolic acid	8	UN1940	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Thiolactic acid	6.1	UN2936	II	Prohibited		
Thionyl chloride	8	UN1836	I	Prohibited		
Thiophene	3	UN2414	II	Only ORM-D	Prohibited	3A
Thiophosgene	6.1	UN2474	II	Prohibited		
Thiophosphoryl chloride	8	UN1837	II	Prohibited		
Thiourea dioxide	4.2	UN3341	II, III	Prohibited		
<i>Tin chloride, fuming, see Stannic chloride, anhydrous</i>						
<i>Tin perchloride or Tin tetrachloride, see Stannic chloride, anhydrous</i>						
Tinctures, medicinal	3	UN1293	II, III	Only ORM-D	Prohibited	3A
<i>Tinning flux, see Zinc chloride</i>						
Tires and tire assemblies, <i>see Air compressed or Nitrogen, compressed</i>						
Titanium disulphide	4.2	UN3174	III	Prohibited		
Titanium hydride	4.1	UN1871	II	Prohibited		
Titanium powder, dry	4.2	UN2546	I, II, III	Prohibited		
Titanium powder, wetted with <i>not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns</i>	4.1	UN1352	II	Prohibited		
Titanium sponge granules or Titanium sponge powders	4.1	UN2878	III	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Titanium tetrachloride	8	UN1838	II	Prohibited		
Titanium trichloride mixtures	8	UN2869	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Titanium trichloride, pyrophoric or Titanium trichloride mixtures, pyrophoric	4.2	UN2441	I	Prohibited		
<i>TNT mixed with aluminum, see Tritonal</i>						
<i>TNT, see Trinitrotoluene, etc.</i>						
Toluene	3	UN1294	II	Only ORM-D	Prohibited	3A
Toluene diisocyanate	6.1	UN2078	II	Prohibited		
<i>Toluene sulfonic acid, see Alkyl, or Aryl sulfonic acid, etc.</i>						
Toluidines <i>liquid</i>	6.1	UN1708	II	Prohibited		
Toluidines <i>solid</i>	6.1	UN3451	II	Prohibited		
2,4-Toluylenediamine, solid or 2,4-Toluenediamine, solid	6.1	UN1709	III	Only ORM-D or Consumer Commodity	6A	6A
2,4-Toluylenediamine, solution or 2,4-Toluenediamine, solution	6.1	UN3418	III	Only ORM-D or Consumer Commodity	6A	6A
Torpedoes <i>with bursting charge</i>	1.1D	UN0451	II	Prohibited		
Torpedoes <i>with bursting charge</i>	1.1E	UN0329	II	Prohibited		
Torpedoes <i>with bursting charge</i>	1.1F	UN0330	II	Prohibited		
Torpedoes, liquid fueled, <i>with inert head</i>	1.3J	UN0450	II	Prohibited		
Torpedoes, liquid fueled, <i>with or without bursting charge</i>	1.1J	UN0449	II	Prohibited		
Toxic by inhalation liquid, flammable, corrosive, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50</i>	6.1	UN3488	I	Prohibited		
Toxic by inhalation liquid, flammable, corrosive, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50</i>	6.1	UN3489	I	Prohibited		
Toxic by inhalation liquid, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50</i>	6.1	UN3381	I	Prohibited		

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
Toxic by inhalation liquid, n.o.s. with an LC50 lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50	6.1	UN3382	I	Prohibited		
Toxic by inhalation liquid, flammable, n.o.s. with an LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50	6.1	UN3383	I	Prohibited		
Toxic by inhalation liquid, flammable, n.o.s. with an LC50 lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50	6.1	UN3384	I	Prohibited		
Toxic by inhalation liquid, water-reactive, flammable, n.o.s. with an LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50-	6.1	UN3490	I	Prohibited		
Toxic by inhalation liquid, water-reactive, flammable, n.o.s. with an LC50 lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50-	6.1	UN3491	I	Prohibited		
Toxic by inhalation liquid, water-reactive, n.o.s. with an LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50	6.1	UN3385	I	Prohibited		
Toxic by inhalation liquid, water-reactive, n.o.s. with an LC50 lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50	6.1	UN3386	I	Prohibited		
Toxic by inhalation liquid, oxidizing, n.o.s. with an LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50	6.1	UN3387	I	Prohibited		
Toxic by inhalation liquid, oxidizing, n.o.s. with an LC50 lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50	6.1	UN3388	I	Prohibited		
Toxic by inhalation liquid, corrosive, n.o.s. with an LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50	6.1	UN3389	I	Prohibited		

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
Toxic by inhalation liquid, corrosive, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50</i>	6.1	UN3390	I	Prohibited		
Toxic liquid, corrosive, inorganic, n.o.s.	6.1	UN3289	I, II	Prohibited		
Toxic liquid, inorganic, n.o.s.	6.1	UN3287	I, II	Prohibited		
Toxic liquid, inorganic, n.o.s.	6.1	UN3287	III	Only ORM-D or Consumer Commodity	6A	6A
Toxic liquids, corrosive, organic, n.o.s.	6.1	UN2927	I, II	Prohibited		
Toxic liquids, flammable, organic, n.o.s.	6.1	UN2929	I, II	Prohibited		
Toxic, liquids, organic, n.o.s.	6.1	UN2810	I, II	Prohibited		
Toxic, liquids, organic, n.o.s.	6.1	UN2810	III	Only ORM-D or Consumer Commodity	6A	6A
Toxic liquids, oxidizing, n.o.s.	6.1	UN3122	I, II	Prohibited		
Toxic liquids, water-reactive, n.o.s.	6.1	UN3123	I, II	Prohibited		
Toxic solid, corrosive, inorganic, n.o.s.	6.1	UN3290	I, II	Prohibited		
Toxic solid, inorganic, n.o.s.	6.1	UN3288	I, II	Prohibited		
Toxic solid, inorganic, n.o.s.	6.1	UN3288	III	Only ORM-D or Consumer Commodity	6A	6A
Toxic solids, corrosive, organic, n.o.s.	6.1	UN2928	I, II	Prohibited		
Toxic solids, flammable, organic, n.o.s.	6.1	UN2930	I, II	Prohibited		
Toxic solids, organic, n.o.s.	6.1	UN2811	I, II	Prohibited		
Toxic solids, organic, n.o.s.	6.1	UN2811	III	Only ORM-D or Consumer Commodity	6A	6A
Toxic solids, oxidizing, n.o.s.	6.1	UN3086	I, II	Prohibited		
Toxic solids, self-heating, n.o.s.	6.1	UN3124	I, II	Prohibited		
Toxic solids, water-reactive, n.o.s.	6.1	UN3125	I, II	Prohibited		
Toxins, extracted from living sources, liquid, n.o.s.	6.1	UN3172	I, II	Prohibited		
Toxins, extracted from living sources, liquid, n.o.s.	6.1	UN3172	III	Only ORM-D or Consumer Commodity	6A	6A
Toxins, extracted from living sources, solid, n.o.s.	6.1	UN3462	I, II	Prohibited		
Toxins, extracted from living sources, solid, n.o.s.	6.1	UN3462	III	Only ORM-D or Consumer Commodity	6A	6A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Toy caps	1.4S	NA0337	II	Prohibited		
Tracers for ammunition	1.3G	UN0212	II	Prohibited		
Tracers for ammunition	1.4G	UN0306	II	Prohibited		
<i>Tractors, see Vehicle, etc.</i>						
<i>Tri-(b-nitroxyethyl) ammonium nitrate</i>	Forbidden			Prohibited		
Triallyl borate	6.1	UN2609	III	Only ORM-D or Consumer Commodity	6A	6A
Triallylamine	3	UN2610	III	Prohibited		
Triazine pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>	3	UN2764	I, II	Prohibited		
Triazine pesticides, liquid, toxic	6.1	UN2998	I, II	Prohibited		
Triazine pesticides, liquid, toxic	6.1	UN2998	III	Only ORM-D or Consumer Commodity	6A	6A
Triazine pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN2997	I, II	Prohibited		
Triazine pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>	6.1	UN2997	III	Only ORM-D or Consumer Commodity	6A	6A
Triazine pesticides, solid, toxic	6.1	UN2763	I, II	Prohibited		
Triazine pesticides, solid, toxic	6.1	UN2763	III	Only ORM-D or Consumer Commodity	6A	6A
Tributylamine	6.1	UN2542	II	Prohibited		
Tributylphosphane	4.2	UN3254	I	Prohibited		
<i>Trichloro-s-triazinetriene dry, with more than 39 percent available chlorine, see Trichloroisocyanuric acid, dry</i>						
Trichloroacetic acid	8	UN1839	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Trichloroacetic acid, solution	8	UN2564	II, III	Only ORM-D or Mailable Limited Quantity	8A	8A
Trichloroacetyl chloride	8	UN2442	II	Prohibited		
Trichlorobenzenes, liquid	6.1	UN2321	III	Only ORM-D or Consumer Commodity	6A	6A
Trichlorobutene	6.1	UN2322	II	Prohibited		
1,1,1-Trichloroethane	6.1	UN2831	III	Only ORM-D or Consumer Commodity	6A	6A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Trichloroethylene	6.1	UN1710	III	Only ORM-D or Consumer Commodity	6A	6A
Trichloroisocyanuric acid, dry	5.1	UN2468	II	Only ORM-D	5A	5A
<i>Trichloromethyl perchlorate</i>	Forbidden			Prohibited		
Trichlorosilane	4.3	UN1295	I	Prohibited		
Tricresyl phosphate <i>with more than 3 percent ortho isomer</i>	6.1	UN2574	II	Prohibited		
Triethyl phosphite	3	UN2323	III	Only ORM-D	Prohibited	3A
Triethylamine	3	UN1296	II	Prohibited		
Triethylenetetramine	8	UN2259	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Trifluoroacetic acid	8	UN2699	I	Prohibited		
Trifluoroacetyl chloride	2.3	UN3057	n/a	Prohibited		
Trifluorochloroethylene, stabilized	2.3	UN1082	n/a	Prohibited		
1,1,1-Trifluoroethane, compressed or Refrigerant gas R 143a	2.1	UN2035	n/a	Only ORM-D	Prohibited	2A
Trifluoromethane or Refrigerant gas R 23	2.2	UN1984	n/a	Only ORM-D or Consumer Commodity	2B	2B
Trifluoromethane, refrigerated liquid	2.2	UN3136	n/a	Only ORM-D or Consumer Commodity	2B	2B
2-Trifluoromethylaniline	6.1	UN2942	III	Only ORM-D or Consumer Commodity	6A	6A
3-Trifluoromethylaniline	6.1	UN2948	II	Prohibited		
<i>Triformoxime trinitrate</i>	Forbidden			Prohibited		
Triisobutylene	3	UN2324	III	Only ORM-D	Prohibited	3A
Triisopropyl borate	3	UN2616	II, III	Only ORM-D	Prohibited	3A
Trimethoxysilane	6.1	NA9269	I	Prohibited		
Trimethyl borate	3	UN2416	II	Only ORM-D	Prohibited	3A
Trimethyl phosphite	3	UN2329	III	Only ORM-D	Prohibited	3A
<i>1,3,5-Trimethyl-2,4,6-trinitrobenzene</i>	Forbidden			Prohibited		
Trimethylacetyl chloride	6.1	UN2438	I	Prohibited		
Trimethylamine, anhydrous	2.1	UN1083	n/a	Only ORM-D	Prohibited	2A
Trimethylamine, aqueous solutions <i>with not more than 50 percent trimethylamine by mass</i>	3	UN1297	I, II	Prohibited		
Trimethylamine, aqueous solutions <i>with not more than 50 percent trimethylamine by mass</i>	3	UN1297	III	Only ORM-D	Prohibited	3A
1,3,5-Trimethylbenzene	3	UN2325	III	Prohibited		
Trimethylchlorosilane	3	UN1298	II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Trimethylcyclohexylamine	8	UN2326	III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Trimethylene glycol diperchlorate</i>	Forbidden			Prohibited		
Trimethylhexamethylene diisocyanate	6.1	UN2328	III	Only ORM-D or Consumer Commodity	6A	6A
Trimethylhexamethylenediamines	8	UN2327	III	Only ORM-D or Mailable Limited Quantity	8A	8A
<i>Trimethylol nitromethane trinitrate</i>	Forbidden			Prohibited		
Trinitro-m-cresol	1.1D	UN0216	II	Prohibited		
<i>2,4,6-Trinitro-1,3,5-triazido benzene (dry)</i>	Forbidden			Prohibited		
<i>2,4,6-Trinitro-1,3-diazobenzene</i>	Forbidden			Prohibited		
<i>Trinitroacetic acid</i>	Forbidden			Prohibited		
<i>Trinitroacetonitrile</i>	Forbidden			Prohibited		
<i>Trinitroamine cobalt</i>	Forbidden			Prohibited		
Trinitroaniline or Picramide	1.1D	UN0153	II	Prohibited		
Trinitroanisole	1.1D	UN0213	II	Prohibited		
Trinitrobenzene, wetted, with not less than 10 percent water, by mass	4.1	UN3367	I	Prohibited		
Trinitrobenzene, dry or wetted with less than 30 percent water, by mass	1.1D	UN0214	II	Prohibited		
Trinitrobenzenesulfonic acid	1.1D	UN0386	II	Prohibited		
Trinitrobenzoic acid, dry or wetted with less than 30 percent water, by mass	1.1D	UN0215	II	Prohibited		
Trinitrobenzoic acid, wetted with not less than 10 percent water, by mass	4.4	UN3368	I	Prohibited		
Trinitrobenzoic acid, wetted with not less than 30 percent water, by mass	4.1	UN1355	I	Prohibited		
Trinitrochlorobenzene or Picryl chloride	1.1D	UN0155	II	Prohibited		
Trinitrochlorobenzene (picryl chloride), wetted, with not less than 10 percent water by mass	4.1	UN3365	I	Prohibited		
<i>Trinitroethanol</i>	Forbidden			Prohibited		
<i>Trinitroethylnitrate</i>	Forbidden			Prohibited		
Trinitrofluorenone	1.1D	UN0387	II	Prohibited		
<i>Trinitromethane</i>	Forbidden			Prohibited		
Trinitronaphthalene	1.1D	UN0217	II	Prohibited		
<i>1,3,5-Trinitronaphthalene</i>	Forbidden			Prohibited		
Trinitrophenetole	1.1D	UN0218	II	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Trinitrophenol (picric acid), wetted with not less than 10 percent water by mass	4.1	UN3364	I	Prohibited		
Trinitrophenol or Picric acid, dry or wetted with less than 30 percent water, by mass	1.1D	UN0154	II	Prohibited		
Trinitrophenol, wetted with not less than 30 percent water, by mass	4.1	UN1344	I	Prohibited		
2,4,6-Trinitrophenyl guanidine (dry)	Forbidden			Prohibited		
2,4,6-Trinitrophenyl nitramine	Forbidden			Prohibited		
2,4,6-Trinitrophenyl trimethylol methyl nitramine trinitrate (dry)	Forbidden			Prohibited		
Trinitrophenylmethyl nitramine or Tetryl	1.1D	UN0208	II	Prohibited		
Trinitroresorcinol or Styphnic acid, dry or wetted with less than 20 percent water, or mixture of alcohol and water, by mass	1.1D	UN0219	II	Prohibited		
Trinitroresorcinol, wetted or Styphnic acid, wetted with not less than 20 percent water, or mixture of alcohol and water, by mass	1.1D	UN0394	II	Prohibited		
2,4,6-Trinitroso-3-methyl nitraminoanisole	Forbidden			Prohibited		
Trinitrotetramine cobalt nitrate	Forbidden			Prohibited		
Trinitrotoluene or TNT, dry or wetted with less than 30 percent water, by mass	1.1D	UN0209	II	Prohibited		
Trinitrotoluene (TNT) wetted, with not less than 10 percent water by mass	4.1	UN3366	I	Prohibited		
Trinitrotoluene and Trinitrobenzene mixtures or TNT and trinitrobenzene mixtures or TNT and hexanitrostilbene mixtures or Trinitrotoluene and hexanitrostilbene mixtures	1.1D	UN0388	II	Prohibited		
Trinitrotoluene mixtures containing Trinitrobenzene and Hexanitrostilbene or TNT mixtures containing trinitrobenzene and hexanitrostilbene	1.1D	UN0389	II	Prohibited		
Trinitrotoluene wetted with not less than 30 percent water, by mass	4.1	UN1356	I	Prohibited		
Tripropylamine	3	UN2260	III	Only ORM-D	Prohibited	3A
Tripropylene	3	UN2057	II, III	Only ORM-D	Prohibited	3A
Tris, bis-bifluoroamino diethoxy propane (TVOPA)	Forbidden			Prohibited		
Tris-(1-aziridiny)phosphine oxide, solution	6.1	UN2501	II	Prohibited		



Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Tris-(1-aziridinyl)phosphine oxide, solution	6.1	UN2501	III	Only ORM-D or Consumer Commodity	6A	6A
Tritonal	1.1D	UN0390	II	Prohibited		
Tungsten hexafluoride	2.3	UN2196	n/a	Prohibited		
Turpentine	3	UN1299	III	Only ORM-D	Prohibited	3A
Turpentine substitute	3	UN1300	I	Prohibited		
Turpentine substitute	3	UN1300	II, III	Only ORM-D	Prohibited	3A
<b>U</b>						
Undecane	3	UN2330	III	Only ORM-D	Prohibited	3A
Urea hydrogen peroxide	5.1	UN1511	III	Only ORM-D	5A	5A
Urea nitrate, dry or wetted with less than 20 percent water, by mass	1.1D	UN0220	II	Prohibited		
Urea nitrate, wetted with not less than 10 percent water, by mass	4.1	UN3370	I	Prohibited		
Urea nitrate, wetted with not less than 20 percent water, by mass	4.1	UN1357	I	Prohibited		
Urea peroxide, see Urea hydrogen peroxide						
<b>V</b>						
Valeraldehyde	3	UN2058	II	Only ORM-D	Prohibited	3A
Valeric acid, see Corrosive liquids, n.o.s.						
Valeryl chloride	8	UN2502	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Vanadium compound, n.o.s.	6.1	UN3285	I, II	Prohibited		
Vanadium compound, n.o.s.	6.1	UN3285	III	Only ORM-D or Consumer Commodity	6A	6A
Vanadium oxytrichloride	8	UN2443	II	Only ORM-D or Mailable Limited Quantity	8A	8A
Vanadium pentoxide, non-fused form	6.1	UN2862	III	Only ORM-D or Consumer Commodity	6A	6A
Vanadium tetrachloride	8	UN2444	I	Prohibited		
Vanadium trichloride	8	UN2475	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Vanadyl sulfate	6.1	UN2931	II	Prohibited		
Vehicle, flammable gas powered or Vehicle, fuel cell, flammable gas powered	9	UN3166	n/a	Prohibited		

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Vehicle, flammable liquid powered or Vehicle, fuel cell, flammable liquid powered	9	UN3166	n/a	Prohibited		
<i>Very signal cartridge, see Cartridges, signal</i>						
Vinyl acetate, stabilized	3	UN1301	II	Only ORM-D	Prohibited	3A
Vinyl bromide, stabilized	2.1	UN1085	n/a	Only ORM-D	Prohibited	2A
Vinyl butyrate, stabilized	3	UN2838	II	Only ORM-D	Prohibited	3A
Vinyl chloride, stabilized	2.1	UN1086	n/a	Only ORM-D	Prohibited	2A
Vinyl chloroacetate	6.1	UN2589	II	Prohibited		
Vinyl ethyl ether, stabilized	3	UN1302	I	Prohibited		
Vinyl fluoride, stabilized	2.1	UN1860	n/a	Only ORM-D	Prohibited	2A
Vinyl isobutyl ether, stabilized	3	UN1304	II	Only ORM-D	Prohibited	3A
Vinyl methyl ether, stabilized	2.1	UN1087	n/a	Only ORM-D	Prohibited	2A
<i>Vinyl nitrate polymer</i>	Forbidden			Prohibited		
Vinylidene chloride, stabilized	3	UN1303	I	Only ORM-D	Prohibited	3A
Vinylpyridines, stabilized	6.1	UN3073	II	Prohibited		
Vinyltoluenes, stabilized	3	UN2618	III	Only ORM-D	Prohibited	3A
Vinyltrichlorosilane, stabilized	3	UN1305	I	Prohibited		
<b>W</b>						
Warheads, rocket with burster or expelling charge	1.4D	UN0370	II	Prohibited		
Warheads, rocket with burster or expelling charge	1.4F	UN0371	II	Prohibited		
Warheads, rocket with bursting charge	1.1D	UN0286	II	Prohibited		
Warheads, rocket with bursting charge	1.1F	UN0369	II	Prohibited		
Warheads, rocket with bursting charge	1.2D	UN0287	II	Prohibited		
Warheads, torpedo with bursting charge	1.1D	UN0221	II	Prohibited		
Water-reactive liquid, corrosive, n.o.s.	4.3	UN3129	I	Prohibited		
Water-reactive liquid, corrosive, n.o.s.	4.3	UN3129	II, III	Only ORM-D	Prohibited	4A
Water-reactive liquid, n.o.s.	4.3	UN3148	I, II, III	Prohibited		
Water-reactive liquid, toxic, n.o.s.	4.3	UN3130	I, II, III	Prohibited		
Water-reactive solid, corrosive, n.o.s.	4.3	UN3131	I	Prohibited		
Water-reactive solid, corrosive, n.o.s.	4.3	UN3131	II, III	Only ORM-D	Prohibited	4A
Water-reactive solid, flammable, n.o.s.	4.3	UN3132	I	Prohibited		
Water-reactive solid, flammable, n.o.s.	4.3	UN3132	II, III	Only ORM-D	Prohibited	4A

Hazardous Materials Descriptions and Proper Shipping Names (a)	Hazard Class (b)	ID Number (c)	DOT PG (d)	USPS Mailability (e)	Domestic Mail Air (f)	Domestic Mail Surface (g)
Water-reactive solid, n.o.s.	4.3	UN2813	I	Prohibited		
Water-reactive solid, n.o.s.	4.3	UN2813	II, III	Only ORM-D	Prohibited	4A
Water-reactive solid, oxidizing, n.o.s.	4.3	UN3133	II, III	Prohibited		
Water-reactive solid, self-heating, n.o.s.	4.3	UN3135	I, II, III	Prohibited		
Water-reactive solid, toxic, n.o.s.	4.3	UN3134	I	Prohibited		
Water-reactive solid, toxic, n.o.s.	4.3	UN3134	II, III	Only ORM-D	Prohibited	4A
Wheel chair, electric, see Battery powered vehicle or Battery powered equipment						
White acid, see Hydrofluoric acid						
White asbestos ( <i>chrysotile, actinolite, anthophyllite, tremolite</i> )	9	UN2590	III	Only ORM-D or Consumer Commodity	9C	9C
Wood preservatives, liquid	3	UN1306	II, III	Only ORM-D	Prohibited	3A
Wool waste, wet	4.2	UN1387	III	Prohibited		
<b>X</b>						
Xanthates	4.2	UN3342	II, III	Prohibited		
Xenon, compressed	2.2	UN2036	n/a	Only ORM-D or Consumer Commodity	2B	2B
Xenon, refrigerated liquid ( <i>cryogenic liquids</i> )	2.2	UN2591	n/a	Prohibited		
Xylenes	3	UN1307	II, III	Prohibited		
Xylenols, solid	6.1	UN2261	II	Prohibited		
Xylenols, liquid	6.1	UN3430	II	Prohibited		
Xylidines, solid	6.1	UN3452	II	Prohibited		
Xylidines, liquid	6.1	UN1711	II	Prohibited		
Xylyl bromide, liquid	6.1	UN1701	II	Prohibited		
Xylyl bromide, solid	6.1	UN3417	II	Prohibited		
<i>p</i> -Xylyl diazide	Forbidden			Prohibited		
<b>Z</b>						
Zinc ammonium nitrite	5.1	UN1512	II	Prohibited		
Zinc arsenate or Zinc arsenite or Zinc arsenate and zinc arsenite mixtures	6.1	UN1712	II	Prohibited		
Zinc ashes	4.3	UN1435	III	Only ORM-D	Prohibited	4A
Zinc bisulfite solution, see Bisulfites, aqueous solutions, n.o.s.						
Zinc bromate	5.1	UN2469	III	Only ORM-D or Mailable Limited Quantity	5A	5A
Zinc chlorate	5.1	UN1513	II	Only ORM-D or Mailable Limited Quantity	5A	5A

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
Zinc chloride, anhydrous	8	UN2331	III	Prohibited		
Zinc chloride, solution	8	UN1840	III	Only ORM-D or Mailable Limited Quantity	8A	8A
Zinc cyanide	6.1	UN1713	I	Prohibited		
Zinc dithionite or Zinc hydrosulfite	9	UN1931	III	Only ORM-D or Consumer Commodity	9C	9C
Zinc fluorosilicate	6.1	UN2855	III	Only ORM-D or Consumer Commodity	6A	6A
Zinc hydrosulfite, see Zinc dithionite						
<i>Zinc muriate solution, see Zinc chloride, solution</i>						
Zinc nitrate	5.1	UN1514	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Zinc permanganate	5.1	UN1515	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Zinc peroxide	5.1	UN1516	II	Only ORM-D or Mailable Limited Quantity	5A	5A
Zinc phosphide	4.3	UN1714	I	Prohibited		
Zinc powder or Zinc dust	4.3	UN1436	I, II, III	Prohibited		
Zinc resinate	4.1	UN2714	III	Only ORM-D	Prohibited	4A
<i>Zinc selenate, see Selenates or Selenites</i>						
<i>Zinc selenite, see Selenates or Selenites</i>						
<i>Zinc silicofluoride, see Zinc fluorosilicate</i>						
Zirconium, dry, coiled wire, finished metal sheets, strip (thinner than 254 microns but not thinner than 18 microns)	4.1	UN2858	III	Only ORM-D	Prohibited	4A
Zirconium, dry, finished sheets, strip or coiled wire	4.2	UN2009	III	Prohibited		
Zirconium hydride	4.1	UN1437	II	Prohibited		
Zirconium nitrate	5.1	UN2728	III	Only ORM-D	5A	5A
Zirconium picramate, dry or wetted with less than 20 percent water, by mass	1.3C	UN0236	II	Prohibited		

<b>Hazardous Materials Descriptions and Proper Shipping Names (a)</b>	<b>Hazard Class (b)</b>	<b>ID Number (c)</b>	<b>DOT PG (d)</b>	<b>USPS Mailability (e)</b>	<b>Domestic Mail Air (f)</b>	<b>Domestic Mail Surface (g)</b>
Zirconium picramate, wetted <i>with not less than 20 percent water, by mass</i>	4.1	UN1517	I	Prohibited		
Zirconium powder, dry	4.2	UN2008	I, II, III	Prohibited		
Zirconium powder, wetted <i>with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns</i>	4.1	UN1358	II	Prohibited		
Zirconium scrap	4.2	UN1932	III	Prohibited		
Zirconium suspended in a liquid	3	UN1308	I, II	Prohibited		
Zirconium suspended in a liquid	3	UN1308	III	Only ORM-D	Prohibited	3A
Zirconium tetrachloride	8	UN2503	III	Only ORM-D or Mailable Limited Quantity	8A	8A

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## Appendix B

# Numerical Listing of Proper Shipping Names by Identification (ID) Number

This appendix contains a numerical list of the United Nations (UN) and North American (NA) identification (ID) numbers for proper shipping names of the hazardous materials listed alphabetically in Appendix [A](#). The text appearing in *italic* type is not part of the proper shipping name of the hazardous material and is used for descriptive or references purposes only. This numerical list can be used to determine the proper shipping name of a hazardous material when the UN or NA number is known. Once the proper shipping name is known, it can be referenced back to Appendix [A](#) to determine the mailability of the hazardous material.

UN0004	Ammonium picrate, <i>dry or wetted with less than 10 percent water, by mass</i>
UN0005	Cartridges for weapons, <i>with bursting charge</i>
UN0006	Cartridges for weapons, <i>with bursting charge</i>
UN0007	Cartridges for weapons, <i>with bursting charge</i>
UN0009	Ammunition, incendiary <i>with or without burster, expelling charge, or propelling charge</i>
UN0010	Ammunition, incendiary <i>with or without burster, expelling charge, or propelling charge</i>
UN0012	Cartridges for weapons, inert projectile or Cartridges, small arms
UN0014	Cartridges for weapons, blank or Cartridges, small arms, blank
UN0015	Ammunition, smoke, <i>with or without burster, expelling charge, or propelling charge</i>
UN0016	Ammunition, smoke, <i>with or without burster, expelling charge, or propelling charge</i>
UN0018	Ammunition, tear-producing <i>with burster, expelling charge, or propelling charge</i>
UN0019	Ammunition, tear-producing <i>with burster, expelling charge, or propelling charge</i>
UN0020	Ammunition, toxic <i>with burster, expelling charge, or propelling charge</i>
UN0021	Ammunition, toxic <i>with burster, expelling charge, or propelling charge</i>
NA0027	Black powder for small arms
UN0027	Black powder or Gunpowder, <i>granular or as a meal</i>
UN0028	Black powder, compressed or Gunpowder, compressed or Black powder, in pellets or Gunpowder, in pellets
UN0029	Detonators, non-electric, <i>for blasting</i>
UN0030	Detonators, electric, <i>for blasting</i>
UN0033	Bombs, <i>with bursting charge</i>
UN0034	Bombs, <i>with bursting charge</i>
UN0035	Bombs, <i>with bursting charge</i>
UN0037	Bombs, photo-flash
UN0038	Bombs, photo-flash
UN0039	Bombs, photo-flash
UN0042	Boosters, <i>without detonator</i>
UN0043	Bursters, <i>explosive</i>
UN0044	Primers, cap type
UN0048	Charges, demolition
UN0049	Cartridges, flash
UN0050	Cartridges, flash
UN0054	Cartridges, signal
UN0055	Cases, cartridge, empty with primer
UN0056	Charges, depth
UN0059	Charges, shaped, <i>without detonator</i>
UN0060	Charges, supplementary explosive
UN0065	Cord, detonating, <i>flexible</i>
UN0066	Cord, igniter
UN0070	Cutters, cable, explosive
UN0072	Cyclotrimethylenetrinitramine, wetted or Cyclonite, wetted or Hexogen, wetted or RDX, wetted <i>with not less than 15 percent water by mass</i>
UN0073	Detonators for ammunition
UN0074	Diazodinitrophenol, wetted <i>with not less than 40 percent water or mixture of alcohol and water, by mass</i>



UN0075	Diethyleneglycol dinitrate, desensitized <i>with not less than 25 percent non-volatile water-insoluble phlegmatizer, by mass</i>
UN0076	Dinitrophenol, <i>dry or wetted with less than 15 percent water, by mass</i>
UN0077	Dinitrophenolates <i>alkali metals, dry or wetted with less than 15 percent water, by mass</i>
UN0078	Dinitroresorcinol, <i>dry or wetted with less than 15 percent water, by mass</i>
UN0079	Hexanitrodiphenylamine or Dipicrylamine or Hexyl
UN0081	Explosive, blasting, type A
UN0082	Explosive, blasting, type B
UN0083	Explosive, blasting, type C
UN0084	Explosive, blasting, type D
UN0092	Flares, surface
UN0093	Flares, aerial
UN0094	Flash powder
UN0099	Fracturing devices, explosives, <i>without detonators for oil wells</i>
UN0101	Fuse, non-detonating ( <i>instantaneous or quickmatch</i> )
UN0102	Cord detonating or Fuse detonating metal clad
UN0103	Fuse, igniter <i>tubular metal clad</i>
UN0104	Cord, detonating, mild effect or Fuse, detonating, mild effect <i>metal clad</i>
UN0105	Fuse, safety
UN0106	Fuzes, detonating
UN0107	Fuzes, detonating
UN0110	Grenades, practice, <i>hand or rifle</i>
UN0113	Guanyl nitrosaminoguanilydene hydrazine, wetted <i>with not less than 30 percent water, by mass</i>
UN0114	Guanyl nitrosaminoguanilyltetrazene, wetted or Tetrazene, wetted <i>with not less than 30 percent water or mixture of alcohol and water, by mass</i>
UN0118	Hexolite, or Hexotol dry or wetted <i>with less than 15 percent water, by mass</i>
UN0121	Igniters
NA0124	Jet, perforating guns, charged <i>oil well, with detonator</i>
UN0124	Jet, perforating guns, charged <i>oil well, without detonator</i>
UN0129	Lead azide, wetted <i>with not less than 20 percent water or mixture of alcohol and water, by mass</i>
UN0130	Lead styphnate, wetted or Lead trinitroresorcinate, wetted <i>with not less than 20 percent water or mixture of alcohol and water, by mass</i>
UN0131	Lighters, fuse
UN0132	Deflagrating metal salts of aromatic nitroderivatives, n.o.s.
UN0133	Mannitol hexanitrate, wetted or Nitromannite, wetted <i>with not less than 40 percent water, or mixture of alcohol and water, by mass</i>
UN0135	Mercury fulminate, wetted <i>with not less than 20 percent water, or mixture of alcohol and water, by mass</i>
UN0136	Mines <i>with bursting charge</i>
UN0137	Mines <i>with bursting charge</i>
UN0138	Mines <i>with bursting charge</i>
UN0143	Nitroglycerin, desensitized <i>with not less than 40 percent non-volatile water insoluble phlegmatizer, by mass</i>
UN0144	Nitroglycerin, solution in alcohol, <i>with more than 1 percent but not more than 10 percent nitroglycerin</i>
UN0146	Nitrostarch, <i>dry or wetted with less than 20 percent water, by mass</i>
UN0147	Nitro urea

UN0150	Pentaerythrite tetranitrate, wetted or Pentaerythritol tetranitrate, wetted or PETN, wetted with not less than 25 percent water, by mass, or Pentaerythrite tetranitrate, or Pentaerythritol tetranitrate, or PETN, desensitized with not less than 15 percent
UN0151	Pentolite, dry or wetted with less than 15 percent water, by mass
UN0153	Trinitroaniline or Picramide
UN0154	Trinitrophenol or Picric acid, dry or wetted with less than 30 percent water, by mass
UN0155	Trinitrochlorobenzene or Picryl chloride
UN0159	Powder cake, wetted or Powder paste, wetted with not less than 25 percent water, by mass
UN0160	Powder, smokeless
UN0161	Powder, smokeless
UN0167	Projectiles, with bursting charge
UN0168	Projectiles, with bursting charge
UN0169	Projectiles, with bursting charge
UN0171	Ammunition, illuminating with or without burster, expelling charge, or propelling charge
UN0173	Release devices, explosive
UN0174	Rivets, explosive
UN0180	Rockets, with bursting charge
UN0181	Rockets, with bursting charge
UN0182	Rockets, with bursting charge
UN0183	Rockets, with inert head
UN0186	Rocket motors
UN0190	Samples, explosive, other than initiating explosives
UN0191	Signal devices, hand
UN0192	Signals, railway track, explosive
UN0193	Signals, railway track, explosive
UN0194	Signals, distress, ship
UN0195	Signals, distress, ship
UN0196	Signals, smoke
UN0197	Signals, smoke
UN0204	Sounding devices, explosive
UN0207	Tetranitroaniline
UN0208	Trinitrophenylmethylnitramine or Tetryl
UN0209	Trinitrotoluene or TNT, dry or wetted with less than 30 percent water, by mass
UN0212	Tracers for ammunition
UN0213	Trinitroanisole
UN0214	Trinitrobenzene, dry or wetted with less than 30 percent water, by mass
UN0215	Trinitrobenzoic acid, dry or wetted with less than 30 percent water, by mass
UN0216	Trinitro-meta-cresol
UN0217	Trinitronaphthalene
UN0218	Trinitrophenetole
UN0219	Trinitroresorcinol or Styphnic acid, dry or wetted with less than 20 percent water, or mixture of alcohol and water, by mass
UN0220	Urea nitrate, dry or wetted with less than 20 percent water, by mass
UN0221	Warheads, torpedo with bursting charge
UN0222	Ammonium nitrate, with more than 0.2 percent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance
UN0224	Barium azide, dry or wetted with less than 50 percent water, by mass

UN0225	Boosters with detonator
UN0226	Cyclotetramethylenetetranitramine, wetted or HMX, wetted or Octogen, wetted <i>with not less than 15 percent water, by mass</i>
UN0234	Sodium dinitro- <i>o</i> -cresolate, <i>dry or wetted with less than 15 percent water, by mass</i>
UN0235	Sodium picramate, <i>dry or wetted with less than 20 percent water, by mass</i>
UN0236	Zirconium picramate, <i>dry or wetted with less than 20 percent water, by mass</i>
UN0237	Charges, shaped, flexible, linear
UN0238	Rockets, line-throwing
UN0240	Rockets, line-throwing
UN0241	Explosive, blasting, type E
UN0242	Charges, propelling, for cannon
UN0243	Ammunition, incendiary, white phosphorus, <i>with burster, expelling charge, or propelling charge</i>
UN0244	Ammunition, incendiary, white phosphorus, <i>with burster, expelling charge, or propelling charge</i>
UN0245	Ammunition smoke, white phosphorus <i>with burster, expelling charge, or propelling charge</i>
UN0246	Ammunition, smoke, white phosphorus <i>with burster, expelling charge, or propelling charge</i>
UN0247	Ammunition, incendiary <i>liquid or gel, with burster, expelling charge, or propelling charge</i>
UN0248	Contrivances, water-activated, <i>with burster, expelling charge, or propelling charge</i>
UN0249	Contrivances, water-activated, <i>with burster, expelling charge, or propelling charge</i>
UN0250	Rocket motors with hypergolic liquids <i>with or without an expelling charge</i>
UN0254	Ammunition, illuminating <i>with or without burster, expelling charge, or propelling charge</i>
UN0255	Detonators, electric, for blasting
UN0257	Fuzes, detonating
UN0266	Octolite or Octol, <i>dry or wetted with less than 15 percent water, by mass</i>
UN0267	Detonators, non-electric, <i>for blasting</i>
UN0268	Boosters with detonator
UN0271	Charges, propelling
UN0272	Charges, propelling
UN0275	Cartridges, power device
NA0276	Model rocket motor
UN0276	Cartridges, power device
UN0277	Cartridges, oil well
UN0278	Cartridges, oil well
UN0279	Charges, propelling, for cannon
UN0280	Rocket motors
UN0281	Rocket motors
UN0282	Nitroguanidine or Picrite, <i>dry or wetted with less than 20 percent water, by mass</i>
UN0283	Boosters, <i>without detonator</i>
UN0284	Grenades, <i>hand or rifle, with bursting charge</i>
UN0285	Grenades, <i>hand or rifle, with bursting charge</i>
UN0286	Warheads, rocket <i>with bursting charge</i>
UN0287	Warheads, rocket <i>with bursting charge</i>
UN0288	Charges, shaped, flexible, linear
UN0289	Cord, detonating, <i>flexible</i>
UN0290	Cord, detonating or Fuse, detonating <i>metal clad</i>
UN0291	Bombs, <i>with bursting charge</i>
UN0292	Grenades, <i>hand or rifle, with bursting charge</i>

UN0293	Grenades, <i>hand or rifle, with bursting charge</i>
UN0294	Mines <i>with bursting charge</i>
UN0295	Rockets, <i>with bursting charge</i>
UN0296	Sounding devices, explosive
UN0297	Ammunition, illuminating <i>with or without burster, expelling charge, or propelling charge</i>
UN0299	Bombs, photo-flash
UN0300	Ammunition, incendiary <i>with or without burster, expelling charge, or propelling charge</i>
UN0301	Ammunition, tear-producing <i>with burster, expelling charge, or propelling charge</i>
UN0303	Ammunition, smoke, <i>with or without burster, expelling charge, or propelling charge</i>
UN0305	Flash powder
UN0306	Tracers for ammunition
UN0312	Cartridges, signal
UN0313	Signals, smoke
UN0314	Igniters
UN0315	Igniters
UN0316	Fuzes, igniting
UN0317	Fuzes, igniting
UN0318	Grenades, practice, <i>hand or rifle</i>
UN0319	Primers, tubular
UN0320	Primers, tubular
UN0321	Cartridges for weapons, <i>with bursting charge</i>
UN0322	Rocket motors with hypergolic liquids <i>with or without an expelling charge</i>
NA0323	Model rocket motor
UN0323	Cartridges, power device
UN0324	Projectiles, <i>with bursting charge</i>
UN0325	Igniters
UN0326	Cartridges for weapons, blank
UN0327	Cartridges for weapons, blank <i>or</i> Cartridges, small arms, blank
UN0328	Cartridges for weapons, inert projectile
UN0329	Torpedoes <i>with bursting charge</i>
UN0330	Torpedoes <i>with bursting charge</i>
NA0331	Ammonium nitrate–fuel oil mixture containing only prilled ammonium nitrate and fuel oil
UN0331	Explosive, blasting, type B <i>or</i> Agent blasting, Type B
UN0332	Explosive, blasting, type E <i>or</i> Agent blasting, Type E
UN0333	Fireworks
UN0334	Fireworks
UN0335	Fireworks
UN0336	Fireworks
NA0337	Toy caps
UN0337	Fireworks
UN0338	Cartridges for weapons, blank <i>or</i> Cartridges, small arms, blank
UN0339	Cartridges for weapons, inert projectile <i>or</i> Cartridges, small arms
UN0340	Nitrocellulose, <i>dry or wetted with less than 25 percent water (or alcohol), by mass</i>
UN0341	Nitrocellulose, <i>unmodified or plasticized with less than 18 percent plasticizing substance, by mass</i>
UN0342	Nitrocellulose, <i>wetted with not less than 25 percent alcohol, by mass</i>
UN0343	Nitrocellulose, <i>plasticized with not less than 18 percent plasticizing substance, by mass</i>

UN0344	Projectiles, <i>with bursting charge</i>
UN0345	Projectiles, <i>inert with tracer</i>
UN0346	Projectiles, <i>with burster or expelling charge</i>
UN0347	Projectiles, <i>with burster or expelling charge</i>
UN0348	Cartridges for weapons, <i>with bursting charge</i>
NA0349	Grenades, empty primed
UN0349	Articles, explosive, n.o.s.
UN0350	Articles, explosive, n.o.s.
UN0351	Articles, explosive, n.o.s.
UN0352	Articles, explosive, n.o.s.
UN0353	Articles, explosive, n.o.s.
UN0354	Articles, explosive, n.o.s.
UN0355	Articles, explosive, n.o.s.
UN0356	Articles, explosive, n.o.s.
UN0357	Substances, explosive, n.o.s.
UN0358	Substances, explosive, n.o.s.
UN0359	Substances, explosive, n.o.s.
UN0360	Detonator assemblies, non–electric <i>for blasting</i>
UN0361	Detonator assemblies, non–electric <i>for blasting</i>
UN0362	Ammunition, practice
UN0363	Ammunition, proof
UN0364	Detonators for ammunition
UN0365	Detonators for ammunition
UN0366	Detonators for ammunition
UN0367	Fuzes, detonating
UN0368	Fuzes, igniting
UN0369	Warheads, rocket <i>with bursting charge</i>
UN0370	Warheads, rocket <i>with burster or expelling charge</i>
UN0371	Warheads, rocket <i>with burster or expelling charge</i>
UN0372	Grenades, practice, <i>hand or rifle</i>
UN0373	Signal devices, hand
UN0374	Sounding devices, explosive
UN0375	Sounding devices, explosive
UN0376	Primers, tubular
UN0377	Primers, cap type
UN0378	Primers, cap type
UN0379	Cases, cartridges, empty with primer
UN0380	Articles, pyrophoric
UN0381	Cartridges, power device
UN0382	Components, explosive train, n.o.s.
UN0383	Components, explosive train, n.o.s.
UN0384	Components, explosive train, n.o.s.
UN0385	5–Nitrobenzotriazol
UN0386	Trinitrobenzenesulfonic acid
UN0387	Trinitrofluorenone

UN0388	Trinitrotoluene and Trinitrobenzene mixtures or TNT and trinitrobenzene mixtures or TNT and hexanitrostilbene mixtures or Trinitrotoluene and hexanitrostilbene mixtures
UN0389	Trinitrotoluene mixtures containing Trinitrobenzene and Hexanitrostilbene or TNT mixtures containing trinitrobenzene and hexanitrostilbene
UN0390	Tritonal
UN0391	RDX and HMX mixtures, <i>wetted with not less than 15 percent water by mass or RDX and HMX mixtures, desensitized with not less than 10 percent phlegmatizer by mass</i>
UN0392	Hexanitrostilbene
UN0393	Hexotonal
UN0394	Trinitroresorcinol, <i>wetted or Styphnic acid, wetted with not less than 20 percent water, or mixture of alcohol and water, by mass</i>
UN0395	Rocket motors, liquid fueled
UN0396	Rocket motors, liquid fueled
UN0397	Rockets, liquid fueled <i>with bursting charge</i>
UN0398	Rockets, liquid fueled <i>with bursting charge</i>
UN0399	Bombs with flammable liquid, <i>with bursting charge</i>
UN0400	Bombs with flammable liquid, <i>with bursting charge</i>
UN0401	Dipicryl sulfide, <i>dry or wetted with less than 10 percent water, by mass</i>
UN0402	Ammonium perchlorate
UN0403	Flares, aerial
UN0404	Flares, aerial
UN0405	Cartridges, signal
UN0406	Dinitrosobenzene
UN0407	Tetrazol-1-acetic acid
UN0408	Fuzes, detonating, <i>with protective features</i>
UN0409	Fuzes, detonating, <i>with protective features</i>
UN0410	Fuzes, detonating, <i>with protective features</i>
UN0411	Pentaerythrite tetranitrate or Pentaerythritol tetranitrate or PETN, <i>with not less than 7 percent wax by mass</i>
UN0412	Cartridges for weapons, <i>with bursting charge</i>
UN0413	Cartridges for weapons, blank
UN0414	Charges, propelling, for cannon
UN0415	Charges, propelling
UN0417	Cartridges for weapons, inert projectile or Cartridges, small arms
UN0418	Flares, surface
UN0419	Flares, surface
UN0420	Flares, aerial
UN0421	Flares, aerial
UN0424	Projectiles, <i>inert with tracer</i>
UN0425	Projectiles, <i>inert with tracer</i>
UN0426	Projectiles, <i>with burster or expelling charge</i>
UN0427	Projectiles, <i>with burster or expelling charge</i>
UN0428	Articles, pyrotechnic <i>for technical purposes</i>
UN0429	Articles, pyrotechnic <i>for technical purposes</i>
UN0430	Articles, pyrotechnic <i>for technical purposes</i>
UN0431	Articles, pyrotechnic <i>for technical purposes</i>
UN0432	Articles, pyrotechnic <i>for technical purposes</i>

UN0433	Powder cake, wetted <i>or</i> Powder paste, wetted <i>with not less than 17 percent alcohol by mass</i>
UN0434	Projectiles, <i>with burster or expelling charge</i>
UN0435	Projectiles, <i>with burster or expelling charge</i>
UN0436	Rockets, <i>with expelling charge</i>
UN0437	Rockets, <i>with expelling charge</i>
UN0438	Rockets, <i>with expelling charge</i>
UN0439	Charges, shaped, <i>without detonator</i>
UN0440	Charges, shaped, <i>without detonator</i>
UN0441	Charges, shaped, <i>without detonator</i>
UN0442	Charges, explosive, commercial <i>without detonator</i>
UN0443	Charges, explosive, commercial <i>without detonator</i>
UN0444	Charges, explosive, commercial <i>without detonator</i>
UN0445	Charges, explosive, commercial <i>without detonator</i>
UN0446	Cases, combustible, empty, without primer
UN0447	Cases, combustible, empty, without primer
UN0448	5–Mercaptotetrazol–1–acetic acid
UN0449	Torpedoes, liquid fueled, <i>with or without bursting charge</i>
UN0450	Torpedoes, liquid fueled, <i>with inert head</i>
UN0451	Torpedoes <i>with bursting charge</i>
UN0452	Grenades, practice, <i>hand or rifle</i>
UN0453	Rockets, <i>line–throwing</i>
UN0454	Igniters
UN0455	Detonators, non–electric, <i>for blasting</i>
UN0456	Detonators, electric, <i>for blasting</i>
UN0457	Charges, bursting, plastics bonded
UN0458	Charges, bursting, plastics bonded
UN0459	Charges, bursting, plastics bonded
UN0460	Charges, bursting, plastics bonded
UN0461	Components, explosive train, n.o.s.
UN0462	Articles, explosive, n.o.s.
UN0463	Articles, explosive, n.o.s.
UN0464	Articles, explosive, n.o.s.
UN0465	Articles, explosive, n.o.s.
UN0466	Articles, explosive, n.o.s.
UN0467	Articles, explosive, n.o.s.
UN0468	Articles, explosive, n.o.s.
UN0469	Articles, explosive, n.o.s.
UN0470	Articles, explosive, n.o.s.
UN0471	Articles, explosive, n.o.s.
UN0472	Articles, explosive, n.o.s.
NA0473	Barium styphnate <i>or</i> Lead mononitroresorcinate
UN0473	Substances, explosive, n.o.s.
UN0474	Substances, explosive, n.o.s.
UN0475	Substances, explosive, n.o.s.
UN0476	Substances, explosive, n.o.s.
UN0477	Substances, explosive, n.o.s.

UN0478	Substances, explosive, n.o.s.
UN0479	Substances, explosive, n.o.s.
UN0480	Substances, explosive, n.o.s.
UN0481	Substances, explosive, n.o.s.
UN0482	Substances, explosive, very insensitive, n.o.s., or Substances, EVI, n.o.s.
UN0483	Cyclotrimethylenetrinitramine, desensitized or Cyclonite, desensitized or Hexogen, desensitized or RDX, desensitized
UN0484	Cyclotetramethylenetetranitramine, desensitized or Octogen, desensitized or HMX, desensitized
UN0485	Substances, explosive, n.o.s.
UN0486	Articles, explosive, extremely insensitive or Articles, EEI
UN0487	Signals, smoke
UN0488	Ammunition, practice
UN0489	Dinitroglycoluril or Dingu
UN0490	Nitrotriazolone or NTO
UN0491	Charges, propelling
UN0492	Signals, railway track, explosive
UN0493	Signals, railway track, explosive
NA0494	Jet, perforating guns, charged oil well, with detonator
UN0494	Jet, perforating guns, charged oil well, without detonator
UN0495	Propellant, liquid
UN0496	Octonal
UN0497	Propellant, liquid
UN0498	Propellant, solid
UN0499	Propellant, solid
UN0500	Detonator assemblies, non-electric for blasting
UN0503	Air bag inflators, or Air bag modules, or Seatbelt pretensioners
UN0504	1H-Tetrazole
UN1001	Acetylene, dissolved
UN1002	Air, compressed
UN1003	Air, refrigerated liquid, (cryogenic liquid) or Air, refrigerated liquid (cryogenic liquid) non-pressurized
UN1005	Ammonia, anhydrous
UN1006	Argon, compressed
UN1008	Boron trifluoride
UN1009	Bromotrifluoromethane or Refrigerant gas, R 13B1
UN1010	Butadienes, stabilized or Butadienes and Hydrocarbon mixture, stabilized containing more than 40% butadienes
UN1011	Butane see also Petroleum gases, liquified
UN1012	Butylene see also Petroleum gases, liquified
UN1013	Carbon dioxide
UN1016	Carbon monoxide, compressed
UN1017	Chlorine
UN1018	Chlorodifluoromethane or Refrigerant gas R 22
UN1020	Chloropentafluoroethane or Refrigerant gas R 115
UN1021	1-Chloro-1,2,2,2-tetrafluoroethane or Refrigerant gas R 124
UN1022	Chlorotrifluoromethane or Refrigerant gas R 13
UN1023	Coal gas, compressed



UN1026	Cyanogen
UN1027	Cyclopropane
UN1028	Dichlorodifluoromethane <i>or</i> Refrigerant gas R 12
UN1029	Dichlorofluoromethane <i>or</i> Refrigerant gas R 21
UN1030	1,1-Difluoroethane <i>or</i> Refrigerant gas R 152a
UN1032	Dimethylamine, anhydrous
UN1033	Dimethyl ether
UN1035	Ethane
UN1036	Ethylamine
UN1037	Ethyl chloride
UN1038	Ethylene, refrigerated liquid ( <i>cryogenic liquid</i> )
UN1039	Ethyl methyl ether
UN1040	Ethylene oxide <i>or</i> Ethylene oxide with nitrogen <i>up to a total pressure of 1MPa (10 bar) at 50° C</i>
UN1041	Ethylene oxide and carbon dioxide mixtures <i>with more than 9 percent but not more than 87 percent ethylene oxide</i>
UN1043	Fertilizer ammoniating solution <i>with free ammonia</i>
UN1044	Fire extinguishers containing <i>compressed or liquified gas</i>
UN1045	Fluorine, compressed
UN1046	Helium, compressed
UN1048	Hydrogen bromide, anhydrous
UN1049	Hydrogen, compressed
UN1050	Hydrogen chloride, anhydrous
UN1051	Hydrogen cyanide, stabilized <i>with less than 3 percent water</i>
UN1052	Hydrogen fluoride, anhydrous
UN1053	Hydrogen sulfide
UN1055	Isobutylene <i>see also Petroleum gases, liquified</i>
UN1056	Krypton, compressed
UN1057	Lighters <i>or</i> Lighter refills <i>cigarettes, containing flammable gas</i>
UN1058	Liquified gases, <i>nonflammable charged with nitrogen, carbon dioxide, or air</i>
UN1060	Methyl acetylene and propadiene mixtures, stabilized
UN1061	Methylamine, anhydrous
UN1062	Methyl bromide
UN1063	Methyl chloride, <i>or</i> Refrigerant gas R 40
UN1064	Methyl mercaptan
UN1065	Neon, compressed
UN1066	Nitrogen, compressed
UN1067	Dinitrogen tetroxide
UN1069	Nitrosyl chloride
UN1070	Nitrous oxide
UN1071	Oil gas, compressed
UN1072	Oxygen, compressed
UN1073	Oxygen, refrigerated liquid ( <i>cryogenic liquid</i> )
UN1075	Petroleum gases, liquified <i>or</i> Liquified petroleum gas
UN1076	Phosgene
UN1077	Propylene <i>see also Petroleum gases, liquified</i>
UN1078	Refrigerant gases, n.o.s.

UN1079	Sulfur dioxide
UN1080	Sulfur hexafluoride
UN1081	Tetrafluoroethylene, stabilized
UN1082	Trifluorochloroethylene, stabilized
UN1083	Trimethylamine, anhydrous
UN1085	Vinyl bromide, stabilized
UN1086	Vinyl chloride, stabilized
UN1087	Vinyl methyl ether, stabilized
UN1088	Acetal
UN1089	Acetaldehyde
UN1090	Acetone
UN1091	Acetone oils
UN1092	Acrolein, stabilized
UN1093	Acrylonitrile, stabilized
UN1098	Allyl alcohol
UN1099	Allyl bromide
UN1100	Allyl chloride
UN1104	Amyl acetates
UN1105	Pentanol
UN1106	Amylamines
UN1107	Amyl chlorides
UN1108	1-Pentene (n-amylene)
UN1109	Amyl formates
UN1110	n-Amyl methyl ketone
UN1111	Amyl mercaptans
UN1112	Amyl nitrate
UN1113	Amyl nitrites
UN1114	Benzene
UN1120	Butanol
UN1123	Butyl acetates
UN1125	n-Butylamine
UN1126	1-Bromobutane
UN1127	Chlorobutanes
UN1128	n-Butyl formate
UN1129	Butyraldehyde
UN1130	Camphor oil
UN1131	Carbon disulfide
UN1133	Adhesives, <i>containing a flammable liquid</i>
UN1134	Chlorobenzene
UN1135	Ethylene chlorohydrin
UN1136	Coal tar distillates, flammable
UN1139	Coating solution ( <i>includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining</i> )
UN1143	Crotonaldehyde, or Crotonaldehyde, stabilized
UN1144	Crotonylene
UN1145	Cyclohexane

UN1146	Cyclopentane
UN1148	Diacetone alcohol
UN1149	Dibutyl ethers
UN1150	1,2-Dichloroethylene
UN1152	Dichloropentanes
UN1153	Ethylene glycol diethyl ether
UN1154	Diethylamine
UN1155	Diethyl ether or Ethyl ether
UN1156	Diethyl ketone
UN1157	Diisobutyl ketone
UN1158	Diisopropylamine
UN1159	Diisopropyl ether
UN1160	Dimethylamine solution
UN1161	Dimethyl carbonate
UN1162	Dimethyldichlorosilane
UN1163	Dimethylhydrazine, unsymmetrical
UN1164	Dimethyl sulfide
UN1165	Dioxane
UN1166	Dioxolane
UN1167	Divinyl ether, stabilized
UN1169	Extracts, aromatic, liquid
UN1170	Ethanol <i>or</i> Ethyl alcohol <i>or</i> Ethanol solutions <i>or</i> Ethyl alcohol solutions
UN1171	Ethylene glycol monoethyl ether
UN1172	Ethylene glycol monoethyl ether acetate
UN1173	Ethyl acetate
UN1175	Ethylbenzene
UN1176	Ethyl borate
UN1177	2-Ethylbutyl acetate
UN1178	2-Ethylbutyraldehyde
UN1179	Ethyl butyl ether
UN1180	Ethyl butyrate
UN1181	Ethyl chloroacetate
UN1182	Ethyl chloroformate
UN1183	Ethylchlorosilane
UN1184	Ethylene dichloride
UN1185	Ethyleneimine, stabilized
UN1188	Ethylene glycol monomethyl ether
UN1189	Ethylene glycol monomethyl ether acetate
UN1190	Ethyl formate
UN1191	Octyl aldehydes
UN1192	Ethyl lactate
UN1193	Ethyl methyl ketone <i>or</i> Methyl ethyl ketone
UN1194	Ethyl nitrate solutions
UN1195	Ethyl propionate
UN1196	Ethyltrichlorosilane
UN1197	Extracts, flavoring, liquid

UN1198	Formaldehyde, solutions, flammable
UN1199	Furaldehydes
UN1201	Fusel oil
UN1202	Diesel fuel
NA1203	Gasohol <i>gasoline mixed with ethyl alcohol, with not more than 20 percent alcohol</i>
UN1203	Gasoline
UN1204	Nitroglycerin, solution in alcohol, <i>with not more than 1 percent nitroglycerin</i>
UN1206	Heptanes
UN1207	Hexaldehyde
UN1208	Hexanes
UN1210	Printing ink, <i>flammable</i>
UN1212	Isobutanol <i>or</i> Isobutyl alcohol
UN1213	Isobutyl acetate
UN1214	Isobutylamine
UN1216	Isooctenes
UN1218	Isoprene, inhibited
UN1219	Isopropanol <i>or</i> Isopropyl alcohol
UN1220	Isopropyl acetate
UN1221	Isopropylamine
UN1222	Isopropyl nitrate
UN1223	Kerosene
UN1224	Ketones, liquid, n.o.s.
NA1226	Lighters for cigars, cigarettes, <i>etc.</i> , <i>with lighter fluids</i>
UN1228	Mercaptans, liquid, flammable, toxic, n.o.s. <i>or</i> Mercaptan mixtures, liquid, flammable, toxic, n.o.s.
UN1229	Mesityl oxide
UN1230	Methanol
UN1231	Methyl acetate
UN1233	Methylamyl acetate
UN1234	Methylal
UN1235	Methylamine, aqueous solution
UN1237	Methyl butyrate
UN1238	Methyl chloroformate
UN1239	Methyl chloromethyl ether
UN1242	Methyldichlorosilane
UN1243	Methyl formate
UN1244	Methylhydrazine
UN1245	Methyl isobutyl ketone
UN1246	Methyl isopropenyl ketone, inhibited
UN1247	Methyl methacrylate monomer, inhibited
UN1248	Methyl propionate
UN1249	Methyl propyl ketone
UN1250	Methyltrichlorosilane
UN1251	Methyl vinyl ketone, stabilized
UN1259	Nickel carbonyl
UN1261	Nitromethane
UN1262	Octanes

UN1263	Paint <i>including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base, or Paint related material including paint thinning, drying, removing, or reducing compound</i>
UN1264	Paraldehyde
UN1265	Pentanes
UN1266	Perfumery products <i>with flammable solvents</i>
UN1267	Petroleum crude oil
UN1268	Petroleum distillates, n.o.s. <i>or</i> Petroleum products, n.o.s.
NA1270	Petroleum oil
UN1272	Pine oil
UN1274	n-Propanol <i>or</i> Propyl alcohol, normal
UN1275	Propionaldehyde
UN1276	n-Propyl acetate
UN1277	Propylamine
UN1278	1-Chloropropane
UN1279	1,2-Dichloropropane
UN1280	Propylene oxide
UN1281	Propyl formates
UN1282	Pyridine
UN1286	Rosin oil
UN1287	Rubber solution
UN1288	Shale Oil
UN1289	Sodium methylate solutions in alcohol
UN1292	Tetraethyl silicate
UN1293	Tinctures, medicinal
UN1294	Toluene
UN1295	Trichlorosilane
UN1296	Triethylamine
UN1297	Trimethylamine, aqueous solutions <i>with not more than 50 percent trimethylamine by mass</i>
UN1298	Trimethylchlorosilane
UN1299	Turpentine
UN1300	Turpentine substitute
UN1301	Vinyl acetate, stabilized
UN1302	Vinyl ethyl ether, stabilized
UN1303	Vinylidene chloride, stabilized
UN1304	Vinyl isobutyl ether, stabilized
UN1305	Vinyltrichlorosilane, stabilized
UN1306	Wood preservatives, liquid
UN1307	Xylenes
UN1308	Zirconium suspended in a liquid
UN1309	Aluminum powder, coated
UN1310	Ammonium picrate, wetted <i>with not less than 10 percent water, by mass</i>
UN1312	Borneol
UN1313	Calcium resinate
UN1314	Calcium resinate, fused
UN1318	Cobalt resinate, precipitated

UN1320	Dinitrophenol, wetted <i>with not less than 15 percent water, by mass</i>
UN1321	Dinitrophenolates, wetted <i>with not less than 15 percent water, by mass</i>
UN1322	Dinitroresorcinol, wetted <i>with not less than 15 percent water, by mass</i>
UN1323	Ferrocenium
UN1324	Films, nitrocellulose base, <i>gelatine coated (except scrap)</i>
NA1325	Fusee (railway or highway) or Medicines, flammable, solid, n.o.s.
UN1325	Flammable solids, organic, n.o.s.
UN1326	Hafnium powder, wetted <i>with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns</i>
UN1328	Hexamethylenetetramine
UN1330	Manganese resinate
UN1331	Matches, strike anywhere
UN1332	Metaldehyde
UN1333	Cerium, <i>slabs, ingots, or rods</i>
UN1334	Naphthalene, crude or Naphthalene, refined
UN1336	Nitroguanidine, wetted or Picrite, wetted <i>with not less than 20 percent water, by mass</i>
UN1337	Nitrostarch, wetted <i>with not less than 20 percent water, by mass</i>
UN1338	Phosphorus, amorphous
UN1339	Phosphorus heptasulfide, <i>free from yellow or white phosphorus</i>
UN1340	Phosphorus pentasulfide, <i>free from yellow or white phosphorus</i>
UN1341	Phosphorus sesquisulfide, <i>free from yellow or white phosphorus</i>
UN1343	Phosphorus trisulfide, <i>free from yellow or white phosphorus</i>
NA1344	Picric acid, wet, <i>with not less than 10 percent water</i>
UN1344	Trinitrophenol, wetted <i>with not less than 30 percent water, by mass</i>
UN1346	Silicon powder, amorphous
UN1347	Silver picrate, wetted <i>with not less than 30 percent water, by mass</i>
UN1348	Sodium dinitro- <i>o</i> -cresolate, wetted <i>with not less than 15 percent water, by mass</i>
UN1349	Sodium picramate, wetted <i>with not less than 20 percent water, by mass</i>
NA1350	Sulfur
UN1350	Sulfur
UN1352	Titanium powder, wetted <i>with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns</i>
UN1353	Fibers or Fabrics impregnated with weakly nitrated nitrocellulose, n.o.s.
UN1355	Trinitrobenzoic acid, wetted <i>with not less than 30 percent water, by mass</i>
UN1356	Trinitrotoluene wetted <i>with not less than 30 percent water, by mass</i>
UN1357	Urea nitrate, wetted <i>with not less than 20 percent water, by mass</i>
UN1358	Zirconium powder, wetted <i>with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns</i>
UN1360	Calcium phosphide
NA1361	Charcoal briquettes, <i>shell, screenings, wood, etc.</i>
UN1361	Carbon, <i>animal or vegetable origin</i>
UN1362	Carbon, activated
UN1363	Copra
UN1364	Cotton waste, oily

NA1365	Cotton
UN1365	Cotton, wet
UN1369	p-Nitrosodimethylaniline
UN1372	Fibers, animal or Fibers, vegetable <i>burnt, wet or damp</i>
UN1373	Fibers or Fabrics, animal or vegetable or Synthetic, n.o.s. <i>with animal or vegetable oil</i>
UN1374	Fish meal, unstabilized or Fish scrap, unstabilized
UN1376	Iron oxide, spent, or Iron sponge, spent <i>obtained from coal gas purification</i>
UN1378	Metal catalyst, wetted <i>with a visible excess of liquid</i>
UN1379	Paper, unsaturated oil treated <i>incompletely dried (including carbon paper)</i>
UN1380	Pentaporane
UN1381	Phosphorus, white dry or Phosphorus, white, under water or Phosphorus white, in solution or Phosphorus, yellow dry or Phosphorus, yellow, under water or Phosphorus, yellow, in solution
UN1382	Potassium sulfide, anhydrous or Potassium sulfide <i>with less than 30 percent water of crystallization</i>
UN1383	Pyrophoric metals, n.o.s. or Pyrophoric alloys, n.o.s.
UN1384	Sodium dithionite or Sodium hydrosulfite
UN1385	Sodium sulfide, anhydrous or Sodium sulfide <i>with less than 30 percent water of crystallization</i>
UN1386	Seed cake, <i>containing vegetable oil solvent extractions and expelled seeds, with not more than 10 percent of oil and when the amount of moisture is higher than 11 percent, with not more than 20 percent of oil and moisture combined or Seed cake with more than 1.5 percent oil and not more than 11 percent moisture</i>
UN1387	Wool waste, wet
UN1389	Alkali metal amalgam, liquid
UN1390	Alkali metal amides
UN1391	Alkali metal dispersions, or Alkaline earth metal dispersions
UN1392	Alkaline earth metal amalgams, liquid
UN1393	Alkaline earth metal alloys, n.o.s.
UN1394	Aluminum carbide
UN1395	Aluminum ferrosilicon powder
UN1396	Aluminum powder, uncoated
UN1397	Aluminum phosphide
UN1398	Aluminum silicon powder, uncoated
UN1400	Barium
UN1401	Calcium
UN1402	Calcium carbide
UN1403	Calcium cyanamide <i>with more than 0.1 percent of calcium carbide</i>
UN1404	Calcium hydride
UN1405	Calcium silicide
UN1407	Cesium or Caesium
UN1408	Ferrosilicon, <i>with 30 percent or more but less than 90 percent silicon</i>
UN1409	Metal hydrides, water-reactive, n.o.s.
UN1410	Lithium aluminum hydride
UN1411	Lithium aluminum hydride, ethereal
UN1413	Lithium borohydride
UN1414	Lithium hydride
UN1415	Lithium
UN1417	Lithium silicon
UN1418	Magnesium, powder or Magnesium alloys, powder

UN1419	Magnesium aluminum phosphide
UN1420	Potassium, metal alloys
UN1421	Alkali metal alloys, liquid, n.o.s.
UN1422	Potassium sodium alloys
UN1423	Rubidium
UN1426	Sodium borohydride
UN1427	Sodium hydride
UN1428	Sodium
UN1431	Sodium methylate
UN1432	Sodium phosphide
UN1433	Stannic phosphide
UN1435	Zinc ashes
UN1436	Zinc powder <i>or</i> Zinc dust
UN1437	Zirconium hydride
UN1438	Aluminum, nitrate
UN1439	Ammonium dichromate
UN1442	Ammonium perchlorate
UN1444	Ammonium persulfate
UN1445	Barium chlorate, solid
UN1446	Barium nitrate
UN1447	Barium perchlorate, solid
UN1448	Barium permanganate
UN1449	Barium peroxide
UN1450	Bromates, inorganic, n.o.s.
UN1451	Cesium nitrate <i>or</i> Caesium nitrate
UN1452	Calcium chlorate
UN1453	Calcium chlorite
UN1454	Calcium nitrate
UN1455	Calcium perchlorate
UN1456	Calcium permanganate
UN1457	Calcium peroxide
UN1458	Chlorate and borate mixtures
UN1459	Chlorate and magnesium chloride mixture, solid
UN1461	Chlorates, inorganic, n.o.s.
UN1462	Chlorites, inorganic, n.o.s.
NA1463	Chromic acid, solid
UN1463	Chromium trioxide, anhydrous
UN1465	Didymium nitrate
UN1466	Ferric nitrate
UN1467	Guanidine nitrate
UN1469	Lead nitrate
UN1470	Lead perchlorate, solid <i>or</i> Lead perchlorate, solution
UN1471	Lithium hypochlorite, dry <i>or</i> Lithium hypochlorite mixtures, dry
UN1472	Lithium peroxide
UN1473	Magnesium bromate
UN1474	Magnesium nitrate



UN1475	Magnesium perchlorate
UN1476	Magnesium peroxide
UN1477	Nitrates, inorganic, n.o.s.
NA1479	Medicines, oxidizing substance, solid, n.o.s.
UN1479	Oxidizing solid, n.o.s.
UN1481	Perchlorates, inorganic, n.o.s.
UN1482	Permanganates, inorganic, n.o.s.
UN1483	Peroxides, inorganic, n.o.s.
UN1484	Potassium bromate
UN1485	Potassium chlorate
UN1486	Potassium nitrate
UN1487	Potassium nitrate and sodium nitrite mixtures
UN1488	Potassium nitrite
UN1489	Potassium perchlorate, solid <i>or</i> Potassium perchlorate, solution
UN1490	Potassium permanganate
UN1491	Potassium peroxide
UN1492	Potassium persulfate
UN1493	Silver nitrate
UN1494	Sodium bromate
UN1495	Sodium chlorate
UN1496	Sodium chlorite
UN1498	Sodium nitrate
UN1499	Sodium nitrate and potassium nitrate mixtures
UN1500	Sodium nitrite
UN1502	Sodium perchlorate
UN1503	Sodium permanganate
UN1504	Sodium peroxide
UN1505	Sodium persulfate
UN1506	Strontium chlorate
UN1507	Strontium nitrate
UN1508	Strontium perchlorate
UN1509	Strontium peroxide
UN1510	Tetranitromethane
UN1511	Urea hydrogen peroxide
UN1512	Zinc ammonium nitrite
UN1513	Zinc chlorate
UN1514	Zinc nitrate
UN1515	Zinc permanganate
UN1516	Zinc peroxide
UN1517	Zirconium picramate, wetted <i>with not less than 20 percent water, by mass</i>
UN1541	Acetone cyanohydrin, stabilized
UN1544	Alkaloids, solid, n.o.s. <i>or</i> Alkaloid salts, solid, n.o.s. <i>poisonous</i>
UN1545	Allyl isothiocyanate, stabilized
UN1546	Ammonium arsenate
UN1547	Aniline
UN1548	Aniline hydrochloride

NA1549	Antimony tribromide, solution <i>or</i> Antimony, trifluoride, solid <i>or</i> Antimony, trifluoride, solution <i>or</i> Antimony tribromide, solid
UN1549	Antimony compounds, inorganic, solid, n.o.s.
UN1550	Antimony lactate
UN1551	Antimony potassium tartrate
UN1553	Arsenic acid, liquid
UN1554	Arsenic acid, solid
UN1555	Arsenic bromide
NA1556	Methyldichloroarsine
UN1556	Arsenic compounds, liquid, n.o.s. <i>inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</i>
NA1557	Arsenic sulfide <i>or</i> Arsenic trisulfide
UN1557	Arsenic compounds, solid, n.o.s. <i>inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</i>
UN1558	Arsenic
UN1559	Arsenic pentoxide
UN1560	Arsenic trichloride
UN1561	Arsenic trioxide
UN1562	Arsenical dust
UN1564	Barium compounds, n.o.s.
UN1565	Barium cyanide
UN1566	Beryllium compounds, n.o.s.
UN1567	Beryllium, powder
UN1569	Bromoacetone
UN1570	Brucine
UN1571	Barium azide, wetted with not less than 50 percent water, by mass
UN1572	Cacodylic acid
UN1573	Calcium arsenate
NA1574	Calcium arsenite, solid
UN1574	Calcium arsenate and calcium arsenite, mixtures, solid
UN1575	Calcium cyanide
UN1577	Chlorodinitrobenzenes, liquid
UN1578	Chloronitrobenzene, solid
UN1579	4-Chloro-o-toluidine hydrochloride, solid
UN1580	Chloropicrin
UN1581	Chloropicrin and methyl bromide mixtures
UN1582	Chloropicrin and methyl chloride mixtures
UN1583	Chloropicrin mixtures, n.o.s.
UN1585	Copper acetoarsenite
UN1586	Copper arsenite
UN1587	Copper cyanide
UN1588	Cyanides, inorganic, solid, n.o.s.
UN1589	Cyanogen chloride, stabilized
UN1590	Dichloroanilines, liquid
UN1591	o-Dichlorobenzene
UN1593	Dichloromethane

UN1594	Diethyl sulfate
UN1595	Dimethyl sulfate
UN1596	Dinitroanilines
UN1597	Dinitrobenzenes, liquid
UN1598	Dintro–o–cresol
UN1599	Dinitrophenol solutions
UN1600	Dinitrotoluenes, molten
UN1601	Disinfectants, solid, toxic, n.o.s.
UN1602	Dyes, liquid, toxic, n.o.s. <i>or</i> Dye intermediates, liquid, toxic, n.o.s.
UN1603	Ethyl bromoacetate
UN1604	Ethylenediamine
UN1605	Ethylene dibromide
UN1606	Ferric arsenate
UN1607	Ferric arsenite
UN1608	Ferrous arsenate
UN1611	Hexaethyl tetraphosphate, liquid <i>or</i> Hexaethyl tetraphosphate, solid
UN1612	Hexaethyl tetraphosphate and compressed gas mixtures
UN1613	Hydrocyanic acid, aqueous solutions <i>or</i> Hydrogen cyanide, aqueous solutions <i>with not more than 20 percent hydrogen cyanide or</i> Hydrocyanic acid, aqueous solutions <i>with less than 5 percent hydrogen cyanide</i>
UN1614	Hydrogen cyanide, stabilized <i>with less than 3 percent water and absorbed in a porous inert material</i>
UN1616	Lead acetate
UN1617	Lead arsenates
UN1618	Lead arsenites
UN1620	Lead cyanide
UN1621	London purple
UN1622	Magnesium arsenate
UN1623	Mercuric arsenate
UN1624	Mercuric chloride
UN1625	Mercuric nitrate
UN1626	Mercuric potassium cyanide
UN1627	Mercurous nitrate
UN1629	Mercury acetate
UN1630	Mercury ammonium chloride
UN1631	Mercury benzoate
UN1634	Mercury bromides
UN1636	Mercury cyanide
UN1637	Mercury gluconate
UN1638	Mercury iodide, solution <i>or</i> Mercury iodide, solid
UN1639	Mercury nucleate
UN1640	Mercury oleate
UN1641	Mercury oxide
UN1642	Mercury oxycyanide, desensitized
UN1643	Mercury potassium iodide
UN1644	Mercury salicylate
UN1645	Mercury sulfates

UN1646	Mercury thiocyanate
UN1647	Methyl bromide and ethylene dibromide mixtures, liquid
UN1648	Acetonitrile
UN1649	Motor fuel anti-knock mixtures
UN1650	beta-Naphthylamine
UN1651	Naphthylthiourea
UN1652	Naphthylurea
UN1653	Nickel cyanide
UN1654	Nicotine
UN1655	Nicotine compounds, solid, n.o.s. <i>or</i> Nicotine preparations, solid, n.o.s.
UN1656	Nicotine hydrochloride <i>or</i> Nicotine hydrochloride solution
UN1657	Nicotine salicylate
UN1658	Nicotine sulfate, solid <i>or</i> Nicotine sulfate, solution
UN1659	Nicotine tartrate
UN1660	Nitric oxide, compressed
UN1661	Nitroanilines ( <i>o</i> -; <i>m</i> -; <i>p</i> -;)
UN1662	Nitrobenzene
UN1663	Nitrophenols ( <i>o</i> -; <i>m</i> -; <i>p</i> -;)
UN1664	Nitrotoluenes, liquid ( <i>o</i> -; <i>m</i> -; <i>p</i> -;) <i>or</i> Nitrotoluenes, solid ( <i>m</i> -; <i>or p</i> -;)
UN1665	Nitroxylens ( <i>o</i> -; <i>m</i> -; <i>p</i> -')
UN1669	Pentachloroethane
UN1670	Perchloromethyl mercaptan
UN1671	Phenol, solid
UN1672	Phenylcarbylamine chloride
UN1673	Phenylenediamines ( <i>o</i> -; <i>m</i> -; <i>p</i> -;)
UN1674	Phenylmercuric acetate
UN1677	Potassium arsenate
UN1678	Potassium arsenite
UN1679	Potassium cuprocyanide
UN1680	Potassium cyanide
UN1683	Silver arsenite
UN1684	Silver cyanide
UN1685	Sodium arsenate
UN1686	Sodium arsenite, aqueous solutions
UN1687	Sodium azide
UN1688	Sodium cacodylate
UN1689	Sodium cyanide
UN1690	Sodium fluoride
UN1691	Strontium arsenite
UN1692	Strychnine or Strychnine salts
NA1693	Tear gas devices <i>with more than 2 percent tear gas substances, by mass</i>
UN1693	Tear gas substances, liquid, n.o.s.
UN1694	Bromobenzyl cyanides, <i>liquid</i>
UN1695	Chloroacetone, stabilized
UN1697	Chloroacetophenone (CN), solid
UN1698	Diphenylamine chloroarsine

UN1699	Diphenylchloroarsine, liquid
UN1700	Tear gas candles
UN1701	Xylyl bromide, liquid
UN1702	1,1,2,-Tetrachloroethane
UN1704	Tetraethyl dithiopyrophosphate
UN1707	Thallium compounds, n.o.s.
UN1708	Toluidines liquid
UN1709	2,4-Toluylenediamine, solid <i>or</i> 2,4-Toluenediamine, solid
UN1710	Trichloroethylene
UN1711	Xylidines, liquid
UN1712	Zinc arsenate <i>or</i> Zinc arsenite <i>or</i> Zinc arsenate and zinc arsenite mixtures
UN1713	Zinc cyanide
UN1714	Zinc phosphide
UN1715	Acetic anhydride
UN1716	Acetyl bromide
UN1717	Acetyl chloride
UN1718	Butyl acid phosphate
UN1719	Caustic alkali liquids, n.o.s.
UN1722	Allyl chloroformate
UN1723	Allyl iodide
UN1724	Allyltrichlorosilane, stabilized
UN1725	Aluminum bromide, anhydrous
UN1726	Aluminum chloride, anhydrous
UN1727	Ammonium hydrogendifluoride, solid
UN1728	Amyltrichlorosilane
UN1729	Anisoyl chloride
UN1730	Antimony pentachloride, liquid
UN1731	Antimony pentachloride, solutions
UN1732	Antimony pentafluoride
UN1733	Antimony trichloride, liquid <i>or</i> Antimony trichloride, solid
UN1736	Benzoyl chloride
UN1737	Benzyl bromide
UN1738	Benzyl chloride <i>or</i> Benzyl chloride unstabilized
UN1739	Benzyl chloroformate
UN1740	Hydrogendifluorides, n.o.s. <i>solid or</i> Hydrogendifluorides, n.o.s. <i>solutions</i>
UN1741	Boron trichloride
UN1742	Boron trifluoride acetic acid complex, liquid
UN1743	Boron trifluoride propionic acid complex, liquid
UN1744	Bromine <i>or</i> Bromine solutions
UN1745	Bromine pentafluoride
UN1746	Bromine trifluoride
UN1747	Butyltrichlorosilane
UN1748	Calcium hypochlorite, dry <i>or</i> Calcium hypochlorite mixtures dry <i>with more than 39 percent available chlorine (8.8 percent available oxygen)</i>
UN1749	Chlorine trifluoride
UN1750	Chloroacetic acid, solution

UN1751	Chloroacetic acid, solid
UN1752	Chloroacetyl chloride
UN1753	Chlorophenyltrichlorosilane
UN1754	Chlorosulfonic acid ( <i>with or without sulfur trioxide</i> )
UN1755	Chromic acid solution
UN1756	Chromic fluoride, solid
UN1757	Chromic fluoride, solution
UN1758	Chromium oxychloride
NA1759	Ferrous chloride, solid
UN1759	Corrosive solids, n.o.s.
NA1760	Ferrous chloride, solution
UN1760	Corrosive liquids, n.o.s.
UN1761	Cupriethylenediamine solution
UN1762	Cyclohexenyltrichlorosilane
UN1763	Cyclohexyltrichlorosilane
UN1764	Dichloroacetic acid
UN1765	Dichloroacetyl chloride
UN1766	Dichlorophenyltrichlorosilane
UN1767	Diethyldichlorosilane
UN1768	Difluorophosphoric acid, anhydrous
UN1769	Diphenyldichlorosilane
UN1770	Diphenylmethyl bromide
UN1771	Dodecyltrichlorosilane
UN1773	Ferric chloride, anhydrous
UN1774	Fire extinguisher charges, <i>corrosive liquid</i>
UN1775	Fluoroboric acid
UN1776	Fluorophosphoric acid anhydrous
UN1777	Fluorosulfonic acid
UN1778	Fluorosilicic acid
UN1779	Formic acid
UN1780	Fumaryl chloride
UN1781	Hexadecyltrichlorosilane
UN1782	Hexafluorophosphoric acid
UN1783	Hexamethylenediamine solution
UN1784	Hexyltrichlorosilane
UN1786	Hydrofluoric acid and Sulfuric acid mixtures
UN1787	Hydriodic acid
UN1788	Hydrobromic acid, <i>with more than 49 percent hydrobromic acid</i> or Hydrobromic acid, <i>with not more than 49 percent hydrobromic acid</i>
UN1789	Hydrochloric acid
UN1790	Hydrofluoric acid, <i>with more than 60 percent strength</i> or Hydrofluoric acid, <i>with not more than 60 percent strength</i>
UN1791	Hypochlorite solutions
UN1792	Iodine monochloride
UN1793	Isopropyl acid phosphate
UN1794	Lead sulfate <i>with more than 3 percent free acid</i>

UN1796	Nitrating acid mixtures, <i>with more than 50 percent nitric acid</i> or Nitrating acid mixtures, <i>with not more than 50 percent nitric acid</i>
UN1798	Nitrohydrochloric acid
UN1799	Nonyltrichlorosilane
UN1800	Octadecyltrichlorosilane
UN1801	Octyltrichlorosilane
UN1802	Perchloric acid <i>with not more than 50 percent acid by mass</i>
UN1803	Phenolsulfonic acid, liquid
UN1804	Phenyltrichlorosilane
UN1805	Phosphoric acid
UN1806	Phosphorus pentachloride
UN1807	Phosphorus pentoxide
UN1808	Phosphorus tribromide
UN1809	Phosphorus trichloride
UN1810	Phosphorus oxychloride
UN1811	Potassium hydrogendifluoride, solid <i>or</i> Potassium hydrogendifluoride, solution
UN1812	Potassium fluoride
UN1813	Potassium hydroxide, solid
UN1814	Potassium hydroxide, solution
UN1815	Propionyl chloride
UN1816	Propyltrichlorosilane
UN1817	Pyrosulfuryl chloride
UN1818	Silicon tetrachloride
UN1819	Sodium aluminate, solution
UN1823	Sodium hydroxide, solid
UN1824	Sodium hydroxide solution
UN1825	Sodium monoxide
UN1826	Nitrating acid mixtures, spent <i>with more than 50 percent nitric acid</i> or Nitrating acid mixtures, spent <i>with not more than 50 percent nitric acid</i>
UN1827	Stannic chloride, anhydrous
UN1828	Sulfur chlorides
UN1829	Sulfur trioxide, inhibited <i>or</i> Sulfur trioxide, stabilized
UN1830	Sulfuric acid <i>with more than 51 percent acid</i>
UN1831	Sulfuric acid, <i>fuming with 30 percent or more free sulfur trioxide</i> <i>or</i> Sulfuric acid, <i>fuming with less than 30 percent free sulfur trioxide</i>
UN1832	Sulfuric acid, spent
UN1833	Sulfurous acid
UN1834	Sulfuryl chloride
UN1835	Tetramethylammonium hydroxide solution
UN1836	Thionyl chloride
UN1837	Thiophosphoryl chloride
UN1838	Titanium tetrachloride
UN1839	Trichloroacetic acid
UN1840	Zinc chloride, solution
UN1841	Acetaldehyde ammonia
UN1843	Ammonium dinitro- <i>o</i> -cresolate, solid

UN1845	Carbon dioxide, solid, <i>or</i> Dry ice
UN1846	Carbon tetrachloride
UN1847	Potassium sulfide, <i>hydrated with not less than 30 percent water of crystallization</i>
UN1848	Propionic acid
UN1849	Sodium sulfide, <i>hydrated with not less than 30 percent water</i>
UN1851	Medicine, liquid, toxic, n.o.s.
UN1854	Barium alloys, pyrophoric
UN1855	Calcium, pyrophoric <i>or</i> Calcium alloys, pyrophoric
UN1857	Textile waste, wet
UN1858	Hexafluoropropylene, compressed <i>or</i> Refrigerant gas R 1216
UN1859	Silicon tetrafluoride, compressed
UN1860	Vinyl fluoride, inhibited
UN1862	Ethyl crotonate
UN1863	Fuel, aviation, turbine engine
UN1865	n-Propyl nitrate
UN1866	Resin solution, <i>flammable</i>
UN1869	Magnesium <i>or</i> Magnesium alloys <i>with more than 50 percent magnesium in pellets, turnings, or ribbons</i>
UN1870	Potassium borohydride
UN1871	Titanium hydride
UN1872	Lead dioxide
UN1873	Perchloric acid <i>with more than 50 percent but not more than 72 percent acid, by mass</i>
UN1884	Barium oxide
UN1885	Benzidine
UN1886	Benzylidene chloride
UN1887	Bromochloromethane
UN1888	Chloroform
UN1889	Cyanogen bromide
UN1891	Ethyl bromide
UN1892	Ethyldichloroarsine
UN1894	Phenylmercuric hydroxide
UN1895	Phenylmercuric nitrate
UN1897	Tetrachloroethylene
UN1898	Acetyl iodide
UN1902	Diisooctyl acid phosphate
UN1903	Disinfectants, liquid, corrosive, n.o.s.
UN1905	Selenic acid
UN1906	Sludge, acid
UN1907	Soda lime <i>with more than 4 percent sodium hydroxide</i>
UN1908	Chlorite solution
UN1910	Calcium oxide
NA1911	Diborane mixtures
UN1911	Diborane
UN1912	Methyl chloride and methylene chloride mixtures
UN1913	Neon, refrigerated liquid ( <i>cryogenic liquid</i> )
UN1914	Butyl propionates



UN1915	Cyclohexanone
UN1916	2,2'-Dichlorodiethyl ether
UN1917	Ethyl acrylate, stabilized
UN1918	Isopropylbenzene
UN1919	Methyl acrylate, inhibited
UN1920	Nonanes
UN1921	Propyleneimine, inhibited
UN1922	Pyrrolidine
UN1923	Calcium dithionite <i>or</i> Calcium hydrosulfite
UN1928	Methyl magnesium bromide, in ethyl ether
UN1929	Potassium dithionite <i>or</i> Potassium hydrosulfite
UN1931	Zinc dithionite <i>or</i> Zinc hydrosulfite
UN1932	Zirconium scrap
UN1935	Cyanide solutions, n.o.s.
UN1938	Bromoacetic acid, <i>solution</i>
UN1939	Phosphorus oxybromide
UN1940	Thioglycolic acid
UN1941	Dibromodifluoromethane, R12B2
UN1942	Ammonium nitrate, <i>with not more than 0.2 percent of combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance</i>
UN1944	Matches, safety ( <i>book, card, or strike on box</i> )
UN1945	Matches, wax, Vesta
UN1950	Aerosols, <i>corrosive, Packing Group II or III, (each not exceeding 1 L capacity) or Aerosols, flammable (each not exceeding 1 L capacity) or Aerosols, flammable, n.o.s. (engine starting fluid) (each not exceeding 1 L capacity) or Aerosols, nonflammable (each not exceeding 1 L capacity) or Aerosols, poison, each not exceeding 1 L capacity</i>
UN1951	Argon, refrigerated liquid ( <i>cryogenic liquid</i> )
UN1952	Ethylene oxide and carbon dioxide <i>mixtures with not more than 9 percent ethylene oxide</i>
UN1953	Compressed gas, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>
NA1954	Insecticide gases flammable n.o.s. <i>or</i> Refrigerant gases, n.o.s., <i>or</i> Dispersant gases, n.o.s. <i>or</i> Refrigerating machines, <i>containing flammable, nonpoisonous, liquified gas</i>
UN1954	Compressed gas, flammable, n.o.s.
NA1955	Organic phosphate, mixed with compressed gas <i>or</i> Organic phosphate compound, mixed with compressed gas <i>or</i> Organic phosphorous compound, mixed with compressed gas
UN1955	Compressed gas, toxic, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>
NA1956	Accumulators, pressurized, pneumatic <i>or</i> hydraulic ( <i>containing nonflammable gas</i> )
UN1956	Compressed gas, n.o.s.
UN1957	Deuterium, compressed
UN1958	1,2-Dichloro-1,1,2,2-Tetrafluoroethane <i>or</i> Refrigerant gas R 114
UN1959	1,1-Difluoroethylene <i>or</i> Refrigerant gas R 1132a
NA1961	Ethane-Propane mixture, refrigerated liquid
UN1961	Ethane, refrigerated liquid
UN1962	Ethylene
UN1963	Helium, refrigerated liquid ( <i>cryogenic liquid</i> )
UN1964	Hydrocarbon gas mixture, compressed, n.o.s.
UN1965	Hydrocarbon gas mixtures, liquified, n.o.s.
UN1966	Hydrogen, refrigerated liquid ( <i>cryogenic liquid</i> )

NA1967	Parathion and compressed gas mixture
UN1967	Insecticide gases, toxic, n.o.s.
UN1968	Insecticide gases, n.o.s.
UN1969	Isobutane <i>see also Petroleum gases, liquified</i>
UN1970	Krypton, refrigerated liquid ( <i>cryogenic liquid</i> )
UN1971	Methane, compressed <i>or</i> Natural gas, compressed ( <i>with high methane content</i> )
UN1972	Methane, refrigerated liquid ( <i>cryogenic liquid</i> ) <i>or</i> Natural gas, refrigerated liquid ( <i>cryogenic liquid</i> ), <i>with high methane content</i>
UN1973	Chlorodifluoromethane and chloropentafluoroethane mixture <i>or</i> Refrigerant gas R 502 <i>with fixed boiling point, with approximately 49 percent chlorodifluoromethane</i>
UN1974	Chlorodifluorobromomethane <i>or</i> Refrigerant gas R 12B1
UN1975	Nitric oxide and dinitrogen tetroxide mixtures <i>or</i> Nitric oxide and nitrogen dioxide mixtures
UN1976	Octafluorocyclobutane, <i>or</i> Refrigerant gas RC 318
UN1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>
UN1978	Propane <i>see also Petroleum gases, liquified</i>
UN1979	Rare gases, mixtures, compressed
UN1980	Rare gases and oxygen mixtures, compressed
UN1981	Rare gases and nitrogen mixtures, compressed
UN1982	Tetrafluoromethane, compressed <i>or</i> Refrigerant gas R 14
UN1983	1-Chloro-2,2,2-trifluoroethane <i>or</i> Refrigerant gas R 133a
UN1984	Trifluoromethane <i>or</i> Refrigerant gas R 23
UN1986	Alcohols, flammable, toxic, n.o.s.
NA1987	Denatured alcohol
UN1987	Alcohols, n.o.s.
UN1988	Aldehydes, flammable, toxic, n.o.s.
UN1989	Aldehydes, n.o.s.
UN1990	Benzaldehyde
UN1991	Chloroprene, stabilized
UN1992	Flammable liquids, toxic, n.o.s.
NA1993	Diesel fuel
UN1993	Flammable liquids, n.o.s.
UN1994	Iron pentacarbonyl
NA1999	Asphalt, liquid <i>including road oils and cutback, bitumens</i>
UN1999	Tars, liquid <i>including road asphalt and oils, bitumen and cut backs</i>
UN2000	Celluloid, <i>in block, rods, rolls, sheets, tubes, etc., except scrap</i>
UN2001	Cobalt naphthenates, powder
UN2002	Celluloid, scrap
UN2003	Metal alkyls, water-reactive, n.o.s. <i>or</i> Metal aryls, water-reactive, n.o.s.
UN2004	Magnesium diamide
UN2005	Magnesium diphenyl
UN2006	Plastics, nitrocellulose-based, self-heating, n.o.s.
UN2008	Zirconium powder, dry
UN2009	Zirconium, dry, <i>finished sheets, strip or coiled wire</i>
UN2010	Magnesium hydride
UN2011	Magnesium phosphide
UN2012	Potassium phosphide

UN2013	Strontium phosphide
UN2014	Hydrogen peroxide, aqueous solutions <i>with more than 40 percent but not more than 60 percent hydrogen peroxide (stabilized as necessary)</i> or Hydrogen peroxide, aqueous solutions <i>with not less than 20 percent but not more than 40 percent hydrogen peroxide (stabilized as necessary)</i>
UN2015	Hydrogen peroxide, stabilized or Hydrogen peroxide aqueous solutions, stabilized <i>with more than 60 percent hydrogen peroxide</i>
UN2016	Ammunition, toxic, non-explosive, <i>without burster or expelling charge, non-fuzed</i>
UN2017	Ammunition, tear-producing, non-explosive, <i>without burster or expelling charge, non-fuzed</i>
UN2018	Chloroanilines, solid
UN2019	Chloroanilines, liquid
UN2020	Chlorophenols, solid
UN2021	Chlorophenols, liquid
UN2022	Cresylic acid
UN2023	Epichlorohydrin
UN2024	Mercury compounds, liquid, n.o.s.
UN2025	Mercury compounds, solid, n.o.s.
UN2026	Phenylmercuric compounds, n.o.s.
UN2027	Sodium arsenite, solid
UN2028	Bombs, smoke, non-explosive, <i>with corrosive liquid, without initiating device</i>
UN2029	Hydrazine, anhydrous or Hydrazine aqueous solutions <i>with more than 64 percent hydrazine, by mass</i>
UN2030	Hydrazine hydrate or Hydrazine aqueous solutions, <i>with not less than 37 percent but not more than 64 percent hydrazine, by mass</i>
UN2031	Nitric acid <i>other than red fuming, with more than 70 percent nitric acid</i> or Nitric acid <i>other than red fuming, with not more than 70 percent nitric acid</i>
UN2032	Nitric acid, red fuming
UN2033	Potassium monoxide
UN2034	Hydrogen and Methane mixtures, compressed
UN2035	1,1,1-Trifluoroethane, compressed or Refrigerant gas R 143a
UN2036	Xenon, compressed
UN2037	Gas cartridges ( <i>flammable</i> ) <i>without a release device, non-refillable</i> or Receptacles, small, containing gas ( <i>gas cartridges</i> ) <i>flammable or nonflammable, without release device, not refillable and not exceeding 1 L capacity</i>
UN2038	Dinitrotoluenes, liquid
UN2044	2,2-Dimethylpropane
UN2045	Isobutyraldehyde or Isobutyl aldehyde
UN2046	Cymenes
UN2047	Dichloropropenes
UN2048	Dicyclopentadiene
UN2049	Diethylbenzene
UN2050	Diisobutylene, isomeric compounds
UN2051	2-Dimethylaminoethanol
UN2052	Dipentene
UN2053	Methyl isobutyl carbinol
UN2054	Morpholine
UN2055	Styrene monomer, inhibited
UN2056	Tetrahydrofuran
UN2057	Tripropylene

UN2058	Valeraldehyde
UN2059	Nitrocellulose, solution, flammable <i>with not less than 12.6 percent nitrogen, by mass, and not more than 55 percent nitrocellulose</i>
UN2067	Ammonium nitrate based fertilizers
NA2069	Ammonium nitrate mixed fertilizers
UN2071	Ammonium nitrate based fertilizers
NA2072	Ammonium nitrate fertilizers
UN2073	Ammonia solution, <i>relative density less than 0.880 at 15° C in water, with more than 35 percent but not more than 50 percent ammonia</i>
UN2074	Acrylamide, solid
UN2075	Chloral, anhydrous, inhibited
UN2076	Cresols, liquid
UN2077	alpha-Naphthylamine
UN2078	Toluene diisocyanate
UN2079	Diethylenetriamine
UN2186	Hydrogen chloride, refrigerated liquid
UN2187	Carbon dioxide, refrigerated liquid
UN2188	Arsine
UN2189	Dichlorosilane
UN2190	Oxygen difluoride, compressed
UN2191	Sulfuryl fluoride
UN2192	Germane
UN2193	Hexafluoroethane, compressed <i>or</i> Refrigerant gas R 116
UN2194	Selenium hexafluoride
UN2195	Tellurium hexafluoride
UN2196	Tungsten hexafluoride
UN2197	Hydrogen iodide, anhydrous
UN2198	Phosphorus pentafluoride, compressed
UN2199	Phosphine
UN2200	Propadiene, inhibited
UN2201	Nitrous oxide, refrigerated liquid
UN2202	Hydrogen selenide, anhydrous
UN2203	Silane, compressed
UN2204	Carbonyl sulfide
UN2205	Adiponitrile
UN2206	Isocyanates, toxic, n.o.s. <i>or</i> Isocyanate solutions, toxic, n.o.s. flashpoint more than 61° C and boiling point less than 300° C
UN2208	Calcium hypochlorite mixtures, dry, <i>with more than 10 percent but not more than 39 percent available chlorine</i>
UN2209	Formaldehyde, solutions, <i>with not less than 25 percent formaldehyde</i>
UN2210	Maneb <i>or</i> Maneb preparations <i>with not less than 60 percent maneb</i>
UN2211	Polymeric beads, expandable, <i>evolving flammable vapor</i>
NA2212	Asbestos
UN2212	Blue asbestos (Crocidolite) <i>or</i> Brown asbestos (amosite, mysorite)
UN2213	Paraformaldehyde
UN2214	Phthalic anhydride <i>with more than .05 percent maleic anhydride</i>
NA2215	Maleic acid

UN2215	Maleic anhydride
UN2216	Fish meal, stabilized <i>or</i> Fish scrap, stabilized
UN2217	Seed cake <i>with not more than 1.5 percent oil and not more than 11 percent moisture</i>
UN2218	Acrylic acid, stabilized
UN2219	Allyl glycidyl ether
UN2222	Anisole
UN2224	Matches, fusee <i>or</i> Benzonitrile
UN2225	Benzene sulfonyl chloride
UN2226	Benzotrichloride
UN2227	n-Butyl methacrylate, stabilized
UN2232	2-Chloroethanal
UN2233	Chloroanisidines
UN2234	Chlorobenzotrifluorides
UN2235	Chlorobenzyl chlorides, liquid
UN2236	3-Chloro-4-methylphenyl isocyanate, liquid
UN2237	Chloronitroanilines
UN2238	Chlorotoluenes
UN2239	Chlorotoluidines, solid
UN2240	Chromosulfuric acid
UN2241	Cycloheptane
UN2242	Cycloheptene
UN2243	Cyclohexyl acetate
UN2244	Cyclopentanol
UN2245	Cyclopentanone
UN2246	Cyclopentene
UN2248	Di-n-butylamine
UN2249	Dichlorodimethyl ether, symmetrical
UN2250	Dichlorophenyl isocyanates
UN2251	Bicyclo [2,2,1] hepta-2, 5-diene, stabilized <i>or</i> 2,5-Norbornadiene, stabilized
UN2252	1,2-Dimethoxyethane
UN2253	N,N-Dimethylaniline
UN2254	Matches, fusee
UN2256	Cyclohexene
UN2257	Potassium
UN2258	1,2-Propylenediamine
UN2259	Triethylenetetramine
UN2260	Tripropylamine
UN2261	Xylenols, solid
UN2262	Dimethylcardamoyl chloride
UN2263	Dimethylcyclohexanes
UN2264	N,N-Dimethylcyclohexamine
UN2265	N,N-Dimethylformamide
UN2266	Dimethyl-N-propylamine
UN2267	Dimethyl thiophosphoryl chloride
UN2269	3,3'-Iminodipropylamine
UN2270	Ethylamine, aqueous solution <i>with not less than 50 percent but not more than 70 percent ethylamine</i>

UN2271	Ethyl amyl ketone
UN2272	N-Ethylaniline
UN2273	2-Ethylaniline
UN2274	N-Ethyl-N-benzylaniline
UN2275	2-Ethylbutanol
UN2276	2-Ethylhexylamine
UN2277	Ethyl methacrylate, stabilized
UN2278	n-Heptane
UN2279	Hexachlorobutadiene
UN2280	Hexamethylenediamine, solid
UN2281	Hexamethylene diisocyanate
UN2282	Hexanols
UN2283	Isobutyl methacrylate, inhibited
UN2284	Isobutyronitrile
UN2285	Isocyanatobenzotrifluorides
UN2286	Pentamethylheptane
UN2287	Isoheptenes
UN2288	Isohexenes
UN2289	Isophoronediamine
UN2290	Isophorone diisocyanate
UN2291	Lead compounds, soluble, n.o.s.
UN2293	4-Methoxy-4-methylpentan-2-one
UN2294	N-Methylaniline
UN2295	Methyl chloroacetate
UN2296	Methylcyclohexane
UN2297	Methylcyclohexanone
UN2298	Methylcyclopentane
UN2299	Methyl dichloroacetate
UN2300	2-Methyl-5-ethylpyridine
UN2301	2-Methylfuran
UN2302	5-Methylhexan-2-one
UN2303	Isopropenylbenzene
UN2304	Naphthalene, molten
UN2305	Nitrobenzenesulfonic acid
UN2306	Nitrobenzotrifluorides
UN2307	3-Nitro-4-chlorobenzotrifluoride
UN2308	Nitrosylsulfuric acid
UN2309	Octadiene
UN2310	Pentane-2,4-dione
UN2311	Phenetidines
UN2312	Phenol, molten
UN2313	Picolines
UN2315	Polychlorinated biphenyls, liquid <i>or solid</i>
UN2316	Sodium cuprocyanide, solid
UN2317	Sodium cuprocyanide, solution
UN2318	Sodium hydrosulfide, <i>with less than 25 percent water of crystallization</i>

UN2319	Terpene hydrocarbons, n.o.s.
UN2320	Tetraethylenepentamine
UN2321	Trichlorobenzenes, liquid
UN2322	Trichlorobutene
UN2323	Triethyl phosphite
UN2324	Triisobutylene
UN2325	1,3,5-Trimethylbenzene
UN2326	Trimethylcyclohexylamine
UN2327	Trimethylhexamethylenediamines
UN2328	Trimethylhexamethylene diisocyanate
UN2329	Trimethyl phosphite
UN2330	Undecane
UN2331	Zinc chloride, anhydrous
UN2332	Acetaldehyde oxime
UN2333	Allyl acetate
UN2334	Allylamine
UN2335	Allyl ethyl ether
UN2336	Allyl formate
UN2337	Phenyl mercaptan
UN2338	Benzotrifluoride
UN2339	2-Bromobutane
UN2340	2-Bromoethyl ethyl ether
UN2341	1-Bromo-3-methylbutane
UN2342	Bromomethylpropanes
UN2343	2-Bromopentane
UN2344	Bromopropanes
UN2345	3-Bromopropyne
UN2346	Butanedione
UN2347	Butyl mercaptans
UN2348	Butyl acrylates, stabilized
UN2350	Butyl methyl ether
UN2351	Butyl nitrites
UN2352	Butyl vinyl ether, stabilized
UN2353	Butyryl chloride
UN2354	Chloromethyl ethyl ether
UN2356	2-Chloropropane
UN2357	Cyclohexylamine
UN2358	Cyclooctatetraene
UN2359	Diallylamine
UN2360	Diallylether
UN2361	Diisobutylamine
UN2362	1,1-Dichloroethane
UN2363	Ethyl mercaptan
UN2364	n-Propyl benzene
UN2366	Diethyl carbonate
UN2367	alpha-Methylvaleraldehyde

UN2368	alpha-Pinene
UN2370	1-Hexene
UN2371	Isopentenenes
UN2372	1,2-Di-(dimethylamino)ethane
UN2373	Diethoxymethane
UN2374	3,3-Diethoxypropene
UN2375	Diethyl sulfide
UN2376	2,3-Dihydropyran
UN2377	1,1-Dimethoxyethane
UN2378	N-Butylaniline or 2-Dimethylaminoacetonitrile
UN2379	1,3-Dimethylbutylamine
UN2380	Dimethyldiethoxysilane
UN2381	Dimethyl disulfide
UN2382	Dimethylhydrazine, symmetrical
UN2383	Dipropylamine
UN2384	Di-n-propyl ether
UN2385	Ethyl isobutyrate
UN2386	1-Ethylpiperidine
UN2387	Fluorobenzene
UN2388	Fluorotoluenes
UN2389	Furan
UN2390	2-Iodobutane
UN2391	Iodomethylpropanes
UN2392	Iodopropanes
UN2393	Isobutyl formate
UN2394	Isobutyl propionate
UN2395	Isobutyryl chloride
UN2396	Methacrylaldehyde, inhibited
UN2397	3-Methylbutan-2-one
UN2398	Methyl tert-butyl ether
UN2399	1-Methylpiperidine
UN2400	Methyl isovalerate
UN2401	Piperidine
UN2402	Propanethiols
UN2403	Isopropenyl acetate
UN2404	Propionitrile
UN2405	Isopropyl butyrate
UN2406	Isopropyl isobutyrate
UN2407	Isopropyl chloroformate
UN2409	Isopropyl propionate
UN2410	1,2,3,6-Tetrahydropyridine
UN2411	Butyronitrile
UN2412	Tetrahydrothiophene
UN2413	Tetrapropylorthotitanate
UN2414	Thiophene
UN2416	Trimethyl borate



UN2417	Carbonyl fluoride
UN2418	Sulfur tetrafluoride
UN2419	Bromotrifluoroethylene
UN2420	Hexafluoroacetone
UN2421	Nitrogen trioxide
UN2422	Octafluorobut-2-ene or Refrigerant gas R 1318
UN2424	Octafluoropropane or Refrigerant gas R 218
UN2426	Ammonium nitrate, liquid ( <i>hot concentrated solution</i> )
UN2427	Potassium chlorate, aqueous solution
UN2428	Sodium chlorate, aqueous solution
UN2429	Calcium chlorate aqueous solution
UN2430	Alkylphenols, solid, n.o.s. ( <i>including C2–C12 homologues</i> )
UN2431	Anisidines
UN2432	N,N-Diethylaniline
UN2433	Chloronitrotoluenes, liquid
UN2434	Dibenzylchlorosilane
UN2435	Ethylphenyldichlorosilane
UN2436	Thioacetic acid
UN2437	Methylphenyldichlorosilane
UN2438	Trimethylacetyl chloride
UN2439	Sodium hydrogendifluoride, solid or Sodium hydrogendifluoride, solution
UN2440	Stannic chloride, pentahydrate
UN2441	Titanium trichloride, pyrophoric or Titanium trichloride mixtures, pyrophoric
UN2442	Trichloroacetyl chloride
UN2443	Vanadium oxytrichloride
UN2444	Vanadium tetrachloride
UN2445	Lithium alkyls
UN2446	Nitrocresols
UN2447	Phosphorus white, molten
NA2448	Sulfur, molten
UN2448	Sulfur, molten
UN2451	Nitrogen trifluoride, compressed
UN2452	Ethylacetylene, stabilized
UN2453	Ethyl fluoride or Refrigerant gas R 161
UN2454	Methyl fluoride, or Refrigerant gas R 41
UN2456	2-Chloropropene
UN2457	2,3-Dimethylbutane
UN2458	Hexadienes
UN2459	2-Methyl-1-butene
UN2460	2-Methyl-2-butene
UN2461	Methylpentadienes
UN2463	Aluminum hydride
UN2464	Beryllium nitrate
UN2465	Dichloroisocyanuric acid, dry or Dichloroisocyanuric acid salts
UN2466	Potassium superoxide
UN2468	Trichloroisocyanuric acid, dry

UN2469	Zinc bromate
UN2470	Phenylacetonitrile, liquid
UN2471	Osmium tetroxide
UN2473	Sodium arsanilate
UN2474	Thiophosgene
UN2475	Vanadium trichloride
UN2477	Methyl isothiocyanate
UN2478	Isocyanates, flammable, toxic, n.o.s. <i>or</i> Isocyanate solutions, flammable, toxic, n.o.s. <i>flashpoint less than 23° C</i>
UN2480	Methyl isocyanate
UN2481	Ethyl isocyanate
UN2482	n-Propyl isocyanate
UN2483	Isopropyl isocyanate
UN2484	tert-Butyl isocyanate
UN2485	n-Butyl isocyanate
UN2486	Isobutyl isocyanate
UN2487	Phenyl isocyanate
UN2488	Cyclohexyl isocyanate
UN2490	Dichlorodisopropyl ether
UN2491	Ethanolamine <i>or</i> Ethanolamine solutions
UN2493	Hexamethyleneimine
UN2495	Iodine pentafluoride
UN2496	Propionic anhydride
UN2498	1,2,3,6-Tetrahydrobenzaldehyde
UN2501	Tris-(1-aziridinyl)phosphine oxide, solution
UN2502	Valeryl chloride
UN2503	Zirconium tetrachloride
UN2504	Tetrabromoethane
UN2505	Ammonium fluoride
UN2506	Ammonium hydrogen sulfate
UN2507	Chloroplatinic acid, solid
UN2508	Molybdenum pentachloride
UN2509	Potassium hydrogen sulfate
UN2511	2-Chloropropionic acid
UN2512	Aminophenols ( <i>o</i> -; <i>m</i> -; <i>p</i> -)
UN2513	Bromoacetyl bromide
UN2514	Bromobenzene
UN2515	Bromoform
UN2516	Carbon tetrabromide
UN2517	1-Chloro-1,1-difluoroethane <i>or</i> Refrigerant gas R 142b
UN2518	1,5,9-Cyclododecatriene
UN2520	Cyclooctadienes
UN2521	Diketene, stabilized
UN2522	2-Dimethylaminoethyl methacrylate
UN2524	Ethyl orthoformate
UN2525	Ethyl oxalate

UN2526	Furfurylamine
UN2527	Isobutyl acrylate, inhibited
UN2528	Isobutyl isobutyrate
UN2529	Isobutyric acid
UN2530	Isobutyric anhydride
UN2531	Methacrylic acid, inhibited
UN2533	Methyl trichloroacetate
UN2534	Methylchlorosilane
UN2535	4-Methylmorpholine <i>or</i> n-methylmorpholine
UN2536	Methyltetrahydrofuran
UN2538	Nitronaphthalene
UN2541	Terpinolene
UN2542	Tributylamine
UN2545	Hafnium powder, dry
UN2546	Titanium powder, dry
UN2547	Sodium superoxide
UN2548	Chlorine pentafluoride
UN2552	Hexafluoroacetone hydrate
UN2554	Methyl allyl chloride
UN2555	Nitrocellulose with water <i>with not less than 25 percent water, by mass</i>
UN2556	Nitrocellulose, with alcohol with not less than 25 percent alcohol, by mass, and with not more than 12.6 percent nitrogen, by dry mass
UN2557	Nitrocellulose, <i>with not more than 12.6 percent nitrogen, by dry mass, or</i> Nitrocellulose mixture with pigment <i>or</i> Nitrocellulose mixture with plasticizer <i>or</i> Nitrocellulose mixture with pigment and plasticizer
UN2558	Epibromohydrin
UN2560	2-Methylpentan-2-ol
UN2561	3-Methyl-1-butene
UN2564	Trichloroacetic acid, solution
UN2565	Dicyclohexylamine
UN2567	Sodium pentachlorophenate
UN2570	Cadmium compounds
UN2571	Alkylsulfuric acids
UN2572	Phenylhydrazine
UN2573	Thallium chlorate
UN2574	Tricresyl phosphate <i>with more than 3 percent ortho isomer</i>
UN2576	Phosphorus oxybromide, molten
UN2577	Phenylacetyl chloride
UN2578	Phosphorus trioxide
UN2579	Piperazine
UN2580	Aluminum bromide, solution
UN2581	Aluminum chloride, solution
UN2582	Ferric chloride, solution
UN2583	Alkyl sulfonic acids, solid <i>or</i> Aryl sulfonic acids, solid <i>with more than 5 percent free sulfuric acid</i>
UN2584	Alkyl sulfonic acids, liquid <i>or</i> Aryl sulfonic acids, liquid <i>with more than 5 percent free sulfuric acid</i>
UN2585	Alkyl sulfonic acids, solid <i>or</i> Aryl sulfonic acids, solid <i>with not more than 5 percent free sulfuric acid</i>

UN2586	Alkyl sulfonic acids, liquid <i>or</i> Aryl sulfonic acids, liquid <i>with not more than 5 percent free sulfuric acid</i>
UN2587	Benzoquinone
UN2588	Pesticides, solid, toxic, n.o.s.
UN2589	Vinyl chloroacetate
UN2590	White asbestos ( <i>chrysotile, actinolite, anthophyllite, tremolite</i> )
UN2591	Xenon, refrigerated liquid ( <i>cryogenic liquids</i> )
UN2599	Chlorotrifluoromethane and trifluoromethane azeotropic mixture <i>or</i> Refrigerant gas R 503 <i>with approximately 60 percent chlorotrifluoromethane</i>
UN2601	Cyclobutane
UN2602	Dichlorodifluoromethane and difluoroethane azeotropic mixture <i>or</i> Refrigerant gas R 500 <i>with approximately 74 percent dichlorodifluoromethane</i>
UN2603	Cycloheptatriene
UN2604	Boron trifluoride diethyl etherate
UN2605	Methoxymethyl isocyanate
UN2606	Methyl orthosilicate
UN2607	Acrolein dimer, stabilized
UN2608	Nitropropanes
UN2609	Triallyl borate
UN2610	Triallylamine
UN2611	Propylene chlorohydrin
UN2612	Methyl propyl ether
UN2614	Methallyl alcohol
UN2615	Ethyl propyl ether
UN2616	Triisopropyl borate
UN2617	Methylcyclohexanols, <i>flammable</i>
UN2618	Vinyltoluenes, stabilized
UN2619	Benzyl dimethylamine
UN2620	Amyl butyrates
UN2621	Acetyl methyl carbinol
UN2622	Glycidaldehyde
UN2623	Firelighters, solid <i>with flammable liquid</i>
UN2624	Magnesium silicide
UN2626	Chloric acid aqueous solution, <i>with not more than 10 percent chloric acid</i>
UN2627	Nitrites, inorganic, n.o.s.
UN2628	Potassium fluoroacetate
UN2629	Sodium fluoroacetate
NA2630	Sodium selenite
UN2630	Selenates <i>or</i> Selenites
UN2642	Fluoroacetic acid
UN2643	Methyl bromoacetate
UN2644	Methyl iodide
UN2645	Phenacyl bromide
UN2646	Hexachlorocyclopentadiene
UN2647	Malononitrile
UN2648	1,2-Dibromobutan-3-one
UN2649	1,3-Dichloroacetone

UN2650	1,1-Dichloro-1-nitroethane
UN2651	4,4'-Diaminodiphenyl methane
UN2653	Benzyl iodide
UN2655	Potassium fluorosilicate
UN2656	Quinoline
UN2657	Selenium disulfide
UN2659	Sodium chloroacetate
UN2660	Nitrotoluidines (mono)
UN2661	Hexachloroacetone
UN2662	Hydroquinone
UN2664	Dibromomethane
UN2667	Butyltoluenes
UN2668	Chloroacetonitrile
UN2669	Chlorocresols, solution
UN2670	Cyanuric chloride
UN2671	Aminopyridines ( <i>o</i> -; <i>m</i> -; <i>p</i> -)
UN2672	Ammonia solution, <i>relative density between 0.880 and 0.957 at 15° C in water, with more than 10 percent but not more than 35 percent ammonia</i>
UN2673	2-Amino-4-chlorophenol
UN2674	Sodium fluorosilicate
UN2676	Stibine
UN2677	Rubidium hydroxide solution
UN2678	Rubidium hydroxide
UN2679	Lithium hydroxide, solution
UN2680	Lithium hydroxide, monohydrate <i>or</i> Lithium hydroxide, solid
UN2681	Caesium hydroxide solution
UN2682	Caesium hydroxide
UN2683	Ammonium sulfide solution
UN2684	Diethylaminopropylamine
UN2685	N,N-Diethylethylenediamine
UN2686	2-Diethylaminoethanol
UN2687	Dicyclohexylammonium nitrate
UN2688	1-Bromo-3-chloropropane
UN2689	Glycerol alpha-monochlorohydrin
UN2690	N-n-Butyl imidazole
UN2691	Phosphorus pentabromide
UN2692	Boron tribromide
UN2693	Bisulfites, aqueous solutions, n.o.s.
UN2698	Tetrahydrophthalic anhydrides <i>with more than 0.05 percent of maleic anhydride</i>
UN2699	Trifluoroacetic acid
UN2705	1-Pentol
UN2707	Dimethyldioxanes
UN2709	Butyl benzenes
UN2710	Dipropyl ketone
UN2713	Acridine
UN2714	Zinc resinate

UN2715	Aluminum resinate
UN2716	1,4-Butynediol
UN2717	Camphor, synthetic
UN2719	Barium bromate
UN2720	Chromium nitrate
UN2721	Copper chlorate
UN2722	Lithium nitrate
UN2723	Magnesium chlorate
UN2724	Manganese nitrate
UN2725	Nickel nitrate
UN2726	Nickel nitrite
UN2727	Thallium nitrate
UN2728	Zirconium nitrate
UN2729	Hexachlorobenzene
UN2730	Nitroanisoie
UN2732	Nitrobromobenzenes liquid <i>or</i> Nitrobromobenzenes solid
UN2733	Amine, flammable, corrosive, n.o.s. <i>or</i> Polyamines, flammable, corrosive, n.o.s.
UN2734	Amine, liquid, corrosive, flammable, n.o.s. <i>or</i> Polyamines, liquid, corrosive, flammable, n.o.s.
UN2735	Amines, liquid, corrosive, n.o.s. <i>or</i> Polyamines, liquid, corrosive, n.o.s.
UN2739	Butyric anhydride
UN2740	n-Propyl chloroformate
UN2741	Barium hypochlorite <i>with more than 22 percent available chlorine</i>
NA2742	sec-Butyl chloroformate <i>or</i> Isobutyl chloroformate
UN2742	Chloroformates, toxic, corrosive, flammable, n.o.s.
UN2743	n-Butyl chloroformate
UN2744	Cyclobutyl chloroformate
UN2745	Chloromethyl chloroformate
UN2746	Phenyl chloroformate
UN2747	tert-Butylcyclohexylchloroformate
UN2748	2-Ethylhexyl chloroformate
UN2749	Tetramethylsilane
UN2750	1,3-Dichloropropanol-2
UN2751	Diethylthiophosphoryl chloride
UN2752	1,2-Epoxy-3-ethoxypropane
UN2753	N-Ethylbenzyltoluidines liquid
UN2754	N-Ethyltoluidines
UN2757	Carbamate pesticides, solid, toxic
UN2758	Carbamate pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>
UN2759	Arsenical pesticides, solid, toxic
UN2760	Arsenical pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>
NA2761	Aldrin, solid <i>or</i> Dieldrin
UN2761	Organochlorine pesticides, solid, toxic
NA2762	Aldrin, liquid
UN2762	Organochlorine pesticides liquid, flammable, toxic, <i>flashpoint less than 23° C</i>
UN2763	Triazine pesticides, solid, toxic
UN2764	Triazine pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>

UN2771	Thiocarbamate pesticides, solid, toxic
UN2772	Thiocarbamate pesticide, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>
UN2775	Copper based pesticides, solid, toxic
UN2776	Copper based pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>
UN2777	Mercury based pesticides, solid, toxic
UN2778	Mercury based pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>
UN2779	Substituted nitrophenol pesticides, solid, toxic
UN2780	Substituted nitrophenol pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>
UN2781	Bipyridilium pesticides, solid, toxic
UN2782	Bipyridilium pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>
UN2783	Organophosphorus pesticides, solid, toxic
UN2784	Organophosphorus pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>
UN2785	4-Thiapentanal
UN2786	Organotin pesticides, solid, toxic
UN2787	Organotin pesticides, liquid, <i>flammable, toxic, flashpoint less than 23° C</i>
UN2788	Organotin compounds, liquid, n.o.s.
UN2789	Acetic acid, glacial <i>or</i> Acetic acid solution, <i>with more than 80 percent acid, by mass</i>
UN2790	Acetic acid solution, <i>not less than 50 percent but not more than 80 percent acid, by mass or</i> Acetic acid solution, <i>with more than 10 percent and less than 50 percent acid, by mass</i>
UN2793	Ferrous metal borings <i>or</i> Ferrous metal shavings <i>or</i> Ferrous metal turnings <i>or</i> Ferrous metal cuttings <i>in a form liable to self-heating</i>
UN2794	Batteries, wet, filled with acid, <i>electric storage</i>
UN2795	Batteries, wet, filled with alkali, <i>electric storage</i>
UN2796	Sulfuric acid <i>with not more than 51 percent acid</i>
UN2797	Battery fluid, alkali
UN2798	Phenyl phosphorus dichloride
UN2799	Phenyl phosphorus thiodichloride
UN2800	Batteries, wet, non-spillable, <i>electric storage</i>
UN2801	Dyes, liquid, corrosive, n.o.s. <i>or</i> Dye intermediates, liquid, corrosive, n.o.s.
UN2802	Copper chloride
UN2803	Gallium
UN2805	Lithium hydride, fused solid
UN2806	Lithium nitride
UN2809	Mercury <i>or</i> Mercury contained in manufactured articles
UN2810	Toxic, liquids, organic, n.o.s.
NA2811	Selenium oxide
UN2811	Toxic solids, organic, n.o.s.
UN2812	Sodium aluminate, solid
UN2813	Water-reactive solid, n.o.s.
UN2814	Infectious substances, affecting humans only
UN2815	N-Aminoethylpiperazine
UN2817	Ammonium hydrogendifluoride, solution
UN2818	Ammonium polysulfide, solution
UN2819	Amyl acid phosphate
UN2820	Butyric acid
UN2821	Phenol solutions

UN2822	2-Chloropyridine
UN2823	Crotonic acid, <i>solid</i>
UN2826	Ethyl chlorothioformate
UN2829	Caproic acid
UN2830	Lithium ferrosilicon
UN2831	1,1,1-Trichloroethane
UN2834	Phosphorous acid
UN2835	Sodium aluminum hydride
UN2837	Bisulfate, aqueous solution
UN2838	Vinyl butyrate, stabilized
UN2839	Aldol
UN2840	Butyraldoxime
UN2841	Di-n-amylamine
UN2842	Nitroethane
UN2844	Calcium manganese silicon
NA2845	Ethyl phosphonous dichloride, anhydrous <i>pyrophoric liquid</i>
UN2845	Pyrophoric liquids, organic, n.o.s.
UN2846	Pyrophoric solids, organic, n.o.s.
UN2849	3-Chloropropanol-1
UN2850	Propylene tetramer
UN2851	Boron trifluoride dihydrate
UN2852	Dipicryl sulfide, wetted <i>with not less than 10 percent water, by mass</i>
UN2853	Magnesium fluorosilicate
UN2854	Ammonium fluorosilicate
UN2855	Zinc fluorosilicate
UN2856	Fluorosilicates, n.o.s.
UN2857	Refrigerating machines, <i>containing nonflammable, nontoxic, liquified gas or ammonia solution (UN2672)</i>
UN2858	Zirconium, dry, <i>coiled wire, finished metal sheets, strip (thinner than 254 microns but not thinner than 18 microns)</i>
UN2859	Ammonium metavanadate
UN2861	Ammonium polyvanadate
UN2862	Vanadium pentoxide, <i>nonfused form</i>
UN2863	Sodium ammonium vanadate
UN2864	Potassium metavanadate
UN2865	Hydroxylamine sulfate
UN2869	Titanium trichloride mixtures
UN2870	Aluminum borohydride <i>or</i> Aluminum borohydride in devices
UN2871	Antimony powder
UN2872	Dibromochloropropane
UN2873	Dibutylaminoethanol
UN2874	Furfuryl alcohol
UN2875	Hexachlorophene
UN2876	Resorcinol
UN2878	Titanium sponge granules <i>or</i> Titanium sponge powders
UN2879	Selenium oxychloride



UN2880	Calcium hypochlorite, hydrated <i>or</i> Calcium hypochlorite, hydrated mixtures, <i>with not less than 5.5 percent but not more than 16 percent water</i>
UN2881	Metal catalyst, dry
UN2900	Infectious substances, affecting animals <i>only</i>
UN2901	Bromine chloride
UN2902	Pesticides, liquid, toxic, n.o.s.
UN2903	Pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>
UN2904	Chlorophenolates, liquid <i>or</i> Phenolates, liquid
UN2905	Chlorophenolates, solid <i>or</i> Phenolates, solid
UN2907	Isosorbide dinitrate mixture <i>with not less than 60 percent lactose, mannose, starch or calcium hydrogen phosphate</i>
UN2910	Radioactive material, excepted package—articles manufactured from natural or depleted uranium or natural thorium <i>or</i> Radioactive material, excepted package—empty package or empty packaging <i>or</i> Radioactive material, excepted package—instruments or articles <i>or</i> Radioactive material, excepted package—limited quantity of material
UN2912	Radioactive material, low specific activity, n.o.s. <i>or</i> Radioactive material, LSA, n.o.s.
UN2913	Radioactive material, surface contaminated object <i>or</i> Radioactive material, SCO
UN2918	Radioactive material, fissile, n.o.s.
NA2920	Dichlorobutene
UN2920	Corrosive liquids, flammable, n.o.s.
UN2921	Corrosive solids, flammable, n.o.s.
NA2922	Sodium hydrosulfide, solution
UN2922	Corrosive liquids, toxic, n.o.s.
UN2923	Corrosive solids, toxic, n.o.s.
UN2924	Flammable liquids, corrosive, n.o.s.
UN2925	Flammable solids, corrosive, organic, n.o.s.
UN2926	Flammable solids, toxic, organic, n.o.s.
NA2927	Ethyl phosphonothioic dichloride, anhydrous <i>or</i> Ethyl phosphorodichloridate
UN2927	Toxic liquids, corrosive, organic, n.o.s.
UN2928	Toxic solids, corrosive, organic, n.o.s.
UN2929	Toxic liquids, flammable, organic, n.o.s.
UN2930	Toxic solids, flammable, organic, n.o.s.
UN2931	Vanadyl sulfate
UN2933	Methyl 2-chloropropionate
UN2934	Isopropyl 2-chloropropionate
UN2935	Ethyl 2-chloropropionate
UN2936	Thiolactic acid
UN2937	alpha-Methylbenzyl alcohol
UN2940	9-Phosphabicyclooctanes <i>or</i> Cyclooctadiene phosphines
UN2941	Fluoroanilines
UN2942	2-Trifluoromethylaniline
UN2943	Tetrahydrofurfurylamine
UN2945	N-Methylbutylamine
UN2946	2-Amino-5-diethylaminopentane
UN2947	Isopropyl chloroacetate
UN2948	3-Trifluoromethylaniline
UN2949	Sodium hydrosulfide, <i>with not less than 25 percent water of crystallization</i>

UN2950	Magnesium granules, coated <i>particle size not less than 149 microns</i>
UN2956	5-tert-Butyl-2,4,6-trinitro-m-xylene or Musk xylene
UN2965	Boron trifluoride dimethyl etherate
UN2966	Thioglycol
UN2967	Sulfamic acid
UN2968	Maneb stabilized or Maneb preparations, stabilized <i>against self-heating</i>
UN2969	Castor beans or Castor meal or Castor pomace or Castor flake
UN2974	Radioactive material, special form, n.o.s.
UN2982	Radioactive material, n.o.s.
UN2983	Ethylene oxide and propylene oxide mixtures <i>with not more than 30 percent ethylene oxide</i>
UN2984	Hydrogen peroxide, aqueous solutions <i>with not less than 8 percent but less than 20 percent hydrogen peroxide (stabilized as necessary)</i>
UN2985	Chlorosilanes, flammable, corrosive, n.o.s.
UN2986	Chlorosilanes, corrosive, flammable, n.o.s.
UN2987	Chlorosilanes, corrosive, n.o.s.
UN2988	Chlorosilanes, water-reactive, flammable, corrosive, n.o.s.
UN2989	Lead phosphite, dibasic
UN2990	Life-saving appliances, self-inflating
UN2991	Carbamate pesticide, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>
UN2992	Carbamate pesticides, liquid, toxic
UN2993	Arsenical pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>
UN2994	Arsenical pesticides, liquid, toxic
UN2995	Organochlorine pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>
UN2996	Organochlorine pesticide, liquid, toxic
UN2997	Triazine pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>
UN2998	Triazine pesticides, liquid, toxic
UN3002	Phenyl urea pesticides, liquid, toxic
UN3005	Thiocarbamate pesticides, liquid, flammable, toxic, <i>flashpoint not less than 23° C</i>
UN3006	Thiocarbamate pesticide, liquid, toxic
UN3009	Copper based pesticides, liquid, toxic, <i>flammable, flashpoint not less than 23° C</i>
UN3010	Copper based pesticides, liquid, toxic
UN3011	Mercury based pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>
UN3012	Mercury based pesticides, liquid, toxic
UN3013	Substituted nitrophenol pesticides, liquid, toxic <i>flammable flashpoint not less than 23° C</i>
UN3014	Substituted nitrophenol pesticides, liquid, toxic
UN3015	Bipyridilium pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>
UN3016	Bipyridilium pesticides, liquid, toxic
UN3017	Organophosphorus pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>
UN3018	Organophosphorus pesticides, liquid, toxic
UN3019	Organotin pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>
UN3020	Organotin pesticides, liquid, toxic
UN3021	Pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>
UN3022	1,2-Butylene oxide, stabilized
UN3023	2-Methyl-2-heptanethiol
UN3024	Coumarin derivative pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>
UN3025	Coumarin derivative pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>

UN3026	Coumarin derivative pesticides, liquid, toxic
UN3027	Coumarin derivative pesticides, solid, toxic
UN3028	Batteries, dry, containing potassium hydroxide solid, <i>electric, storage</i>
UN3048	Aluminum phosphide pesticides
UN3049	Metal alkyl halides, water-reactive, n.o.s. <i>or</i> Metal aryl halides, water-reactive, n.o.s.
UN3050	Metal alkyl hydrides, water-reactive, n.o.s. <i>or</i> Metal aryl hydrides, water-reactive, n.o.s.
UN3053	Magnesium alkyls
UN3054	Cyclohexyl mercaptan
UN3055	2-(2-Aminoethoxy) ethanol
UN3056	n-Heptaldehyde
UN3057	Trifluoroacetyl chloride
UN3064	Nitroglycerin, solution in alcohol, <i>with more than 1 percent but not more than 5 percent nitroglycerin</i>
UN3065	Alcoholic beverages
UN3066	Paint or Paint related material
UN3070	Ethylene oxide and dichlorodifluoromethane mixture <i>with not more than 12.5 percent ethylene oxide</i>
UN3071	Mercaptans, liquid, toxic, flammable, n.o.s. <i>or</i> Mercaptan mixtures, liquid, toxic, flammable, n.o.s., <i>flashpoint not less than 23° C</i>
UN3072	Life-saving appliances, not self-inflating <i>containing dangerous goods as equipment</i>
UN3073	Vinylpyridines, stabilized
NA3077	Hazardous waste, solid, n.o.s. <i>or</i> Other regulated substances, solid, n.o.s.
UN3077	Environmentally hazardous substances, solid, n.o.s. (not including waste)
UN3078	Cerium, <i>turnings or gritty powder</i>
UN3079	Methacrylonitrile, inhibited
UN3080	Isocyanates, toxic, flammable, n.o.s. <i>or</i> Isocyanate solutions, toxic, flammable, n.o.s. <i>flashpoint not less than 23° C but not more than 6° C and boiling point less than 300° C</i>
NA3082	Hazardous waste, liquid, n.o.s. <i>or</i> Other regulated substances, liquid, n.o.s.
UN3082	Environmentally hazardous substances, liquid, n.o.s. (not including waste)
UN3083	Perchloryl fluoride
UN3084	Corrosive solids, oxidizing, n.o.s.
UN3085	Oxidizing solid, corrosive, n.o.s.
UN3086	Toxic solids, oxidizing, n.o.s.
UN3087	Oxidizing solid, toxic, n.o.s.
UN3088	Self-heating solid, organic, n.o.s.
UN3089	Metal powders, flammable, n.o.s.
UN3090	Lithium metal batteries (including lithium alloy batteries)
UN3091	Lithium metal batteries (including lithium alloy batteries) contained in, or packed with, equipment
UN3091	Lithium batteries packed with equipment
UN3092	1-Methoxy-2-propanol
UN3093	Corrosive liquids, oxidizing, n.o.s.
UN3094	Corrosive liquids, water-reactive, n.o.s.
UN3095	Corrosive solids, self-heating, n.o.s.
UN3096	Corrosive solids, water-reactive, n.o.s.
UN3097	Flammable solid, oxidizing, n.o.s.
UN3098	Oxidizing liquid, corrosive, n.o.s.
UN3099	Oxidizing liquid, toxic, n.o.s.
UN3100	Oxidizing solid, self-heating, n.o.s.

UN3101	Organic peroxide type B, liquid
UN3102	Organic peroxide type B, solid
UN3103	Organic peroxide type C, liquid
UN3104	Organic peroxide type C, solid
UN3105	Organic peroxide type D, liquid
UN3106	Organic peroxide type D, solid
UN3107	Organic peroxide type E, liquid
UN3108	Organic peroxide type E, solid
UN3109	Organic peroxide type F, liquid
UN3110	Organic peroxide type F, solid
UN3111	Organic peroxide type B, liquid, temperature controlled
UN3112	Organic peroxide type B, solid, temperature controlled
UN3113	Organic peroxide type C, liquid, temperature controlled
UN3114	Organic peroxide type C, solid, temperature controlled
UN3115	Organic peroxide type D, liquid, temperature controlled
UN3116	Organic peroxide type D, solid, temperature controlled
UN3117	Organic peroxide type E, liquid, temperature controlled
UN3118	Organic peroxide type E, solid, temperature controlled
UN3119	Organic peroxide type F, liquid, temperature controlled
UN3120	Organic peroxide type F, solid, temperature controlled
UN3121	Oxidizing solid, water-reactive, n.o.s.
UN3122	Toxic liquids, oxidizing, n.o.s.
UN3123	Toxic liquids, water-reactive, n.o.s.
UN3124	Toxic solids, self-heating, n.o.s.
UN3125	Toxic solids, water-reactive, n.o.s.
UN3126	Self-heating solid, corrosive, organic, n.o.s.
UN3127	Self-heating solid, oxidizing, n.o.s.
UN3128	Self-heating solid, toxic, organic, n.o.s.
UN3129	Water-reactive liquid, corrosive, n.o.s.
UN3130	Water-reactive liquid, toxic, n.o.s.
UN3131	Water-reactive solid, corrosive, n.o.s.
UN3132	Water-reactive solid, flammable, n.o.s.
UN3133	Water-reactive solid, oxidizing, n.o.s.
UN3134	Water-reactive solid, toxic, n.o.s.
UN3135	Water-reactive solid, self-heating, n.o.s.
UN3136	Trifluoromethane, refrigerated liquid
UN3137	Oxidizing solid, flammable, n.o.s.
UN3138	Ethylene, acetylene and propylene in mixture, refrigerated liquid <i>with at least 71.5 percent ethylene with not more than 22.5 percent acetylene and not more than 6 percent propylene</i>
UN3139	Oxidizing liquid, n.o.s.
UN3140	Alkaloids, liquid, n.o.s., or Alkaloid salts, liquid, n.o.s.
UN3141	Antimony compounds, inorganic, liquid, n.o.s.
UN3142	Disinfectants, liquid, toxic, n.o.s.
UN3143	Dyes, solid, toxic, n.o.s. or Dye intermediates, solid, toxic, n.o.s.
UN3144	Nicotine compounds, liquid, n.o.s. or Nicotine preparations, liquid, n.o.s.
UN3145	Alkylphenols, liquid, n.o.s. (including C2–C12 homologues)

UN3146	Organotin compounds, solid, n.o.s.
UN3147	Dyes, solid, corrosive, n.o.s. <i>or</i> Dye intermediates, solid, corrosive, n.o.s.
UN3148	Water-reactive liquid, n.o.s.
UN3149	Hydrogen peroxide and peroxyacetic acid mixtures, <i>stabilized with acids, water, and not more than 5 percent peroxyacetic acid</i>
UN3150	Devices, small, hydrocarbon gas powered <i>or</i> Hydrocarbon gas refills for small devices <i>with release device</i>
UN3151	Polyhalogenated biphenyls, liquid <i>or</i> Polyhalogenated terphenyls, liquid
UN3152	Polyhalogenated biphenyls, solid <i>or</i> Polyhalogenated terphenyls, solid
UN3153	Perfluoro(methyl vinyl ether)
UN3154	Perfluoro(ethyl vinyl ether)
UN3155	Pentachlorophenol
UN3156	Compressed gas, oxidizing, n.o.s.
UN3157	Liquified gas, oxidizing, n.o.s.
UN3158	Gas, refrigerated liquid, n.o.s. ( <i>cryogenic liquid</i> )
UN3159	1,1,1,2-Tetrafluoroethane <i>or</i> Refrigerant gas R 134a
UN3160	Liquified gas, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>
UN3161	Liquified gas, flammable, n.o.s.
UN3162	Liquified gas, toxic, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>
UN3163	Liquified gas, n.o.s.
UN3164	Articles, pressurized pneumatic <i>or</i> Hydraulic containing non-flammable gas
UN3165	Aircraft hydraulic power unit fuel tank ( <i>containing a mixture of anhydrous hydrazine and monomethyl hydrazine</i> ) ( <i>M86 fuel</i> )
UN3166	Vehicle, flammable gas powered <i>or</i> Vehicle, fuel cell, flammable gas powered. Vehicle, flammable liquid powered <i>or</i> Vehicle, fuel cell, flammable liquid powered
UN3167	Gas sample, non-pressurized, flammable, n.o.s., <i>not refrigerated liquid</i>
UN3168	Gas sample, non-pressurized, toxic, flammable, n.o.s., <i>not refrigerated liquid</i>
UN3169	Gas sample, non-pressurized, toxic, n.o.s., <i>not refrigerated liquid</i>
UN3170	Aluminum smelting by-products <i>or</i> Aluminum remelting by-products
UN3171	Battery-powered vehicle <i>or</i> Battery-powered equipment
UN3172	Toxins, extracted from living sources, liquid, n.o.s.
UN3174	Titanium disulphide
UN3175	Solids containing flammable liquid, n.o.s.
UN3176	Flammable solid, organic, molten, n.o.s.
NA3178	Smokeless powder for small arms ( <i>100 pounds or less</i> )
UN3178	Flammable solid, inorganic, n.o.s.
UN3179	Flammable solid, toxic, inorganic, n.o.s.
UN3180	Flammable solid, corrosive, inorganic, n.o.s.
UN3181	Metal salts of organic compounds, flammable, n.o.s.
UN3182	Metal hydrides, flammable, n.o.s.
UN3183	Self-heating liquid, organic, n.o.s.
UN3184	Self-heating liquid, toxic, organic, n.o.s.
UN3185	Self-heating liquid, corrosive, organic, n.o.s.
UN3186	Self-heating liquid, inorganic, n.o.s.
UN3187	Self-heating liquid, toxic, inorganic, n.o.s.
UN3188	Self-heating liquid, corrosive, inorganic, n.o.s.
UN3189	Metal powder, self-heating, n.o.s.

UN3190	Self-heating solid, inorganic, n.o.s.
UN3191	Self-heating solid, toxic, inorganic, n.o.s.
UN3192	Self-heating solid, corrosive, inorganic, n.o.s.
UN3194	Pyrophoric liquid, inorganic, n.o.s.
UN3200	Pyrophoric solid, inorganic, n.o.s.
UN3203	Pyrophoric organometallic compound, water-reactive, n.o.s.
UN3205	Alkaline earth metal alcoholates, n.o.s.
UN3206	Alkali metal alcoholates, self-heating, corrosive, n.o.s.
UN3207	Organometallic compound <i>or</i> Compound solution <i>or</i> Compound dispersion, water-reactive, flammable, n.o.s.
UN3208	Metallic substances, water-reactive, n.o.s.
UN3209	Metallic substance, water-reactive, self-heating, n.o.s.
UN3210	Chlorates, inorganic, aqueous solutions, n.o.s.
UN3211	Perchlorates, inorganic, aqueous solution, n.o.s.
UN3212	Hypochlorites, inorganic, n.o.s.
UN3213	Bromates, inorganic, aqueous solution, n.o.s.
UN3214	Permanganates, inorganic, aqueous solution, n.o.s.
UN3215	Persulfates, inorganic, n.o.s.
UN3216	Persulfates, inorganic, aqueous solution, n.o.s.
UN3218	Nitrates, inorganic, aqueous solution, n.o.s.
UN3219	Nitrites, inorganic, aqueous solution, n.o.s.
UN3220	Pentafluoroethane <i>or</i> Refrigerant gas R 125
UN3221	Self-reactive liquid type B
UN3222	Self-reactive solid type B
UN3223	Self-reactive liquid type C
UN3224	Self-reactive solid type C
UN3225	Self-reactive liquid type D
UN3226	Self-reactive solid type D
UN3227	Self-reactive liquid type E
UN3228	Self-reactive solid type E
UN3229	Self-reactive liquid type F
UN3230	Self-reactive solid type F
UN3231	Self-reactive liquid type B, temperature controlled
UN3232	Self-reactive solid type B, temperature controlled
UN3233	Self-reactive liquid type C, temperature controlled
UN3234	Self-reactive solid type C, temperature controlled
UN3235	Self-reactive liquid type D, temperature controlled
UN3236	Self-reactive solid type D, temperature controlled
UN3237	Self-reactive liquid type E, temperature controlled
UN3238	Self-reactive solid type E, temperature controlled
UN3239	Self-reactive liquid type F, temperature controlled
UN3240	Self-reactive solid type F, temperature controlled
UN3241	2-Bromo-2-nitropropane-1,3-diol
UN3242	Azodicarbonamide
UN3243	Solids containing toxic liquid, n.o.s.
UN3244	Solids containing corrosive liquid, n.o.s.

UN3246	Methanesulfonyl chloride
UN3247	Sodium peroxoborate, anhydrous
UN3248	Medicine, liquid, flammable, toxic, n.o.s.
UN3249	Medicine, solid, toxic, n.o.s.
UN3250	Chloroacetic acid, molten
UN3251	Isosorbide–5–mononitrate
UN3252	Difluoromethane <i>or</i> Refrigerant gas R 32
UN3253	Disodium trioxosilicate
UN3254	Tributylphosphane
UN3255	tert–Butyl hypochlorite
UN3256	Elevated temperature liquid, flammable, n.o.s., <i>with flashpoint above 37.8° C, at or above its flashpoint</i>
UN3257	Elevated temperature liquid, n.o.s., <i>at or above 100° C and below its flashpoint (including molten metals, molten salts, etc.)</i>
UN3258	Elevated temperature solid, n.o.s., <i>at or above 240° C, see 49 CFR 173.247(h)(4)</i>
UN3259	Amines, solid, corrosive, n.o.s. <i>or</i> Polyamines, solid, corrosive, n.o.s.
UN3260	Corrosive solid, acidic, inorganic, n.o.s.
UN3261	Corrosive solid, acidic, organic, n.o.s.
UN3262	Corrosive solid, basic, inorganic, n.o.s.
UN3263	Corrosive solid, basic, organic, n.o.s.
UN3264	Corrosive liquid, acidic, inorganic, n.o.s.
UN3265	Corrosive liquid, acidic, organic, n.o.s.
UN3266	Corrosive liquid, basic, inorganic, n.o.s.
UN3267	Corrosive liquid, basic, organic, n.o.s.
UN3268	Air bag inflators, <i>or</i> Air bag modules, <i>or</i> Seatbelt pretensioners
UN3269	Polyester resin kit
UN3270	Nitrocellulose membrane filters
UN3271	Ethers, n.o.s.
UN3272	Esters, n.o.s.
UN3273	Nitriles, flammable, toxic, n.o.s.
UN3274	Alcoholates solution, n.o.s., <i>in alcohol</i>
UN3275	Nitriles, toxic, flammable, n.o.s.
UN3276	Nitriles, toxic, n.o.s.
UN3277	Chloroformates, toxic, corrosive, n.o.s.
UN3278	Organophosphorus compound, toxic n.o.s.
UN3279	Organophosphorus compound, toxic, flammable, n.o.s.
UN3280	Organoarsenic compound, n.o.s.
UN3281	Metal carbonyls, n.o.s.
UN3282	Organometallic compound, toxic n.o.s.
UN3283	Selenium compound, n.o.s.
UN3284	Tellurium compound, n.o.s.
UN3285	Vanadium compound, n.o.s.
UN3286	Flammable liquid, toxic, corrosive, n.o.s.
UN3287	Toxic liquid, inorganic, n.o.s.
UN3288	Toxic solid, inorganic, n.o.s.
UN3289	Toxic liquid, corrosive, inorganic, n.o.s.

UN3290	Toxic solid, corrosive, inorganic, n.o.s.
UN3291	Regulated medical waste (sharps) <i>or</i> Regulated medical waste ( <i>non-sharps</i> )
UN3292	Batteries, containing sodium <i>or</i> Cells, containing sodium
UN3293	Hydrazine, aqueous solution <i>with not more than 37 percent hydrazine, by mass</i>
UN3294	Hydrogen, cyanide, solution in alcohol <i>with not more than 45 percent hydrogen cyanide</i>
UN3295	Hydrocarbons, liquid, n.o.s.
UN3296	Heptafluoropropane <i>or</i> Refrigerant gas R 227
UN3297	Ethylene oxide and chlorotetrafluoroethane mixture <i>with not more than 8.8 percent ethylene oxide</i>
UN3298	Ethylene oxide and pentafluoroethane mixture <i>with not more than 7.9 percent ethylene oxide</i>
UN3299	Ethylene oxide and tetrafluoroethane mixture <i>with not more than 5.6 percent ethylene oxide</i>
UN3300	Ethylene oxide and carbon dioxide mixtures <i>with more than 87 percent ethylene oxide</i>
UN3301	Corrosive liquids, self-heating, n.o.s.
UN3302	2-Dimethylaminoethyl acrylate
UN3303	Compressed gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>
UN3304	Compressed gas, toxic, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>
UN3305	Compressed gas, toxic, flammable, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>
UN3306	Compressed gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>
UN3307	Liquified gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>
UN3308	Liquified gas, toxic, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>
UN3309	Liquified gas, toxic, flammable, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>
UN3310	Liquified gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i>
UN3311	Gas, refrigerated liquid, oxidizing, n.o.s. ( <i>cryogenic liquid</i> )
UN3312	Gas, refrigerated liquid, flammable, n.o.s. ( <i>cryogenic liquid</i> )
UN3313	Organic pigments, self-heating
UN3314	Plastic molding compound <i>in dough, sheet, or extruded rope form evolving flammable vapor</i>
UN3316	First aid kits
UN3317	2-Amino-4,6-Dinitrophenol, wetted <i>with not less than 20 percent water by mass</i>
UN3318	Ammonia solution, <i>relative density less than 0.880 at 15° C in water, with more than 50 percent ammonia</i>
UN3319	Nitroglycerin mixture, <i>desensitized, solid, n.o.s. with more than 2 percent but not more than 10 percent nitroglycerin, by mass</i>
UN3320	Sodium borohydride and sodium hydroxide solution, <i>with not more than 12 percent sodium borohydride and not more than 40 percent sodium hydroxide by mass</i>
UN3423	Tetramethylammonium hydroxide, solid
NA3334	Self-defense spray, non-pressurized
UN3334	Aviation regulated liquid, n.o.s.
UN3335	Aviation regulated solid, n.o.s.
UN3336	Mercaptans, liquid, flammable, n.o.s. <i>or</i> Mercaptan mixture, liquid, flammable, n.o.s.
UN3337	Refrigerant gas R 404A
UN3338	Refrigerant gas R 407A
UN3339	Refrigerant gas R 407B
UN3340	Refrigerant gas R 407C
UN3341	Thiourea dioxide
UN3342	Xanthates
UN3343	Nitroglycerin mixture, desensitized, liquid, flammable, n.o.s. <i>with not more than 30 percent nitroglycerin, by mass</i>



UN3344	Pentaerythrite tetranitrate mixture, desensitized, solid, n.o.s. <i>with more than 10 percent but not more than 20 percent PETN, by mass</i>
UN3345	Phenoxyacetic acid derivative pesticide, solid, toxic
UN3346	Phenoxyacetic acid derivative pesticide, liquid, flammable, toxic <i>flashpoint less than 23° C</i>
UN3347	Phenoxyacetic acid derivative pesticide, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i>
UN3348	Phenoxyacetic acid derivative pesticide, liquid, toxic
UN3349	Pyrethroid pesticide, solid, toxic
UN3350	Pyrethroid pesticide, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>
UN3351	Pyrethroid pesticide, liquid, flammable, toxic, <i>flashpoint less than 23° C</i>
UN3352	Pyrethroid pesticide, liquid, toxic
UN3354	Insecticide gases, flammable, n.o.s.
UN3355	Insecticide gases, toxic, flammable, n.o.s., <i>Inhalation hazard A, B, C or D</i>
UN3356	Oxygen generator, chemical
UN3360	Fiber, vegetable, dry
UN3361	Chlorosilanes, toxic, corrosive, n.o.s.
UN3362	Chlorosilanes, toxic, corrosive, flammable, n.o.s.
UN3363	Dangerous Goods in Machinery or Dangerous Goods in Apparatus
UN3364	Trinitrophenol (picric acid), <i>wetted with not less than 10 percent water by mass</i>
UN3365	Trinitrochlorobenzene (picryl chloride), <i>wetted, with not less than 10 percent water by mass</i>
UN3366	Trinitrotoluene (TNT) <i>wetted, with not less than 10 percent water by mass</i>
UN3367	Trinitrobenzene, <i>wetted, with not less than 10 percent water, by mass</i>
UN3368	Trinitrobenzoic acid, <i>wetted with not less than 10 percent water, by mass</i>
UN3370	Urea nitrate, <i>wetted with not less than 10 percent water, by mass</i>
UN3373	Biological substance, Category B
UN3379	Desensitized explosives, liquid, n.o.s.
UN3380	Desensitized explosives, solid, n.o.s.
UN3381	Toxic by inhalation liquid, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m<sup>3</sup> and saturated vapor concentration greater than or equal to 500 LC50</i>
UN3382	Toxic by inhalation liquid, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m<sup>3</sup> and saturated vapor concentration greater than or equal to 10 LC50</i>
UN3383	Toxic by inhalation liquid, flammable, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m<sup>3</sup> and saturated vapor concentration greater than or equal to 500 LC50</i>
UN3384	Toxic by inhalation liquid, flammable, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m<sup>3</sup> and saturated vapor concentration greater than or equal to 10 LC50</i>
UN3385	Toxic by inhalation liquid, water-reactive, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m<sup>3</sup> and saturated vapor concentration greater than or equal to 500 LC50</i>
UN3386	Toxic by inhalation liquid, water-reactive, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m<sup>3</sup> and saturated vapor concentration greater than or equal to 10 LC50</i>
UN3387	Toxic by inhalation liquid, oxidizing, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m<sup>3</sup> and saturated vapor concentration greater than or equal to 500 LC50</i>
UN3388	Toxic by inhalation liquid, oxidizing, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m<sup>3</sup> and saturated vapor concentration greater than or equal to 10 LC50</i>
UN3389	Toxic by inhalation liquid, corrosive, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m<sup>3</sup> and saturated vapor concentration greater than or equal to 500 LC50</i>
UN3390	Toxic by inhalation liquid, corrosive, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m<sup>3</sup> and saturated vapor concentration greater than or equal to 10 LC50</i>

UN3401	Alkali metal amalgam, solid
UN3402	Alkaline earth metal amalgams, solid
UN3405	Barium chlorate, solution
UN3406	Barium perchlorate, solution
UN3407	Chlorate and magnesium chloride mixture, solution
UN3409	Chloronitrobenzene, liquid
UN3410	4-Chloro-o-toluidine hydrochloride, solution
UN3416	Chloroacetophenone (CN), liquid
UN3417	Xylyl bromide, solid
UN3420	Boron trifluoride propionic acid complex, solid
UN3424	Ammonium dinitro-o-cresolate, solution
UN3425	Bromoacetic acid, solid
UN3426	Acrylamide, solution
UN3427	Chlorobenzyl chlorides, solid
UN3428	3-Chloro-4-methylphenyl isocyanate, solid
UN3429	Chlorotoluidines, liquid
UN3430	Xylenols, liquid
UN3437	Chlorocresols, solid
UN3441	Chlorodinitrobenzenes, solid
UN3442	Dichloroanilines, solid
UN3443	Dinitrobenzenes, solid
UN3448	Tear gas substances, solid, n.o.s
UN3449	Bromobenzyl cyanides, solid
UN3451	Toluidines solid
UN3452	Xylidines, solid
UN3454	Dinitrotoluenes, solid
UN3455	Cresols, solid
UN3457	Chloronitrotoluenes, solid
UN3460	N-Ethylbenzyltoluidines, solid
UN3462	Toxins, extracted from living sources, solid, n.o.s.
UN3472	Crotonic acid, liquid
UN3475	Ethanol and gasoline mixture <i>or</i> Ethanol and motor spirit mixture <i>or</i> Ethanol and petrol mixture, <i>with more than 10 percent ethanol</i>
UN3480	Lithium-ion batteries (including lithium polymer batteries)
UN3481	Lithium-ion batteries (including lithium polymer batteries) contained in, or packed with, equipment
UN3485	Calcium hypochlorite, dry, corrosive <i>or</i> Calcium hypochlorite mixtures, dry, corrosive with more than 39 percent available chlorine (8.8 percent available oxygen)
UN3486	Calcium hypochlorite mixture, dry, corrosive with more than 10 percent but not more than 39 percent available chlorine
UN3487	Calcium hypochlorite, hydrated, corrosive <i>or</i> Calcium hypochlorite, hydrated mixture, corrosive with not less than 5.5 percent but not more than 16 percent water
UN3488	Toxic by inhalation liquid, flammable, corrosive, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m<sup>3</sup> and saturated vapor concentration greater than or equal to 500 LC50</i>
UN3489	Toxic by inhalation liquid, flammable, corrosive, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m<sup>3</sup> and saturated vapor concentration greater than or equal to 10 LC50</i>
UN3490	Toxic by inhalation liquid, water-reactive, flammable, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m<sup>3</sup> and saturated vapor concentration greater than or equal to 500 LC50-</i>

UN3491	Toxic by inhalation liquid, water-reactive, flammable, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m<sup>3</sup> and saturated vapor concentration greater than or equal to 10 LC50-</i>
UN3496	Batteries, nickel-metal hydride see Batteries, dry. Sealed, n.o.s. <i>for nickel metal hydride batteries transported by modes other than vessel</i>
UN3500	Chemical under pressure, n.o.s.
UN3501	Chemical under pressure, flammable, n.o.s.
UN3502	Chemical under pressure, toxic, n.o.s.
UN3503	Chemical under pressure, corrosive, n.o.s.
UN3504	Chemical under pressure, flammable, toxic, n.o.s.
UN3505	Chemical under pressure, flammable, corrosive, n.o.s.
UN3506	Mercury contained in manufactured articles
UN8000	Consumer Commodity
NA9035	Gas identification set
NA9191	Chlorine dioxide, hydrate, frozen
NA9202	Carbon monoxide, refrigerated liquid ( <i>cryogenic liquid</i> )
NA9206	Methyl phosphonic dichloride
NA9260	Aluminum, molten
NA9263	Chloropivaloyl chloride
NA9264	3,5-Dichloro-2,4,6-trifluoropyridine
NA9269	Trimethoxysilane

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## Appendix C

# USPS Packaging Instructions for Mailable Hazardous Materials

These Postal Service packaging instructions are for mailable types of hazardous materials. The numeric digits 1 through 9 correspond to the appropriate hazard class. The alpha characters differentiate the separate groups of materials within a hazard class. Packaging instructions 10A through 10C provide packaging information relating to special provisions not associated with a specific hazard class. Postal Service packaging instructions are provided as follows:

### Hazard Class 1: Explosives

- 1A Toy Propellant Devices
- 1B Safety Fuses

### Hazard Class 2: Gases

- 2A Flammable Gases
- 2B Nonflammable Gases
- 2C Fire Extinguishers
- 2D Foodstuffs and Soap Products
- 2E Audible Fire Alarm Systems
- 2F Biological Products or Medical Preparations

### Hazard Class 3: Flammable and Combustible Liquids

- 3A Flammable Liquids
- 3B Combustible Liquids
- 3C Cigarette Lighters

### Hazard Class 4: Flammable Solids

- 4A Flammable Solids
- 4B Safety Matches

### Hazard Class 5: Oxidizing Substances, Organic Peroxides

- 5A Oxidizing Substances and Organic Peroxides

### Hazard Class 6: Toxic Substances and Infectious Substances

- 6A Toxic Substances
- 6B Toxic Substances with LD50 Oral Toxicity of 50 mg/kg or Less
- 6C Category B Infectious Substances
- 6D Sharps Waste and Other Regulated Medical Waste
- 6E Used Health Care Products

- 6F Forensic Material
- 6G Nonregulated Infectious Materials
- 6H Exempt Human or Animal Specimens

## Hazard Class 7: Radioactive Materials

- 7A Radioactive Materials

## Hazard Class 8: Corrosives

- 8A Corrosives
- 8B Nonspillable Wet Battery
- 8C Manufactured Devices that Contain Small Amounts of Mercury

## Hazard Class 9: Miscellaneous Hazardous Materials

- 9A Dry Ice (Carbon Dioxide Solid)
- 9B Magnetized Materials
- 9C Miscellaneous Hazardous Materials
- 9D Lithium and Lithium-ion Cells and Batteries — Domestic
- 9E Lithium and Lithium-ion Cells and Batteries — International and APO/FPO/DPO

## Category 10: Other Packaging Instructions

- 10A Small Quantity Provision
- 10B Excepted Quantity Provision
- 10C Cremated Remains

## USPS Packaging Instruction 1A

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### Toy Propellant Devices

The proper shipping name for a mailable toy propellant device is “model rocket motor” or “igniter.” A device that is assigned identification number NA0323 or UN0454 and classed as a Division 1.4S explosive is eligible for mailing in domestic mail via surface transportation only, provided that all requirements are met and the device is properly packaged as follows.

### Proper Shipping Name and ID Number

- Model Rocket Motors, NA0323.
- Igniters, UN0454.

### Required Authorization

Prior written permission must be obtained from:

MANAGER, PRODUCT CLASSIFICATION  
 USPS HEADQUARTERS  
 475 L'ENFANT PLAZA SW, ROOM 4446  
 WASHINGTON, DC 20260

## **Mailability**

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation with prior approval. Each device must meet the specifications in [341.22a](#).

## **Design Specifications**

Mailable devices must meet each of the following conditions:

- Each device must be ignitable by electrical means only.
- Each device must contain no more than 30g (1.07 ounces) of propellant.
- Each device must produce less than 80 newton seconds of total impulse with thrust duration not less than 0.050 second.
- Each device must be constructed so that all chemical ingredients are preloaded into a cylindrical paper or similarly constructed nonmetallic tube that does not fragment into sharp, hard pieces.
- Each device must be designed so that it will not burst under normal conditions.
- Each device must be incapable of spontaneous ignition under 500° F.
- Each device must not contain any type of explosive or pyrotechnic warhead other than a small, activation-charge, parachute-recovery system.

## **Required Packaging**

### **Primary Receptacle**

- Each device must be packed in a securely sealed primary receptacle.
- Multiple primary receptacles are permitted within a single mailpiece.
- Each primary receptacle must be surrounded by sufficient cushioning material to absorb shock and prevent breakage.

### **Outer Shipping Container**

- A strong outer packaging that is capable of firmly and securely holding the primary receptacle(s) and cushioning material is required.
- Each mailpiece must not exceed a total weight of 25 pounds.

### **Marking**

- Each outer packaging must be clearly marked on the address side with “Toy Propellant Devices,” followed by the applicable proper shipping name and UN or NA number. The markings “Surface Only” or “Surface Mail Only” and “Handle With Care” must also appear on the address side of the mailpiece. A DOT hazardous materials warning label must not be affixed.
- A complete mailing address and return address must be used.

**Documentation**

- A properly completed shipper's declaration for dangerous goods must be prepared in triplicate and affixed to the outside of the mailpiece.

**Note:** Full responsibility rests with the mailer to comply with Bureau of Alcohol, Tobacco, Firearms, and Explosives (BATFE) regulations before mailing. A legible photocopy of the Product Classification Manager's approval letter must be presented by the mailer to the Postal Service acceptance clerk at the time of mailing.

## USPS Packaging Instruction 1B

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**Safety Fuse**

Safety fuses consist of a core of black powder overspun with yarns, waterproofing compounds, and/or tapes. A safety fuse assigned identification number UN0105 and classed as a Division 1.4S explosive may be mailed only as permitted in [341.22b](#) and when properly packaged as follows.

**Proper Shipping Name**

- Safety Fuse.

**ID Number**

- UN0105.

**Required Authorization**

Prior written permission must be obtained from:

MANAGER, PRODUCT CLASSIFICATION  
USPS HEADQUARTERS  
475 L'ENFANT PLAZA SW, ROOM 4446  
WASHINGTON, DC 20260

**Mailability**

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation with prior approval.

**Required Packaging****Primary Receptacle**

- Each device must be packed in a securely sealed primary receptacle.
- Multiple primary receptacles are permitted within a single mailpiece.

**Cushioning Material**

- Each primary receptacle must be surrounded by sufficient cushioning material to absorb shock and prevent breakage.



### Outer Packaging

- A strong outer packaging that is capable of firmly and securely holding the primary receptacle(s) and cushioning material is required.
- The outer packaging must be made of fiberboard, wood, or metal. Friction closures or paperboard containers are not acceptable.

### Marking

- The outside of the mailpiece must be clearly marked on the address side with “Safety Fuse, UN0105” and “Surface Only” or “Surface Mail Only.”
- A complete mailing address and return address must be used.

### Documentation

- A properly completed shipper's declaration for dangerous goods must be prepared in triplicate, and affixed to the outside of the mailpiece.

**Note:** Full responsibility rests with the mailer to comply with Bureau of Alcohol, Tobacco, Firearms, and Explosives (BATFE) regulations before mailing. A legible photocopy of the Product Classification Manager's approval letter must be presented by the mailer to the Postal Service acceptance clerk at the time of mailing.

## USPS Packaging Instruction 2A

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### Flammable Gases

A Class 2 flammable gas that qualifies as a consumer commodity or ORM-D material is mailable provided that all applicable requirements in [342](#) are met and it is properly packaged as follows.

### Proper Shipping Name

- Consumer Commodity.

### ID Number

- Various (see Appendix [A](#)).

### Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation.

### Required Packaging

#### Primary Receptacle

- The capacity of an other-than-metal (nonmetal) primary receptacle must be 4 fluid ounces (7.22 cubic inches) or less per mailpiece.
- The capacity of a metal primary receptacle must be 33.8 fluid ounces (1-liter or 61.0 cubic inches) or less per mailpiece.
- The liquid content of the material and the gas must not completely fill the primary receptacle at 130° F.

- A DOT 2P container must be used if the internal pressure is from 140 psig to 160 psig at 130° F (55° C). A DOT 2Q container must be used if the pressure is from 161 psig to 180 psig at 130° F (55° C).
- A container with an internal pressure more than 180 psig at 130° F (55° C) is prohibited from mailing.
- Primary receptacles must have recessed valves, screw-thread caps, tap closures, or other means to prevent accidental discharge. Valves and fittings must be protected to ensure the integrity of the receptacle during transport.

### **Cushioning Material**

- Sufficient cushioning material must surround the primary receptacle to absorb shock and prevent damage.

### **Outer Packaging**

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.
- Multiple primary receptacles may be securely packed within a single strong outer packaging, provided the total volume of flammable gas does not exceed 33.8 fluid ounces (1 liter) per mailpiece.

### **Marking**

- The address side of the outer packaging must be clearly marked with “Surface Only” or “Surface Mail Only” and “Consumer Commodity ORM-D.”
- Optionally, the address side of the outer packaging may bear an approved DOT limited quantity square-on-point marking designating surface transportation, prepared under [342.4b](#), instead of an ORM-D marking.
- A complete return address and delivery address must be used.

## **USPS Packaging Instruction 2B**

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### **Nonflammable Gases**

A Class 2 nonflammable gas that qualifies as a consumer commodity or ORM-D material is mailable provided that all applicable requirements in [342](#) are met and it is properly packaged as follows.

#### **Proper Shipping Name**

- Consumer Commodity.

#### **ID Number**

- Various (see Appendix [A](#)).

#### **Mailability**

- International Mail: Prohibited.
- Domestic Mail: Permitted with restrictions via air transportation and permitted via surface transportation.

## **Required Packaging**

### **Primary Receptacle(s)**

- The capacity of an other-than-metal (nonmetal) primary receptacle must be 4 fluid ounces (7.22 cubic inches) or less per mailpiece.
- The capacity of a metal primary receptacle must be 33.8 fluid ounces (1-liter or 61.0 cubic inches) or less.
- The liquid content of the material and the gas must not completely fill the primary receptacle at 130° F.
- A DOT 2P container must be used if the internal pressure is from 140 psig to 160 psig at 130° F (55° C). A DOT 2Q container must be used if the pressure is from 161 psig to 180 psig at 130° F (55° C).
- A container with an internal pressure more than 180 psig at 130° F (55° C) is prohibited from mailing.
- The primary receptacle(s) must be packaged to protect valves and fittings and to ensure integrity during transport.
- The primary receptacle(s) must have a recessed valve, screw-thread cap, tap closure, or other means to prevent accidental discharge.

### **Cushioning Material**

- Sufficient cushioning material must surround the primary receptacle to absorb shock and prevent damage.

### **Outer Packaging**

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle(s) and cushioning material is required.
- Multiple primary receptacles may be securely packed within a single strong outer packaging.
- Each mailpiece must not exceed a total weight of 25 pounds.

### **Marking**

- For air transportation, mailpieces must bear the DOT square-on-point marking including the symbol “Y,” an approved DOT Class 9 hazardous material warning label, Identification Number “ID8000,” and the proper shipping name “Consumer Commodity.”
- For surface transportation, each mailpiece must be clearly marked on the address side with “Surface Only” or “Surface Mail Only” and “Consumer Commodity ORM-D.”
- Optionally, the address side of the outer packaging may bear an approved DOT limited quantity square-on-point marking designating surface transportation, prepared under [342.4c](#), instead of an ORM-D marking.
- A complete return address and delivery address must be used.

### **Documentation**

- For air transportation, a mailable, nonflammable gas must have a properly completed shipper's declaration for dangerous goods prepared in triplicate and affixed to the outside of the mailpiece.

## USPS Packaging Instruction 2C

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### Fire Extinguishers

A fire extinguisher containing a Division 2.2 compressed, nonflammable gas assigned UN1044 that can qualify as a consumer commodity or ORM-D material is mailable if it does not contain a methyl bromide gas mixture or sulfuric acid, and, if the gas is nonflammable, nonpoisonous, or noncorrosive, as specified in 49 CFR 173.309(a). All applicable requirements in [342](#) must be met, and it must be properly packaged as follows.

#### Proper Shipping Name

- Consumer Commodity.

#### ID Number

- UN1044 (see “Note” under Documentation below).

#### Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted with restrictions via air transportation and permitted via surface transportation.

### Required Packaging

#### Primary Receptacle

- The primary receptacle must be a DOT specification 2P or 2Q container that meets the requirements in 49 CFR 173.309(a)(4).
- Only one primary receptacle not exceeding 1 liter (33.8 ounces) is permitted per mailpiece.

#### Cushioning Material

- Sufficient cushioning material must surround the primary receptacle to absorb shock and prevent damage.

#### Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.

#### Marking

- For air transportation, packages must bear the DOT square-on-point marking including the symbol “Y,” an approved DOT Class 9 hazardous material warning label, Identification Number “ID8000,” and the proper shipping name “Consumer Commodity.”
- For surface transportation, each mailpiece must be clearly marked on the address side with “Surface Only” or “Surface Mail Only” and “Consumer Commodity ORM-D.”

- Optionally, each mailpiece may bear an approved DOT limited quantity square-on-point marking, designating surface transportation, and prepared under [342.4c](#), instead of an ORM-D marking.
- A complete return address and delivery address must be used.

### **Documentation**

- For air transportation, a properly completed shipper's declaration for dangerous goods must be prepared in triplicate and affixed to the outside of the mailpiece.

**Note:** Fire extinguishers assigned UN0275, UN0276, UN0323, and UN0381 are prohibited from mailing. However, fire extinguishers assigned UN1774 are mailable as Class 8 corrosives subject to the limitations for corrosives in [348](#).

## **USPS Packaging Instruction 2D**

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### **Foodstuffs and Soap Products**

Foodstuffs and soap products that are held in containers under pressure are mailable in the domestic mail via surface transportation if they qualify as a consumer commodity or ORM-D material and all applicable requirements in [342](#) are met.

### **Proper Shipping Name**

- Consumer Commodity.

### **ID Number**

- Various (see Appendix [A](#)).

### **Mailability**

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation.

### **Required Packaging**

#### **Primary Receptacle**

- Acceptable only in a nonrefillable metal primary receptacle not exceeding 61.0 cubic inches (1 liter) with soluble or emulsified compressed gas.
- Liquid content of the material and the gas must not completely fill the primary receptacle at 130° F, the pressure in the primary receptacle must be 140 psig or less at 130° F, and the metal primary receptacle must be able to withstand one-and-one-half times the equilibrium pressure of the content at 130° F.

#### **Cushioning Material**

- The primary receptacle must be surrounded by sufficient cushioning material to absorb shock and prevent damage.

**Outer Packaging**

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.
- Multiple primary receptacles may be securely packed within a single outer packaging up to a weight limit of 25 pounds (11.325 kg) per mailpiece.

**Marking**

- The address side of each outer packaging must be clearly marked with “Inside Containers Comply With Prescribed Regulations” per 49 CFR 173.306(b)(1).
- Each mailpiece must be clearly marked on the address side with “Surface Only” or “Surface Mail Only” and “Consumer Commodity ORM-D.”
- Optionally, each mailpiece may bear an approved DOT limited quantity square-on-point marking, designating surface transportation, prepared under [342.4c](#), instead of an ORM-D marking.
- A complete return address and delivery address must be used.

## USPS Packaging Instruction 2E

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**Audible Fire Alarm Systems**

An audible fire alarm system powered by a compressed gas is mailable only in domestic mail via surface transportation provided that the system qualifies as a consumer commodity or ORM-D material and all applicable requirements in [342](#) are met.

**Proper Shipping Name**

- Consumer Commodity.

**ID Number**

- Various (see Appendix [A](#)).

**Mailability**

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation.

**Required Packaging****Primary Receptacle**

- The content of the primary receptacle is a nonflammable, nonpoisonous, or noncorrosive gas.
- The gas is contained within a metal primary receptacle that has a capacity of 19.3 fluid ounces (35 cubic inches) or less, does not exceed a pressure of 70 psig at 70° F, and is not completely filled at 130° F.

- Each nonrefillable primary receptacle must be designed to withstand a burst pressure of not less than 4 times its charged pressure at 130° F.
- Each refillable primary receptacle must be designed to withstand a burst pressure of not less than 5 times its charged pressure at 130° F.

### **Cushioning Material**

- The primary receptacle must be surrounded by sufficient cushioning material to absorb shock and prevent breakage.

### **Outer Packaging**

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning is required.
- Multiple primary receptacles may be securely packed within a single outer packaging up to a weight limit of 25 pounds (11.325 kg) per mailpiece.

### **Marking**

- Each mailpiece must be clearly marked on the address side with “Surface Only” or “Surface Mail Only” and “Consumer Commodity ORM-D.”
- Optionally, each mailpiece may bear an approved DOT limited quantity square-on-point marking, designating surface transportation, prepared under [342.4c](#), instead of an ORM-D marking.
- A complete return address and delivery address must be used.

## **USPS Packaging Instruction 2F**

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### **Biological Products or Medical Preparations**

A product or preparation in a nonrefillable metal primary receptacle charged with a nonflammable solution containing biological products or a medical preparation that could deteriorate by heat may be accepted in the domestic mail via surface transportation only provided that the item qualifies as a consumer commodity or ORM-D material, and all applicable requirements in [342](#) are met.

### **Proper Shipping Name**

- Consumer Commodity.

### **ID Number**

- Various (see Appendix [A](#)).

### **Mailability**

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation.

## Packaging Requirements

### Primary Receptacle

- Capacity of the primary receptacle must be 19.3 fluid ounces (35 cubic inches) or less, pressure in the primary receptacle must be 140 psig or less at 130° F, and the liquid content of product and gas must not completely fill the container at 130° F.
- If heated until the pressure in the primary receptacle is equivalent to equilibrium pressure of content at 130° F, the primary receptacle must be able to withstand leakage, distortion, or other damage or defects.
- Only one primary receptacle is permitted per mailpiece.

### Cushioning Material

- The primary receptacle must be surrounded by sufficient cushioning material to absorb shock and prevent breakage.

### Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning is required.
- Multiple primary receptacles are not permitted.

### Marking

- Each mailpiece must be clearly marked on the address side with “Surface Only” or “Surface Mail Only” and “Consumer Commodity ORM-D.”
- Optionally, each mailpiece may bear an approved DOT limited quantity square-on-point marking, designating surface transportation, prepared under [342.4c](#), instead of an ORM-D marking.
- A complete return address and delivery address must be used.

## USPS Packaging Instruction 3A

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### Flammable Liquids

A flammable liquid having a flashpoint greater than 20° F (–7° C) but less than 100° F (38° C) is mailable in domestic mail via surface transportation, if the liquid can qualify as a consumer commodity or ORM-D material, and all applicable requirements in [343](#) are met.

Flammable liquids having a flashpoint of 20° or less are not mailable.

### Proper Shipping Name

- Consumer Commodity.

### ID Number

- Various (see Appendix [A](#)).



## **Mailability**

- International Mail and APO/FPO/DPO: Prohibited.
- Domestic Mail: Permitted only via surface transportation.

## **Required Packaging**

Separate packaging requirements apply depending on the flashpoint of the flammable liquid.

### **For flashpoint greater than 20° F (-7° C) but not more than 73° F (23° C):**

#### **Primary Receptacle**

- A metal primary receptacle must not exceed 1 quart.
- A nonmetal primary receptacle must not exceed 1 pint.
- The primary receptacle must have a screw cap (with minimum of one-and-one-half turns), soldering clips, or other means of secure closure (friction tops are not acceptable).
- Multiple primary receptacles are permitted, provided the aggregate quantity of flammable material per mailpiece does not exceed 1 quart for metal primary containers or 1 pint for nonmetal primary containers.

#### **Cushioning Material and Secondary Packaging**

- Enough cushioning material must surround the primary receptacles to prevent breakage and absorb any potential leakage.
- The cushioning and primary receptacles must be packed in securely sealed secondary packaging.

#### **Outer Packaging**

- Strong outer packaging that is capable of firmly and securely holding the primary receptacles, cushioning material, and secondary packaging is required.

#### **Marking**

- Each mailpiece must be clearly marked on the address side with “Surface Only” or “Surface Mail Only” and “Consumer Commodity ORM-D.”
- Optionally, each mailpiece may bear an approved DOT limited quantity square-on-point marking, designating surface transportation, prepared under [343.3b](#), instead of an ORM-D marking.
- A complete return address and delivery address must be used.

### **For flashpoint greater than 73° F (23° C) but less than 100° F (38° C):**

#### **Primary Receptacle**

- A metal primary receptacle must not exceed 1 gallon.
- A nonmetal primary receptacle must not exceed 1 quart.
- The primary receptacle must have a screw cap (with minimum of one-and-one-half turns), soldering clips, or other means of secure closure (friction tops are not acceptable).

- Multiple primary receptacles are permitted, provided the aggregate quantity of flammable material per mailpiece does not exceed 1 gallon for metal primary containers or 1 quart for nonmetal primary containers.

#### **Cushioning Material and Secondary Packaging**

- Enough cushioning material must surround the primary receptacles to prevent breakage and absorb any potential leakage.
- The cushioning and primary receptacles must be packed in securely sealed secondary packaging.

#### **Outer Packaging**

- Strong outer packaging that is capable of firmly and securely holding the primary receptacles, cushioning material, and secondary packaging is required.

#### **Marking**

- Each mailpiece must be clearly marked on the address side with “Surface Only,” or “Surface Mail Only” and “Consumer Commodity ORM-D.”
- Optionally, each mailpiece may bear an approved DOT limited quantity square-on-point marking, designating surface transportation, prepared under [343.3b](#), instead of an ORM-D marking.
- A complete return address and delivery address must be used.

#### **For flashpoint of at least 100° F (38° C) but not more than 140° F (60° C):**

- Use Packaging Instruction 3B.

## **USPS Packaging Instruction 3B**

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### **Combustible Liquids**

A combustible liquid having a flashpoint of 140° F (60° C) but no more than 200° F (93° C) is mailable if it can qualify as a consumer commodity or ORM-D material and meet all applicable requirements in [343](#). A flammable liquid having a flashpoint of at least 100° F (38° C) but not more than 140° F (60° C) may be reclassified as a combustible liquid within the limits of 49 CFR 173.120(b).

#### **Proper Shipping Name**

- Consumer Commodity.

#### **ID Number**

- Various (see Appendix [A](#)).

#### **Mailability**

- International Mail: Prohibited.
- Domestic Mail: For flashpoints of at least 100° F (38° C), but not more than 140° F (60° C), permitted only via surface transportation. For flashpoints above 140° (60° C), permitted with restrictions via air transportation and surface transportation.

## **Required Packaging**

Separate packaging requirements apply, depending on the flashpoint of the combustible liquid.

### **For flashpoint of at least 100° F (38° C) but not more than 140° F (60° C):**

#### **General**

- Permitted only in domestic mail via surface transportation.

#### **Primary Receptacle**

- The capacity of a metal primary receptacle must not exceed 1 gallon.
- A nonmetal primary receptacle must not exceed 1 quart.
- Multiple primary receptacles are permitted, provided the aggregate quantity of flammable material per mailpiece does not exceed 1 gallon for metal primary containers or 1 quart for nonmetal primary containers.

#### **Absorbent and Cushioning Material**

- Enough absorbent and cushioning material must surround the primary receptacles to prevent breakage and absorb any potential leakage.

#### **Secondary Packaging**

- The cushioning and primary receptacles must be packed in a securely sealed secondary packaging.

#### **Outer Packaging**

- Strong outer packaging that is capable of firmly and securely holding the primary receptacles, cushioning material, and secondary packaging is required.

#### **Marking**

- Each mailpiece must be plainly and durably marked on the address side with “Surface Only” or “Surface Mail Only” and “Consumer Commodity ORM-D.”
- Optionally each mailpiece may bear the appropriate DOT limited quantity square-on-point marking, prepared under [343.3b](#), instead of an ORM-D marking.
- A complete return address and delivery address must be used.

### **For flashpoint above 140° F (60° C) but not more than 200° F (93° C):**

#### **General**

- Permitted in domestic mail via air or surface transportation.

#### **Primary Receptacle**

- The capacity of the primary receptacle must not exceed 1 gallon.
- Multiple primary receptacles are permitted, provided the aggregate quantity of flammable material per mailpiece does not exceed 1 gallon.

#### **Absorbent and Cushioning Material**

- Enough absorbent and cushioning material must surround the primary receptacles to prevent breakage and absorb any potential leakage.

### **Secondary Packaging**

- The cushioning and primary receptacles must be packed in a securely sealed secondary packaging.

### **Outer Packaging**

- Strong outer packaging that is capable of firmly and securely holding the primary receptacles, cushioning material, and secondary packaging is required.

### **Marking**

- When permitted for air transportation, packages must bear the DOT square-on-point marking including the symbol “Y,” an approved DOT Class 9 hazardous material warning label, Identification Number “ID8000,” and the proper shipping name “Consumer Commodity.”
- When using surface transportation, each mailpiece must bear an approved DOT limited quantity square-on-point marking, designating surface transportation, and prepared under 343.3b, or be plainly and durably marked on the address side with “Surface Only” or “Surface Mail Only” and “Consumer Commodity ORM–D.”
- A complete return address and delivery address must be used.

### **Documentation**

- For air transportation, a properly completed shipper's declaration for dangerous goods must be prepared in triplicate and affixed to the outside of the mailpiece.

## **For flashpoint above 200° F (93° C):**

### **General**

- The material is not regulated as a hazardous material. Therefore, it is permitted in domestic mail via air or surface transportation without restriction when properly packaged to prevent leakage during transport.

### **Primary Receptacle**

- Each primary receptacle must be sturdy and have a secure method of closure.
- Multiple primary receptacles may be enclosed within a single mailpiece.

### **Absorbent and Cushioning Material**

- Enough absorbent and cushioning material must surround the primary receptacle to prevent breakage and absorb all potential leakage.

### **Outer Packaging**

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.

### **Marking**

- A complete return address and delivery address must be used.

# USPS Packaging Instruction 3C

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## Cigarette Lighters

A cigarette lighter equipped with an ignition element and containing fuel is classified as a Class 3 flammable liquid. A cigarette lighter containing a flammable gas is classed as a Division 2.1 flammable gas. A cigarette lighter that contains either flammable liquid or flammable gas is permitted in domestic mail via surface transportation only with prior written approval, provided all applicable requirements of [343.25](#) are met.

## Proper Shipping Name and ID Number

- Lighters or Lighter Refills, UN1057.

## Required Authorization

- The design of the lighter and its packaging must be approved by the DOT Associate Administrator for Hazardous Material Safety, per 49 CFR 173.21(i) and 173.308, and a DOT Approval Number (LAA\*\*\*\*) must have been issued. Prior to mailing, the mailer must request and obtain written approval from the PCSC manager. (See [343.25](#)).

## Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation.

## Required Packaging

### Primary Receptacle

- The design of the lighter must be approved by DOT (see “Required Authorization” above).

### Cushioning Material

- Sufficient cushioning material must be used to absorb shock and protect the lighter from breakage.

### Outer Packaging

- The packaging must be designed to protect the lighter's sparking mechanism from accidental ignition caused by friction or external pressure during transport.
- The outer packaging must be of sufficient strength to prevent the inner contents from breaking or bursting through.

### Marking

- The address side of each mailpiece must be clearly marked with “Surface Only” or “Surface Mail Only” and “Lighters” or “Lighter Refills” followed by the LAA\*\*\*\* Number.
- A complete return address and delivery address must be used.

**Note:** A legible photocopy of the PCSC manager's approval letter must accompany the mailing at the time of deposit.

## USPS Packaging Instruction 3D

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### Ethanol-based Flammable Liquids and Solids

Certain limited quantities of flammable liquids and solids containing ethyl alcohol are permitted in the domestic mail via air transportation, with special authorization from the manager, Product Classification when all applicable requirements in [343.27](#) are met.

#### Proper Shipping Name

- Consumer Commodity.

#### ID Number

- Various (see Appendix A).

#### Mailability

- International Mail and APO/FPO/DPO: Prohibited.
- Domestic Mail: Permitted via air transportation with special authorization; or via surface transportation by following Packaging Instruction 3A.

#### Required Packaging

Separate packaging requirements apply, dependent on the percentage of ethyl alcohol and primary container used.

***For content not more than 70% ethyl alcohol:***

#### Primary Receptacle

- A nonglass primary receptacle must not exceed 16 ounces for liquids or 1 pound for solids.
- A glass primary receptacle must not exceed 8 ounces for liquids or 1/2 pound for solids.
- The primary receptacle must have a screw cap (with minimum of one and one-half turns), soldering clips, or other means of secure closure (friction tops are not acceptable).
- Multiple primary receptacles are permitted when the total aggregate mailpiece weight does not exceed 25 pounds.
- The total volume of flammable liquid in the mailpiece must not exceed 96 ounces.
- The total volume of flammable solids in the mailpiece must not exceed 16 pounds.

#### Cushioning Material

- Enough cushioning material must surround the primary receptacles to prevent breakage and absorb any potential leakage.
- The cushioning and primary receptacles must be packed in securely sealed outer packaging.

### **Outer Packaging**

- Strong outer packaging that is capable of firmly and securely holding the primary receptacles and cushioning material is required.

### **Marking**

- Each package must bear the text “Contains Air-Eligible Ethyl Alcohol — Authorization No. #” on the outer packaging in at least 14-point type.
- A complete company name, return address, and delivery address must be applied to each outer package.

### ***For content more than 70% ethyl alcohol:***

### **Primary Receptacle**

- The primary receptacle must not exceed 8 ounces for liquids or 1/2 pound for solids.
- The primary receptacle must have a screw cap (with minimum of one and one-half turns), soldering clips, or other means of secure closure (friction tops are not acceptable).
- Multiple primary receptacles are permitted when the total aggregate mailpiece weight does not exceed 16 pounds.
- The total volume of flammable liquid in the mailpiece must not exceed 48 ounces.
- The total volume of flammable solids in the mailpiece must not exceed 8 pounds.

### **Cushioning Material**

- Enough cushioning material must surround the primary receptacles to prevent breakage and absorb any potential leakage.
- The cushioning and primary receptacles must be packed in securely sealed outer packaging.

### **Outer Packaging**

- Strong outer packaging that is capable of firmly and securely holding the primary receptacles and cushioning material is required.

### **Marking**

- Each package must bear the text “Contains Air-Eligible Ethyl Alcohol — Authorization No. #” on the outer packaging in at least 14-point type.
- A complete company name, return address, and delivery address must be applied to each outer package.

## USPS Packaging Instruction 4A

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### Flammable Solids

A flammable solid that can qualify as a mailable limited quantity or ORM-D material is permitted in the domestic mail via surface transportation only, provided all applicable requirements in [344](#) are met.

### Proper Shipping Name

- Various (see Appendix [A](#)).

### ID Number

- Various (see Appendix [A](#)).

### Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation.

### Required Packaging

#### Primary Receptacle

- The primary receptacle must have a secure seal and together with its contents must not exceed a weight of 1 pound.
- Multiple primary receptacles are permitted.

#### Cushioning Material

- Sufficient cushioning material must be used to absorb shock and the primary receptacle from breakage.

#### Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.
- Each mailpiece must not exceed a total weight of 25 pounds.

#### Marking

- Each mailpiece must be clearly marked on the address side with “Surface Only” or “Surface Mail Only” and “Consumer Commodity ORM-D.”
- Optionally, each mailpiece may bear an approved DOT limited quantity square-on-point marking, designating surface transportation, prepared under [344.3a](#), instead of an ORM-D marking.
- A complete return address and delivery address must be used.



# USPS Packaging Instruction 4B

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## Safety Matches

Safety matches (book, card, or strike-on-box) may be mailed only in domestic mail via surface transportation, provided all applicable requirements in [344](#) are met, including:

- They do not ignite spontaneously under conditions normally incident to transportation or when subjected for eight consecutive hours to a temperature of 200° F (93° C).
- They cannot be readily ignited by friction unless struck on their own or on a similar box, card, or book.

**Note:** Strike-anywhere matches assigned UN1331 and other types of matches assigned UN2254 or UN1945 are nonmailable.

## Proper Shipping Name

- Matches, Safety.

## ID Number

- UN1944.

## Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation.

## Required Packaging

### Primary Receptacle

- Mailable types of safety matches must be tightly packed in a securely sealed primary receptacle to prevent any shifting or movement that could cause accidental ignition by rubbing against adjoining items.
- Multiple primary receptacles are permitted per mailpiece.

### Outer Packaging

- The outer packaging material must be made of fiberboard, wood, or other equivalent and be strong enough to prevent the inner contents from bursting through.
- The primary container(s) must be snugly packed within the outer packaging.
- Each mailpiece must not exceed a total weight of 25 pounds.

### Marking

- The address side of each mailpiece must be clearly marked “Surface Only” or “Surface Mail Only” and either “Book Matches”, “Card matches,” or “Strike-on-Box Matches,” as applicable.
- A complete return address and delivery address must be used.

### Documentation

- A shipping paper is not required.

## USPS Packaging Instruction 5A

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### **Oxidizing Substances, Organic Peroxides**

An oxidizing substance or an organic peroxide that can qualify as a consumer commodity or ORM-D material is permitted in the domestic mail, provided that all applicable requirements in [345](#) are met.

#### **Proper Shipping Name**

- Various (see Appendix [A](#)).

#### **ID Number**

- Various (see Appendix [A](#)).

#### **Mailability**

- International Mail: Prohibited.
- Domestic Mail: Permitted with restrictions via air transportation, or surface transportation.

### **Required Packaging**

#### **Primary Receptacle**

- For liquids, the capacity of the primary receptacle must not exceed 1 pint (.0473 liters).
- For solids, the weight of the contents of the primary receptacle must not exceed 1 pound (.0453 kg).
- Multiple primary receptacles are permitted up to a total weight of 25 pounds per mailpiece.

#### **Absorbent and Cushioning Material**

- Enough absorbent and cushioning material must surround the primary receptacle to prevent breakage and absorb all potential leakage.

#### **Secondary Packaging**

- For liquids only, the cushioning and primary receptacle must be packed in a secondary leak-resistant packaging or material that is securely sealed.

#### **Outer Packaging**

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.
- Each mailpiece must not exceed a total weight of 25 pounds.

### **Marking**

- For air transportation, packages must bear the DOT square-on-point marking including the symbol “Y,” the appropriate approved DOT Class 5.1 or 5.2 hazardous material warning label, the identification number, and the proper shipping name.
- For surface transportation, each mailpiece must be clearly marked on the address side with “Surface Only” or “Surface Mail Only” and “Consumer Commodity ORM-D.”
- Optionally, each mailpiece may bear an approved DOT limited quantity square-on-point marking, designating surface transportation, and prepared under [345.3c](#), instead of an ORM-D marking.
- A complete return address and delivery address must be used.

### **Documentation**

- For air transportation, a mailable material must have a properly completed shipper’s declaration for dangerous goods that is prepared in triplicate affixed to the outside of the mailpiece.
- The shipper’s declaration must be properly completed and signed by the mailer.

## **USPS Packaging Instruction 6A**

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### **Toxic Substances**

A Division 6.1 toxic substance that qualifies as a consumer commodity or ORM-D material is permitted in the domestic mail via air or surface transportation when all applicable requirements in [346](#) are met.

### **Proper Shipping Name**

- Consumer Commodity.

### **ID Number**

- Various (see Appendix [A](#)).

### **Mailability**

- International Mail: Prohibited.
- Domestic Mail: Permitted via air transportation or surface transportation.

### **Required Packaging**

#### **Primary Receptacle**

- The primary container must be of sufficient strength and have a secure method of closure.
- The capacity of the primary receptacle(s) per mailpiece must not exceed 8 ounces.

**Absorbent and Cushioning Material**

- Enough absorbent and cushioning material must surround the primary receptacle to prevent breakage and absorb all potential leakage.

**Outer Shipping Container**

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.
- The inner receptacle and cushioning material must fit snugly within the outer packaging.

**Marking**

- For air transportation, packages must bear the DOT square-on-point marking including the symbol “Y,” an approved DOT Class 9 hazardous material warning label, Identification Number “ID8000,” and the proper shipping name “Consumer Commodity.”
- For surface transportation, each mailpiece must be clearly marked on the address side with “Surface Only” or “Surface Mail Only” and “Consumer Commodity ORM-D.”
- Optionally, each mailpiece may bear an approved DOT limited quantity square-on-point marking, designating surface transportation, prepared under [346.31c](#), instead of an ORM-D marking.
- A complete return address and delivery address must be used.

**Documentation**

- For air transportation, a mailable material must have a properly completed shipper's declaration for dangerous goods that is prepared in triplicate and affixed to the outside of the mailpiece.

## USPS Packaging Instruction 6B

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**Toxic Substances With LD<sub>50</sub> Oral Toxicity of 50 mg/kg or Less**

A Division 6.1 toxic substance having an LD<sub>50</sub> for oral toxicity of greater than 5 mg/kg but less than or equal to 50 mg/kg is mailable only between authorized parties under the specific conditions in [346.231b](#).

**Proper Shipping Name**

- Various (see Appendix [A](#)).

**ID Number**

- Various (see Appendix [A](#)).

## Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only between authorized parties via air transportation or surface transportation.

## Authorized Mailers

Toxic substances that have an LD<sub>50</sub> for oral toxicity of greater than 5 mg/kg but less than or equal to 50 mg/kg may be mailed between the following parties subject to these specific conditions:

- Toxic substances for scientific use (not outwardly or of their own force dangerous or injurious to life, health, or property) may be sent only between manufacturers, dealers, bona fide research or experimental scientific laboratories, and employees of federal, state, or local governments who have official use for such poisons and are designated by the agency head to receive or send such poisons.
- Poisonous drugs and medicines that are regulated as Division 6.1 materials may be sent only from the manufacturer or dealer of the drugs and medicines to licensed physicians, surgeons, dentists, pharmacists, druggists, cosmetologists, barbers, and veterinarians (18 U.S.C. 1716).

**Note:** Drugs and medicines that are not regulated as Division 6.1 materials are subject to the conditions in Chapter [4](#).

## Required Packaging

### Primary Receptacle

- The total volume in the primary receptacle must not exceed 8 ounces.
- The primary receptacle must be leak-resistant and have a secure method of closure.

### Absorbent and Cushioning Material

- Each primary receptacle that contains a liquid material must be completely surrounded by absorbent material capable of completely taking up all the contents in the event of breakage.
- Sufficient cushioning material must surround the primary receptacle(s) to absorb shocks and prevent damage.

### Secondary Container

- For toxic liquids the secondary container must be leakproof.
- For toxic solids the secondary container must be siftproof.
- The primary receptacle, absorbent material, and cushioning material must fit firmly and securely within the secondary packaging to absorb shocks and prevent breakage during normal postal handling.

**Outer Shipping Container**

- The outer container must be constructed of 200-pound grade corrugated fiberboard or equivalent strength.
- The secondary container must fit firmly and securely within the outer shipping container packaging to prevent breakage during normal postal handling.

**Marking**

- The proper shipping name and UN number of the toxic material must be clearly marked on the address of the mailpiece.
- Orientation markings (see [Exhibit 226](#)) that properly indicate the upright position of the primary receptacle(s) must be displayed on two opposite outer side walls of the outer shipping container.
- Each mailpiece must bear a complete return address and delivery address. The delivery address must be placed on the top side of the mailpiece.

**Documentation**

- For air or surface transportation, a properly completed shipper's declaration for dangerous goods (i.e., shipping paper) must be prepared in triplicate and affixed to the outside of the mailpiece.

## USPS Packaging Instruction 6C

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**Category B Infectious Substances**

Infectious substance means a material known or reasonably expected to contain a pathogen. A pathogen is a microorganism that can cause disease in humans or animals. Examples of pathogens include bacteria, viruses, fungi, and other infectious agents. An infectious substance must be assigned to one of the following two packaging categories:

- Category A: Category A infectious substances are not mailable.
- Category B: An infectious substance that does not meet the criteria for inclusion in Category A. A mailpiece known or suspected to contain a Category B infectious substance is mailable as described in [346](#).

**Proper Shipping Name and ID Number**

- Biological substance, Category B, UN3373.

**Mailability**

- International Mail: Mailable only when:
  - Permitted by the destination country (see the Individual Country Listing in the IMM).
  - They are presented by and to authorized laboratories designated in “International Mail” below in this Packaging Instruction.
  - They meet the definition in [346.12a](#).

- Written approval has been granted by the manager, Product Classification.
- Quantity limits in [622.2](#) are met.
- Sent via First-Class Package International Service with Registered Mail service.
- Domestic Mail: Mailable only when:
  - Intended for medical or veterinary use, research, or laboratory certification related to the public health.
  - Division 6.2 materials meet the preparation requirements for air transportation and sent via Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service.

## **Required Packaging**

- Must be triple-packaged, meeting the packaging requirements in 49 CFR 173.199. Such materials must be properly packaged to withstand shocks, pressure changes, and other conditions related to ordinary handling in transit, and surrounded by absorbent material sufficient to protect the primary receptacle and to absorb the total amount of liquid should the primary receptacle leak or break.

## **Primary Receptacle (Container)**

- Each primary receptacle containing a liquid must be leakproof. Each primary receptacle containing a solid must be siftproof.
- A single primary receptacle must not contain more than 1 liter (34 ounces) of a liquid specimen or 4 kg (8.8 pounds) of a solid specimen.
- Two or more primary receptacles whose combined volume does not exceed 4 liters (1 gallon) for liquids or 4 kg (8.8 pounds) for solids may be enclosed in a single secondary container.

## **Cushioning and Absorbent Material**

- The space between the primary receptacle(s) and the secondary container at the top, bottom, and sides must contain enough material to absorb the entire contents of the primary receptacle(s) in case of breakage or leakage.
- Either the primary receptacle or the secondary container must be capable of withstanding, without leakage, an internal pressure that produces a pressure differential of not less than 0.95 bar, 14 psi (95 kPa), and temperatures in the range of –40° F to 131° F (–40° C to 55° C).

## **Secondary Container**

- Secondary containers for liquids must be leakproof. Secondary containers for solids must be siftproof. The secondary packaging must be constructed of a durable material and have a secure sealing method.
- If the primary receptacle does not meet the pressure requirements listed above, then the secondary container must be designed to meet those requirements.
- The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#).

### Outer Shipping Container

- The primary and secondary packaging must be enclosed in a rigid outer shipping container. The primary receptacle(s) and the secondary container must be enclosed in a strong outer packaging constructed of fiberboard or other equivalent material.
- At least one surface of the outer shipping container must have a minimum dimension of 3.9 inches by 3.9 inches (100 mm by 100 mm) as required by 49 CFR 173.199.

### Markings

As required by 49 CFR 173.199:

- Each mailpiece (outer shipping container) must be marked on the address side with the proper shipping name “Biological Substance, Category B” and have the diamond marking indicating UN3373 (see [Exhibit 346.12a2](#)).
- The address side of the outer shipping container must be marked with name and telephone number of a person who is knowledgeable about the material shipped and has comprehensive emergency response and incident mitigation information, or someone who has immediate access to the person with such knowledge and information.
- Orientation arrows are not required on these mailpieces but may be used.

### International Mail

- Substances identified in IMM 135.11b *must* be sent *only* by authorized laboratories to their foreign counterparts in those countries that have indicated a willingness to accept them.

**Note:** Countries distinguish between infectious and noninfectious (nonregulated) biological substances and may prohibit one or the other or both. See “Prohibitions” in the Individual Country Listings.

- Infectious biological substances can be sent to or received by *only* the following types of institutions:
  - a. Laboratories of local, state, and federal government agencies.
  - b. Laboratories of federally licensed manufacturers of biological products derived from bacteria and viruses.
  - c. Laboratories affiliated with or operated by hospitals, universities, research facilities, and other teaching institutions.
  - d. Private laboratories licensed, certified, recognized, or approved by a public authority.



# USPS Packaging Instruction 6D

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## Sharps Waste and Other Regulated Medical Waste

Regulated medical waste and sharps medical waste known or suspected to contain a Category A infectious substance is not mailable. Regulated medical waste and sharps medical waste as defined in [346.12f](#) and [346.12g](#) and containing materials classified as Category B infectious substances are permitted for mailing provided that all applicable requirements specified in [346.322](#) are met.

For packaging instructions for medical professional packages, refer to [346.322b–d](#).

## Proper Shipping Name and ID Number

- Regulated Medical Waste, UN3291.
- Sharps Medical Waste, UN3291.

## Required Authorization

- Each vendor of a complete regulated medical waste or sharps waste mailing container system (including all component parts required to safely mail such waste to a storage or disposal facility) must obtain authorization from the Postal Service prior to mailing. The vendor in whose name the authorization is being sought must submit a written request to the manager of Product Classification, Postal Service Headquarters (see [214](#) for address).

## Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only with merchandise return service via Priority Mail or First-Class Mail.

## Required Packaging

### General

- Only regulated medical waste and sharps medical waste mailing container systems approved by Postal Service Headquarters may be mailed. Approved packaging must meet all requirements in [346.322b](#), including a leakproof primary receptacle (also puncture-resistant for sharps medical waste), a water-resistant secondary containment system, enough material within the primary receptacle to absorb and retain three times the total liquid allowed within the primary receptacle, and a step-by-step instruction sheet that details the sequence and method of container assembly prior to mailing.

### Marking

- Each primary receptacle and outer shipping container must bear a label, which cannot be detached intact, showing the name of the vendor, the USPS Authorization Number, and the container ID number. Place the label on the top or on a side of the container.
- The primary receptacle(s) and the outer shipping container must bear the international biohazard symbol in black with either a fluorescent orange or fluorescent red background as shown in [Exhibit 346.321](#). The symbol on the outer shipping container must be at least 3 inches high and 4 inches wide.
- The outer shipping container must bear a properly prepared merchandise return service label. The merchandise return service permit must be held in the same name as that of the authorized medical waste vendor.
- The outer shipping container must be marked on two opposite side walls with the package orientation marking in 49 CFR 173.312 to identify the proper upright position of the mailpiece during handling.
- Mailpieces containing regulated medical waste or sharps waste must be marked on the address side with the correct UN number and proper shipping name (e.g., “Regulated Medical Waste, UN3291” or “Regulated Medical Waste-Sharps, UN3291”).

### Documentation

- Each mailpiece must have a four-part waste shipping paper. The shipping paper must be affixed to the outside of the mailpiece in an envelope or similar carrier that can be easily opened and resealed to allow review of the document. The shipping paper must comply with all applicable requirements imposed by the laws of the state from which the container system is mailed. At a minimum, the information in [Exhibit 346.322c3](#) must be on the shipping paper.

## USPS Packaging Instruction 6E

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### Used Health Care Products

“Used health care product” means a medical, diagnostic, or research device or piece of equipment, or a personal care product used by consumers, medical professionals, or pharmaceutical providers, that does not meet the definition of a diagnostic specimen, biological product, regulated medical waste, or sharps waste, is contaminated with potentially infectious body fluids or materials, and is not decontaminated or disinfected to remove or mitigate the infectious hazard prior to transport.

### Proper Shipping Name

- Not applicable.

## **Mailability**

- International Mail: Prohibited.
- Domestic Mail: A used health care product:
  - Known or reasonably suspected to contain a Category A material is not mailable.
  - Not suspected to contain infectious material or that is known, or suspected, to contain Category B infectious substances, and is being returned to the manufacturer or manufacturer's designee, is mailable with air transportation.

## **Required Packaging**

- Each used health care product must be drained of liquid to the extent possible and placed in a watertight primary receptacle designed and constructed to ensure that it remains intact under normal conditions of transport. For a used health care product capable of cutting or penetrating skin or packaging material, the primary receptacle must be capable of retaining the product without puncture of the packaging under normal conditions of transport.

## **Primary Container**

- The primary receptacle must be capable of retaining the product without puncture of the packaging under normal conditions of transport.
- Each primary receptacle must be placed inside a watertight secondary container designed and constructed to ensure that it remains intact under normal conditions of transport.
- The primary receptacle must be marked with the international biohazard symbol shown in [Exhibit 346.321](#).

## **Secondary Container**

- Each primary receptacle must be placed inside a watertight secondary container designed and constructed to ensure that it remains intact under normal conditions of transport.
- The secondary container must also be marked with the international biohazard symbol shown in [Exhibit 346.321](#).

## **Outer Shipping Container**

- The secondary container must be placed inside an outer shipping container with sufficient cushioning material to prevent movement between the secondary container and the outer shipping container. An itemized list of the contents of the primary receptacle and information concerning possible contamination with a Division 6.2 material, including its possible location on the product, must be placed between the secondary container and the outer shipping container.

## **Marking/Documentation**

- A shipping paper and content marking on the outer shipping container are not required.

## USPS Packaging Instruction 6F

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### Forensic Material

Forensic material containing a biological material, such as tissue, body fluid, excreta, or secretions, and sent on behalf of a federal, state, local, or Indian tribal government agency must be packaged under [346.325](#) when it is not known or suspected to contain a Category A or Category B infectious substance. Forensic material known or suspected to contain a Category A infectious substance is not mailable. Forensic material known or suspected to contain a Category B infectious substance as identified in [346.321](#) is mailable via air transportation, when triple-packaged in a primary receptacle, secondary container, and a rigid outer shipping container.

### Proper Shipping Name

- Not applicable.

### Mailability

- International Mail: Mailable only when:
  - Permitted by the destination country (see the Individual Country Listing in the IMM).
  - They are presented by and to authorized laboratories designated in “International Mail” below in this Packaging Instruction.
  - They meet the Category B infectious substance definition in [346.12a](#).
  - Written approval has been granted by the manager, Product Classification.
  - Quantity limits in [622.2](#) are met.
  - They are triple-packaged (see below), meeting the packaging requirements in 49 CFR 173.199.
  - Sent via First-Class Package International Service with Registered Mail service.
- Domestic Mail: Mailable only when:
  - Intended for medical or veterinary use, research, or laboratory certification related to the public health.
  - Division 6.2 materials meet the preparation requirements for air transportation and sent via Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service.

### Required Packaging

- Must be triple-packaged, meeting the packaging requirements in 49 CFR 173.199. Such materials must be properly packaged to withstand shocks, pressure changes, and other conditions related to ordinary handling in transit, and surrounded by absorbent material sufficient to protect the primary receptacle and to absorb the total amount of liquid should the primary receptacle leak or break.

### **Primary Receptacle (Container)**

- Each primary receptacle containing a liquid must be leakproof. Each primary receptacle containing a solid must be siftproof.
- A single primary receptacle must not contain more than 1 liter (34 ounces) of a liquid specimen or 4 kg (8.8 pounds) of a solid specimen.
- Two or more primary receptacles whose combined volume does not exceed 4 liters (1 gallon) for liquids or 4 kg (8.8 pounds) for solids may be enclosed in a single secondary container.

### **Cushioning and Absorbent Material**

- The space between the primary receptacle(s) and the secondary container at the top, bottom, and sides must contain enough material to absorb the entire contents of the primary receptacle(s) in case of breakage or leakage.
- Either the primary receptacle or the secondary container must be capable of withstanding, without leakage, an internal pressure that produces a pressure differential of not less than 0.95 bar, 14 psi (95 kPa), and temperatures in the range of –40° F to 131° F (–40° C to 55° C).

### **Secondary Container**

- Secondary containers for liquids must be leakproof. Secondary containers for solids must be siftproof. The secondary packaging must be constructed of a durable material and have a secure sealing method.
- If the primary receptacle does not meet the pressure requirements listed above, then the secondary container must be designed to meet those requirements.
- The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#).

### **Outer Shipping Container**

- The primary and secondary packaging must be enclosed in a rigid outer shipping container. The primary receptacle(s) and the secondary container must be enclosed in a strong outer packaging constructed of fiberboard or other equivalent material.
- At least one surface of the outer shipping container must have a minimum dimension of 3.9 inches by 3.9 inches (100 mm by 100 mm) as required by 49 CFR 173.199.

### **Marking/Documentation**

- Category B infectious substances not present:
  - A shipping paper and content markings on the outer shipping container are not required.
  - Each mailpiece must have a complete delivery and return address.
- Category B infectious substances are present:
  - Each mailpiece (outer shipping container) must be marked with the proper shipping name “Biological Substance, Category B” and have the diamond marking indicating UN3373 (see [Exhibit 346.12a2](#)).

- The address side of the outer shipping container must be marked with name and telephone number of a person who is knowledgeable about the material shipped and has comprehensive emergency response and incident mitigation information, or someone who has immediate access to the person with such knowledge and information.
- Orientation arrows are not required on these mailpieces but may be used.

### International Mail

Substances identified in IMM 135.11b *must* be sent *only* by authorized laboratories to their foreign counterparts in those countries that have indicated a willingness to accept them.

**Note:** Countries distinguish between infectious and noninfectious (nonregulated) biological substances and may prohibit one or the other or both. See “Prohibitions” in the Individual Country Listings.

- Infectious biological substances can be sent to or received by *only* the following types of institutions:
  - Laboratories of local, state, and federal government agencies.
  - Laboratories of federally licensed manufacturers of biological products derived from bacteria and viruses.
  - Laboratories affiliated with or operated by hospitals, universities, research facilities, and other teaching institutions.
  - Private laboratories licensed, certified, recognized, or approved by a public authority.

## USPS Packaging Instruction 6G

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### Nonregulated Infectious Materials

Nonregulated materials as defined in [346.234](#) are not subject to regulation as hazardous materials but must be properly packaged when presented for mailing. Nonregulated materials include biological product, blood collected for the purpose of blood transfusion, blood products and blood components collected for the purpose of transfusion, dried blood spots, forensic material not expected of containing a Category A or Category B infectious substance and transported on behalf of a government agency. For a complete description of nonregulated materials, see [346.234](#).

### Proper Shipping Name and ID Number

- Not applicable (not regulated under 49 CFR as a hazardous material in domestic commerce).

## **Mailability**

- International Mail: Nonregulated materials identified in [346.234](#) are mailable but must be properly packaged as indicated in [346.325](#) when presented for mailing.
- Domestic Mail: Permitted via air or surface transportation when packaging requirements are met.

## **Required Packaging**

### **Liquid Patient Specimens and Biological Products**

#### **Exceeding 50 ml**

- Material must be packaged in a securely sealed primary receptacle. A single primary receptacle must not contain more than 500 ml of specimen. Two or more primary receptacles whose combined volume does not exceed 500 ml may be enclosed in a single secondary container. The secondary container must be securely and snugly enclosed in a fiberboard box or container of equivalent strength that serves as the outer shipping container.

#### **Not Exceeding 50 ml**

- A patient specimen or biological product consisting of 50 ml or less per mailpiece must be packaged in a securely sealed primary receptacle. Two or more primary receptacles whose combined volume does not exceed 50 ml may be enclosed within a single mailpiece. The secondary container can also serve as the outer shipping container. In that case, the biohazard symbol must appear on the inner packaging or on the primary container.

#### **Absorbent and Cushioning Material**

- Sufficient absorbent material and cushioning material to withstand shock and pressure changes must surround the primary receptacle(s), or be otherwise configured to take up the entire liquid contents in case of leakage.

#### **Secondary Container**

- The secondary container must be securely sealed, and it may serve as the outer shipping container if it has sufficient strength to withstand ordinary postal processing.
- The primary receptacle(s) and the absorbent cushioning must be enclosed in a secondary container with a leakproof barrier that can prevent failure of the secondary container if the primary receptacle(s) should leak during transport.
- The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#), except when the secondary container also serves as the outer shipping container. In that case, the biohazard symbol must appear on the inner packaging or on the primary container.

#### **Outer Shipping Container**

- A fiberboard box or container of equivalent strength that serves as the outer shipping container.

- When the secondary container also serves as the outer shipping container, the biohazard symbol must appear on the inner packaging or on the primary container.

### **Solid or Dry Specimen**

#### **Primary Receptacle**

- The primary receptacle (and cushioning material, if required) must be enclosed in a secondary container.

#### **Secondary Container**

- The secondary container must be siftproof to contain the contents should the primary receptacle(s) leak.
- The secondary container must be marked with the international biohazard symbol (see [Exhibit 346.321](#)).

#### **Outer Shipping Container**

- The secondary container may serve as the outer shipping container if it has sufficient strength to withstand ordinary postal processing.

#### **Markings**

- A complete return address and delivery address must be used.
- No other identifying marks are allowed on the outside of the box.

**Note:** A shipper's declaration for dangerous goods (shipping papers) is not required for clinical specimens that do not contain infectious substances.

## **USPS Packaging Instruction 6H**

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### **Exempt Human or Animal Specimens**

Exempt human or animal specimens as defined in [346.12d](#) are not subject to regulation as hazardous materials, but when presented for mailing, they must be properly packaged. See [346.326](#).

“Exempt human or animal specimen” means a human or animal sample (including, but not limited to, secretions, excreta, blood and its components, tissue and tissue fluids, and body parts) transported for routine testing not related to the diagnosis of an infectious disease.

Typically, exempt human specimens are specimens for which there is a low probability that the sample is infectious, such as specimens for drug or alcohol testing; cholesterol testing; blood glucose level testing; prostate-specific antigens (PSA) testing; testing to monitor heart, kidney, or liver function; pregnancy testing; and testing for diagnosis of noninfectious diseases such as cancer biopsies.

#### **Proper Shipping Name**

- Not applicable (not regulated under 49 CFR as a hazardous material in domestic commerce).



## **Mailability**

- International Mail: Mailable. They are not subject to regulation as hazardous materials, but when presented for mailing, they must be packaged as identified in [346.326](#).
- Domestic Mail: Permitted via air or surface transportation when packaging requirements are met.

## **Required Packaging**

### **Primary Receptacle**

- Material must be triple-packaged in leakproof (for liquids) or siftproof (for solids) primary receptacles.
- A single primary receptacle must not contain more than 500 ml of a liquid specimen or 500 grams of a solid specimen.
- Two or more primary receptacles whose combined volume does not exceed 500 ml (for liquids) or 500 grams (for solids) may be enclosed in a single secondary container.
- Sufficient cushioning and absorbent materials must surround each primary receptacle containing liquid.

### **Secondary Container**

- The secondary container cannot serve as the outer shipping container.
- The secondary container must be securely and snugly enclosed in a fiberboard box or container of equivalent strength that serves as the outer shipping container. The outer shipping container must be rigid.
- The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#).

### **Marking/Documentation**

- The outer shipping container must be marked on the address side with the words “Exempt human specimen” or “Exempt animal specimen,” as appropriate. In addition, at least one surface of the outer packaging must have a minimum dimension of 3.9 inches by 3.9 inches (100 mm by 100 mm).
- A shipping paper is not required.

## USPS Packaging Instruction 7A

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### Radioactive Materials

Radioactive materials are prohibited in international mail and domestic mail if required to bear the DOT Radioactive White-I, Radioactive Yellow-II, Radioactive Yellow-III label, or the Fissile label (49 CFR 172.436, 172.438, or 172.440, respectively) or if it contains quantities of radioactive material in excess of those authorized in [347](#). Radioactive materials are prohibited in domestic mail via air transportation. For international mail, the standards in IMM 135.5 apply.

The only categories of radioactive material that are mailable are those that can be classified as a “limited quantity” under 49 CFR and that meet the limits in [Exhibit 347.22](#): excepted instruments, articles, and devices, and excepted articles containing natural uranium and thorium. Accurate documentation of the activity limits, which must not exceed those specified in [Exhibit 347.22](#), must be provided.

### Proper Shipping Name and ID Number

- Radioactive Material, excepted package-limited quantity, UN2910.
- Radioactive Material, excepted package-instruments or articles, UN2911.
- Radioactive Material, excepted package-articles manufactured from natural uranium (or natural thorium), UN2909.

### Mailability

- International Mail: Only as permitted in [622.3](#) and IMM 135.5, and when sent with under the following conditions:
  - Sent only to those countries that have expressed a willingness to accept them (see the Individual Country Listings in the IMM).
  - Each radioactive materials shipment must be sent via First-Class Package International Service using Registered Mail service.
  - Each shipment must comply with both the International Atomic Energy Agency Regulations and the specifications contained in [347](#) and this section.
  - The sender and recipient of each radioactive materials shipment must receive prior authorization from the appropriate regulatory authorities within their countries.
  - A white package label bearing the French words “Matières Radioactives” (Radioactive Materials) must be securely affixed, taped, or gummed to the address side of each mailpiece containing radioactive materials. The sender is responsible for supplying and affixing this label to the mailpiece.

- The address side of each mailpiece must bear the following endorsements in bold letters: “Return to Sender in Case of Nondelivery” and “Radioactive Materials, Quantities Permitted for Movement by Post.”
- A shipper’s declaration for dangerous goods is required. See [326](#) and [725.3](#).
- Domestic Mail: Permitted only via surface transportation and when the applicable requirements in [347](#) are met.

## Required Packaging

Separate packaging requirements apply as follows.

- Domestic Mail for Limited Quantities (49 CFR 173.421) whose activity per package does not exceed the limits specified in [Exhibit 347.22](#):
  - Primary Receptacle:
    - The materials are packaged in strong, tight inner receptacles that will not leak any of the radioactive materials during normal Postal Service handling.
  - Absorbent and Cushioning Material:
    - Sufficient and suitably positioned absorbent material capable of absorbing at least twice the volume of the liquid contents in the event of leakage is required.
    - Adequate cushioning material to withstand shock and pressure changes must surround the primary receptacle.
  - Secondary Packaging:
    - Liquid radioactive materials must be packaged within a leak-resistant and corrosion-resistant secondary packaging.
  - Outer Packaging:
    - The inner receptacle and the secondary packaging (when required) must be securely packed within a strong outer packaging.
    - The radiation level at any point on the external surface of the mailpiece must not exceed 0.5 millirem per hour.
    - The nonfixed (removable) radioactive surface contamination on the external surface of the mailpiece does not exceed the applicable limits specified in 49 CFR 173.443(a).
    - The package does not contain fissile material unless excepted by 49 CFR 173.453.
    - No single dimension of the external mailpiece can be less than 2.5 centimeters (1 inch), and the length and girth can be no less than 30 centimeters (12 inches).
  - Marking:
    - The outside of the inner receptacle or the outside of the secondary packaging must be clearly marked “Radioactive.”
    - The address side of the mailpiece must clearly display the following marking: “This package conforms to the conditions

and limitations specified in 49 CFR 173.421 for radioactive material, excepted package-limited quantity of material, UN2910 and is within Postal Service activity limits for mailing.”

- A complete return address and delivery address must be used.
- Domestic Mail for Mailable Instruments and Articles (49 CFR 173.424) permitted under [347](#):

Instruments and manufactured articles (including clocks, electronic tubes, or apparatus) or similar devices having radioactive materials in gaseous or nondispersible solid form as a component part must be packed as follows:

- Primary Receptacle:
  - The activity of the instrument or device must not exceed the relevant limit listed in [Exhibit 347.22](#).
  - The radiation level at 10 centimeters (4 inches) from any point on the external surface of the unpackaged instrument or device must not exceed 10 millirem per hour.
- Cushioning Material:
  - Adequate cushioning material to withstand shock and pressure changes must surround the primary receptacle.
- Outer Packaging:
  - The inner receptacle and cushioning material must be securely packed within a strong outer packaging.
  - The total activity per mailpiece must not exceed the relevant limit listed in [Exhibit 347.22](#).
  - The radiation level at any point on the external surface of the mailpiece containing the device or instrument must not exceed 0.5 millirem per hour.
  - The nonfixed (removable) radioactive surface contamination on the external surface of the mailpiece must not exceed the applicable limits specified in 49 CFR 173.443(a).
  - The package does not contain fissile material unless excepted by 49 CFR 173.453.
  - At least one external dimension of the mailpiece must be no less than 10 centimeters (4 inches).
- Marking:
  - The outside of the inner receptacle or the outside of the secondary packaging must be clearly marked “Radioactive.”
  - The address side of the mailpiece must clearly display the following marking: “This package conforms to the conditions and limitations specified in 49 CFR 173.424 for radioactive material, excepted package-instruments or articles, UN2911 and is within Postal Service activity limits for mailing.”
  - A complete return address and delivery address must be used.

- Domestic Mail for Mailable Excepted Articles Containing Uranium or Thorium (49 CFR 173.426) permitted under [347](#):

Manufactured articles excepted under [347](#) and in which the sole radioactive material is natural or depleted uranium or natural thorium must be packaged as follows:

- Primary Receptacle:
  - The outer surface of the uranium or thorium is enclosed in an inactive sheath made of metal or other durable protective material.
- Cushioning Material:
  - Adequate cushioning material to withstand shock and pressure changes must surround the primary receptacle.
- Outer Packaging:
  - The inner receptacle and cushioning material must be securely packed within a strong outer packaging.
  - The radiation level at any point on the external surface of the mailpiece must not exceed 0.5 millirem per hour.
  - The nonfixed (removable) radioactive surface contamination on the external surface of the mailpiece must not exceed the applicable limits specified in 49 CFR 173.443(a).
- Marking:
  - The outside of the inner receptacle or the outside of the secondary packaging must be clearly marked “Radioactive.”
  - The address side of the mailpiece must clearly display the following marking: “This package conforms to the conditions and limitations specified in 49 CFR 173.426 for radioactive material, excepted package-articles manufactured from natural uranium (or natural thorium), UN2909 and is within Postal Service activity limits for mailing.”
  - A complete return address and delivery address is required.

**Note:** A shipper's declaration for dangerous goods is not required for mailable radioactive materials.

- International Mail:

The requirements specified in [622.3](#) and IMM 135.5 apply in addition to the packaging instructions for domestic mail.

# USPS Packaging Instruction 8A

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## Corrosives

A *corrosive* is any liquid or solid that causes visible destruction or irreversible alteration in human skin tissue at the site of contact or a liquid that has a severe corrosion rate on steel.

A Class 8 corrosive material that qualifies as a mailable limited quantity or ORM-D material is permitted in domestic mail provided that all applicable requirements in [348](#) are met.

## Proper Shipping Name

- Various (see Appendix [A](#)).

## ID Number

- Various (see Appendix [A](#)).

## Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted via air or surface transportation when packaging requirements are met.

## Required Packaging

Separate packaging requirements apply for liquids and solids.

- For Mailable Liquid Corrosives:
  - General:
    - Liquid Corrosive. A liquid mixture must be 1 pint (16 ounces) or less, and must contain 15 percent or less corrosive material with the remainder of the mixture not being a hazardous material, unless otherwise specified for a specific corrosive material.
  - Primary Receptacles:
    - Primary receptacles must be securely sealed compatible glass bottles.
    - The primary receptacle must be tightly sealed with a screw cap having a minimum of one-and-one-half turns, a soldering clip, or other means to effect secure closure. A friction-top closure is not acceptable.
    - Volume per primary receptacle is limited to 16 ounces.
    - Multiple primary receptacles are permitted.
  - Absorbent and Cushioning Material:
    - A noncombustible absorbent material that is capable of taking up all liquid in case of leakage must surround the primary receptacle.
    - Cushioning material must surround the primary receptacle to prevent breakage.

- Secondary Packaging:
  - The secondary packaging container must be constructed of metal or plastic and be compatible with the design of the primary receptacle.
  - The secondary container must be tightly sealed with a screw cap having a minimum of one-and-one-half turns, a soldering clip, or other means to effect secure closure. A friction-top closure is not acceptable.
- Outer Shipping Container:
  - The primary receptacle, absorbent material, cushioning material, and secondary packaging must be packed in a strong outer packaging.
  - Each mailpiece must not exceed a total weight of 25 pounds.
- Marking:
  - For air transportation, packages must bear the DOT square-on-point marking including the symbol “Y,” an approved DOT Class 8 hazardous material warning label, the identification number, and the proper shipping name.
  - For surface transportation, the mailpiece must be clearly marked on the address side with “Surface Only” or “Surface Mail Only” and “Consumer Commodity ORM-D” immediately following or below the proper shipping name.
  - Optionally, each mailpiece may bear an approved DOT limited quantity square-on-point marking, designating surface transportation, prepared under [348.4b](#), instead of an ORM-D marking.
  - A complete return address and delivery address must be used.
- Documentation:
  - For air transportation, a properly completed shipper's declaration for dangerous goods must be prepared in triplicate and affixed to the outside of the mailpiece.
- For Mailable Solid Corrosives:
  - General:
    - A solid mixture must be 10 pounds or less per primary receptacle and must contain 10 percent or less corrosive material with the remainder of the mixture not being a hazardous material, unless otherwise specified for a specific corrosive solid.
  - Primary Receptacle:
    - Each primary receptacle must be siftproof and be securely sealed.
  - Secondary Packaging:
    - Each primary receptacle must be packed within a siftproof secondary packaging container that is compatible with the primary receptacle.

- Outer Packaging:
  - The primary receptacle and the compatible secondary packaging containers must be snugly packed within a strong outer packaging.
  - Multiple primary receptacles and compatible secondary packaging containers may be packed within a single outer packaging up to a total weight of 25 pounds per mailpiece.
- Marking:
  - For air transportation, packages must bear the DOT square-on-point marking including the symbol “Y,” an approved DOT Class 8 hazardous material warning label, the identification number, and the proper shipping name.
  - For surface transportation, the mailpiece must be clearly marked on the address side with “Surface Only” or “Surface Mail Only” and “Consumer Commodity ORM-D” immediately following or below the proper shipping name.
  - Optionally, each mailpiece may bear an approved DOT limited quantity square-on-point marking, designating surface transportation, and prepared under [348.4b](#), instead of an ORM-D marking.
  - A complete return address and delivery address is required.
- Documentation:
  - For air transportation, a properly completed shipper's declaration for dangerous goods must be prepared in triplicate and affixed to the outside of the mailpiece.

## USPS Packaging Instruction 8B

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### **Nonspillable Wet Battery**

A nonspillable wet battery containing liquid electrolyte is prohibited from mailing unless the battery casing is completely sealed to prevent the liquid corrosive from spilling during handling, as allowed in [348](#). Nonspillable batteries with UN2800 are prohibited in international mail, but they may be sent as domestic mail via air or surface transportation when properly packaged. Nonspillable wet batteries mailed in accordance with these instructions must meet all applicable conditions in 49 CFR 173.159a.

### **Proper Shipping Name**

- Nonspillable Battery.

### **ID Number**

- UN2800.



## Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted via air or surface transportation when packaging requirements are met.

## Required Packaging

### Primary Receptacle

- The nonspillable battery must be capable of withstanding the vibration and pressure differential tests cited in 49 CFR 173.159(f) (1) and (2).

### Absorbent and Cushioning Material

- The nonspillable battery must be protected from short circuits with protective or cushioning material.
- A noncombustible material that is capable of absorbing all liquid in case of leakage must surround the primary receptacle.

### Outer Packaging

- The nonspillable battery must be securely packaged in a strong fiberboard box.
- Only one nonspillable battery is allowed per mailpiece.
- The total weight of a single mailpiece cannot exceed 25 pounds.

### Marking

- The outer packaging must be plainly and durably marked on the address with the text “NONSPILLABLE BATTERY, UN2800.”
- Each mailpiece must include the mailer and addressee names and have a complete delivery and return address.

**Note:** A shipper's declaration for dangerous goods is not required for nonspillable wet batteries sent via air transportation as exempted in 49 CFR 173.159a.

## USPS Packaging Instruction 8C

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### Manufactured Devices that Contain Small Amounts of Mercury

A *corrosive* is any liquid or solid that causes visible destruction or irreversible alteration in human skin tissue at the site of contact or a liquid that has a severe corrosion rate on steel.

A Class 8 manufactured article that contains minute amounts of mercury (such as compact fluorescent lamps [CFLs]) that meets the standards below is permitted in domestic mail provided all the applicable requirements in [348.22g](#) are met.

### Proper Shipping Name

- Mercury contained in manufactured articles

**ID Number**

- UN3506

**Mailability**

- International Mail. Prohibited
- Domestic Mail: Permitted via air or surface transportation when packaging requirements are met.

**Required Packaging****Primary Receptacle**

- Each primary device, article, or apparatus must be a securely sealed glass, or equivalent material, enclosure.
- Each device, article, or apparatus must be cushioned and separated from other items and must not exceed 100 milligrams (mg) (0.0035 ounce) of mercury.
- Multiple devices are permitted within a single mailpiece, provided the aggregate mercury quantity does not exceed 1 gram (g) (0.035 ounce) of mercury within the mailpiece.

**Absorbent and Cushioning Material**

A noncombustible absorbent/cushioning material, capable of containing any leakage in case of breakage, must surround each device.

**Outer Shipping Container**

The device(s), and its absorbent/cushioning material, must be packed in rigid, strong outer packaging.

**Marking**

- Each mailpiece must bear the marking “Manufactured Devices Containing Less Than 100 mg Mercury.”
- For air transportation, packages must bear the DOT square-on-point marking including the symbol “Y,” an approved DOT Class 8 hazardous material warning label, the identification number, and the proper shipping name.
- For surface transportation, the mailpiece must be clearly marked on the address side with “Surface Only” or “Surface Mail Only” and “Consumer Commodity ORM-D” immediately following or below the proper shipping name.
- Optionally, each mailpiece may bear an approved DOT limited quantity square-on-point marking, designating surface transportation, prepared under [348.4b](#), instead of an ORM-D marking.
- A complete return address and delivery address must be used.

**Documentation**

- For air transportation, a properly completed shipper's declaration for dangerous goods must be prepared in triplicate and affixed to the outside of the mailpiece.

# USPS Packaging Instruction 9A

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## Dry Ice (Carbon Dioxide Solid)

When dry ice is enclosed in a thick metal or other restricting type of container, a build-up of internal pressure could cause the container to rupture or explode. Dry ice is permitted to be sent in domestic mail when it is used as a refrigerant to cool the contents of a mailable hazardous or nonhazardous material, provided that all applicable requirements in [349](#) are met.

### Proper Shipping Name

- Carbon Dioxide Solid or Dry Ice.

### ID Number

- UN1845.

### Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted with restriction via air or surface transportation.

## Required Packaging

### General

- Packages containing dry ice must be packed in containers that permit the release of carbon dioxide gas and conform to 49 CFR 173.217 and 175.10(a)(10). If a fiberboard box is used, enough insulation is necessary to prevent condensation and wetting of the mailing carton.
- For air transportation, each mailpiece may *not* contain more than 5 pounds of dry ice.
- For surface transportation, a mailpiece may contain more than 5 pounds of dry ice.

### Marking

- Each mailpiece must be clearly marked on the address side with the name of the contents being cooled (such as frozen medical specimens, steaks) and the net weight of the dry ice.
- For air transportation, each mailpiece must bear a Class 9 DOT miscellaneous hazardous material warning label and must be clearly marked “Carbon Dioxide Solid, UN1845” Or “Dry Ice, UN1845.”
- For surface transportation, each mailpiece must be clearly marked “Surface Only” or “Surface Mail Only” and “Carbon Dioxide Solid, UN1845” or “Dry Ice, UN1845.”

### Documentation

- For air transportation, a properly completed shipper's declaration for dangerous goods must be prepared in triplicate and affixed to the outside of the mailpiece.

**Note:** A shipper's declaration and a Class 9 DOT warning label are not required for dry ice sent via domestic surface mail. Mailpieces containing dry ice that are prepared for surface transportation must not, under any circumstances, be routed via air transportation.

## USPS Packaging Instruction 9B

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### Magnetized Materials

A magnetized material is an article that has a magnetic field strength capable of causing the deviation of aircraft instruments. Magnetized materials include magnets and magnetized devices such as magnetrons and light meters of sufficient strength to possibly cause erroneous aircraft magnetic compass readings. Magnetized materials are mailable, provided that all requirements in [349.24](#) are met.

### Proper Shipping Name and ID Number

- Not applicable.

### Mailability

- International Mail: Only non-regulated magnetized materials that have a magnetic field strength less than 0.002 gauss at a distance of 7 feet may be sent internationally. Magnetized materials which are regulated are prohibited. See [622.4](#).
- Domestic Mail via Air Transportation: Magnetized materials that have a magnetic field strength greater than 0.00525 gauss at 15 feet are prohibited. A magnetic field strength less than 0.002 gauss at a distance of 7 feet is not regulated.
- Domestic Mail via Surface Transportation: Magnetized material is not regulated as a hazardous material when transported via surface transportation.

### Required Packaging

#### General

- Magnets and magnetic devices such as magnetrons and light meters must be packaged with the polarities of each unit positioned to oppose one another.
- Keeper bars must be installed on permanent magnets or must otherwise be shielded to prevent the magnetic field from affecting magnetic compasses.
- Mailable materials must be packed in strong outer containers.

### **Marking**

- For air transportation, the address side of the outer packaging must bear the magnetized material warning label shown in [Exhibit 349.242b](#).
- For surface transportation, mailpieces containing magnetized material with unconfined fields must be clearly marked on the address side with “Surface Only” or “Surface Mail Only” and “Magnetic - Keep 7 Feet Away From Navigational Equipment.”
- A complete return address and delivery address must be used.

### **Documentation**

- For air transportation, a properly completed shipper's declaration for dangerous goods must be prepared in triplicate and affixed to the outside of the mailpiece. Magnetized material is not regulated as a hazardous material when transported via surface transportation.

## **USPS Packaging Instruction 9C**

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### **Miscellaneous Hazardous Materials**

A Class 9 miscellaneous hazardous material that qualifies as a consumer commodity or ORM-D material is permitted in domestic mail provided all applicable requirements in [349](#) are met.

### **Proper Shipping Name**

- Consumer Commodity.

### **ID Number**

- Various (see Appendix [A](#)).

### **Mailability**

- International Mail: Prohibited.
- Domestic Mail: Permitted via air or surface transportation. Flammable materials are prohibited from air transportation.

### **Required Packaging**

#### **Primary Receptacle**

- For liquids, the capacity of the primary receptacle must not exceed 1 pint.
- For solids, the weight of the primary receptacle and its contents must not exceed 1 pound.
- Multiple primary receptacles are permitted.

#### **Cushioning Material**

- Enough cushioning material must surround the primary receptacle to prevent breakage and absorb all potential leakage.

**Outer Packaging**

- A strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.
- Each mailpiece must not exceed a total weight of 25 pounds.

**Marking**

- For air transportation, packages must bear the DOT square-on-point marking including the symbol “Y,” an approved DOT Class 9 hazardous material warning label, Identification Number “ID8000,” and the proper shipping name “Consumer Commodity.”
- For surface transportation, each mailpiece must be clearly marked on the address side with “Consumer Commodity ORM-D” and “Surface Mail Only” or “Surface Only.”
- Optionally, each mailpiece may bear an approved DOT limited quantity square-on-point marking, designating surface transportation, and prepared under [349.4b](#), instead of an ORM-D marking.
- A complete return address and delivery address must be used.

**Documentation**

- For air transportation, a mailable material must have a properly completed shipper's declaration for dangerous goods prepared in triplicate and affixed to the outside of the mailpiece.

## USPS Packaging Instruction 9D

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### Lithium Metal and Lithium-ion Cells and Batteries — Domestic

Lithium metal (nonrechargeable) cells and batteries and lithium-ion (rechargeable) cells and batteries are mailable in limited quantities domestically via air or surface transportation when they are installed in or packed with the equipment they are intended to operate.

- Individual *lithium-ion (or lithium polymer)* batteries (without equipment) are mailable in limited quantities domestically via air or surface transportation, provided the batteries are in the originally sealed packaging.
- Individual *lithium metal (or lithium alloy)* batteries (without equipment) are mailable in limited quantities only via surface transportation, provided the batteries are in the originally sealed packaging.

**Proper Shipping Name**

- Lithium Metal Battery.
- Lithium-ion Battery.

**ID Number**

- Lithium-ion Battery, UN3480.
- Lithium Metal Battery, UN3090.

- Lithium-ion Battery contained in equipment, UN3481.
- Lithium-ion Battery packed with equipment, UN3481.
- Lithium Metal Battery contained in equipment, UN3091.
- Lithium Metal Battery packed with equipment, UN 3091.

### **Mailability**

- Lithium metal and lithium-ion cells and batteries *installed in or packed with* equipment are mailable via air or surface transportation.
- Lithium metal cells and batteries *not packed with or installed in* equipment (individual batteries) are mailable via surface transportation only.

### **Required Packaging**

#### **Lithium Metal and Lithium-ion Batteries**

- The equipment must be cushioned to prevent movement or damage and be contained in a strong enough sealed package to prevent crushing of the package or exposure of the contents during normal handling in the mail.
- All outer packages must have a complete delivery and return address.

### **Markings**

- **Lithium metal** batteries properly *installed in* the equipment they are intended to operate:
  - Mailable via air transportation or surface transportation domestically.
  - For mailpieces containing button cell batteries installed in equipment (including circuit boards), or no more than 4 lithium metal cells or 2 lithium metal batteries installed in the equipment, no markings are required when mailed by air or surface transportation. Mailers may optionally use a DOT-approved lithium battery handling label, in domestic air or surface transportation. Quantities must be within the limits of 349.22.
  - For mailpieces exceeding 4 lithium metal cells, markings on outer packaging must indicate:
    - The package contains lithium metal cells or batteries;
    - The package is to be handled with care and that a flammable hazard exists if the package is damaged;
    - Special procedures must be followed in the event the package is damaged, to include inspection and repacking, if necessary; and
    - A telephone number for additional information.

**Note:** Mailers may use a DOT-approved lithium battery handling label, in domestic air or surface transportation, to meet these marking requirements provided all required elements are included.

- **Lithium metal** batteries *packed with* the equipment they are intended to operate:
  - Markings on outer packaging must indicate:
    - The package contains lithium metal cells or batteries;
    - The package is to be handled with care and that a flammable hazard exists if the package is damaged;
    - Special procedures must be followed in the event the package is damaged, to include inspection and repacking, if necessary; and
    - A telephone number for additional information.

**Note:** Mailers may use a DOT-approved lithium battery handling label, in domestic air or surface transportation, to meet these marking requirements provided all required elements are included.
- **Lithium metal** batteries *not packed with or installed in* equipment (individual batteries):
  - Mailable domestically via surface transportation only. Prohibited internationally or to and from APO, FPO, and DPO locations.
  - Markings on outer packaging must indicate:
    - The package contains lithium metal cells or batteries;
    - The package is to be handled with care and that a flammable hazard exists if the package is damaged;
    - Special procedures must be followed in the event the package is damaged, to include inspection and repacking, if necessary; and
    - A telephone number for additional information.

**Note:** Mailers may use a DOT-approved lithium battery handling label, in domestic air or surface transportation, to meet these marking requirements provided all required elements are included.

  - In addition, the outer packaging must be marked on the address side “Surface Mail Only, Primary Lithium Batteries — Forbidden for Transportation Aboard Passenger Aircraft” or “Surface Mail Only, Lithium Metal Batteries — Forbidden for Transportation Aboard Passenger Aircraft.”
- **Lithium-ion** batteries properly *installed in* the equipment they are intended to operate:
  - Mailable via air transportation or surface transportation domestically.
  - For mailpieces containing button cell batteries installed in equipment (including circuit boards), or no more than 4 lithium-ion cells or 2 lithium-ion batteries installed in the equipment, no markings are required. Mailers may optionally use a DOT-approved lithium battery handling label, in domestic air or surface transportation. Quantities must be within the limits of 349.22.



- For mailpieces exceeding 4 lithium-ion cells, markings on outer packaging must indicate:
  - The package contains lithium-ion cells or batteries;
  - The package is to be handled with care and that a flammable hazard exists if the package is damaged;
  - Special procedures must be followed in the event the package is damaged, to include inspection and repacking, if necessary; and
  - A telephone number for additional information.

**Note:** Mailers may use a DOT-approved lithium battery handling label, in domestic air or surface transportation, to meet these marking requirements provided all required elements are included.

- **Lithium-ion batteries *packed with* the equipment they are intended to operate:**
  - Mailable via air and surface transportation domestically.
  - Markings on outer packaging must indicate:
    - The package contains lithium-ion cells or batteries;
    - The package is to be handled with care and that a flammable hazard exists if the package is damaged;
    - Special procedures must be followed in the event the package is damaged, to include inspection and repacking, if necessary; and
    - A telephone number for additional information.

**Note:** Mailers may use a DOT-approved lithium battery handling label, in domestic air or surface transportation, to meet these marking requirements provided all required elements are included.

- **Lithium-ion batteries *not packed with or installed in* equipment (individual batteries):**
  - Mailable via air and surface transportation domestically.
  - Must be mailed in “the originally sealed packaging.”
  - Markings on outer packaging must indicate:
    - The package contains lithium-ion cells or batteries;
    - The package is to be handled with care and that a flammable hazard exists if the package is damaged;
    - Special procedures must be followed in the event the package is damaged, to include inspection and repacking, if necessary; and
    - A telephone number for additional information.

**Note:** Mailers may use a DOT-approved lithium battery handling label, in domestic air or surface transportation, to meet these marking requirements provided all required elements are included.

- The outside of the package must be marked on the address side “Package Contains Lithium-ion Batteries (no lithium metal).” No other markings permitted when mailed by air transportation. Optionally, an applicable DOT-approved lithium battery handling label may also be used for surface transportation.

## Quantities

### Domestic — Lithium Metal Cells and Batteries:

*Installed in or packed with the equipment they are intended to operate:*

- Each cell must contain no more than 1.0 gram of lithium content.
- Each battery must contain no more than 2.0 grams aggregate lithium content.
- The shipment cannot contain more batteries than the number needed to operate the device.
- Each mailpiece must contain no more than 8 cells or 2 batteries.

*Individual batteries mailed without equipment:*

- Each cell must contain no more than 1.0 gram of lithium content.
- Each battery must contain no more than 2.0 grams aggregate lithium content.
- The mailpiece must not exceed 5 pounds.

### Domestic — Lithium-ion Cells and Batteries:

*Installed in equipment, packed with equipment, or mailed without equipment (individual batteries):*

- The total watt-hour rating for each cell must not exceed 20 Wh.
- The total watt-hour rating for each battery must not exceed 100 Wh.
- Each mailpiece must contain no more than 8 cells or 2 batteries.

### Domestic — Small Lithium Metal or Lithium-ion Batteries

*Very small, consumer-type batteries, installed in equipment, or packed with equipment:*

- Each lithium metal or lithium alloy cell or battery must contain no more than 0.3 gram of lithium content.
- Each lithium-ion or lithium polymer cell or battery must not exceed a watt-hour rating of 2.7 Wh.
- No limit on the number of cells/batteries.
- Each mailpiece must not exceed 2.5 kilograms (5.5 pounds) total weight.

## Domestic Lithium Battery Mailability Exhibit

	Surface Transportation	Air Transportation	Mailpiece Limitations <sup>1</sup>
<b>Lithium Metal or Lithium Alloy Batteries<sup>2, 3</sup></b> <i>Small, non-rechargeable, consumer-type batteries</i>			
Contained in (properly installed in equipment)	Mailable	Mailable	8 cells or 2 batteries 11lbs.
Packed with equipment, but not installed in the equipment	Mailable	Mailable	8 cells or 2 batteries 11lbs.
Without the equipment they operate (individual batteries in originally sealed packaging)	Mailable	Prohibited	5 lbs.
<b>Lithium-ion or Lithium Polymer Batteries<sup>4, 5</sup></b> <i>Small, rechargeable, consumer-type batteries</i>			
Contained in (properly installed in equipment)	Mailable	Mailable	8 cells or 2 batteries
Packed with equipment, but not installed in the equipment	Mailable	Mailable	8 cells or 2 batteries
Without the equipment they operate (individual batteries in originally sealed packaging)	Mailable	Mailable	8 cells or 2 batteries
<b>Very Small Lithium Metal or Lithium-ion Batteries<sup>6, 7</sup></b> <i>Exception for very small consumer-type batteries in USPS air transportation</i>			
Contained in (properly installed in equipment)	Mailable	Mailable	No limit on cells/ batteries 5.5 lbs.
Packed with equipment, but not installed in the equipment	Mailable	Mailable	No limit on cells/ batteries 5.5 lbs.
<b>Damaged/Recalled Batteries</b>	Prohibited, unless approved by the manager, Product Classification.		

1. When a mailpiece limitation of 8 cells or 2 batteries is applicable, a mailpiece may contain either 8 cells or 2 batteries, not both.
2. Each lithium metal or lithium alloy cell must not contain more than 1.0 gram of lithium content.
3. Each lithium metal or lithium alloy battery must not contain more than 2.0 grams of aggregate lithium content.
4. Each lithium-ion or lithium polymer cell must not exceed more than 20 Wh (watt-hour rating).
5. Each lithium-ion or lithium polymer battery must not exceed 100 Wh.
6. Each lithium metal or lithium alloy cell or battery must not exceed 0.3 gram of lithium content.
7. Each lithium-ion or lithium polymer cell or battery must not exceed a watt-hour rating of 2.7 Wh.

### Documentation

Except for mailpieces containing button cell batteries installed in equipment (including circuit boards), or no more than 4 lithium cells or 2 lithium batteries installed in the equipment they operate, mailpieces containing lithium batteries must also be accompanied by a document that indicates:

- The package contains lithium metal or lithium-ion cells or batteries, as applicable;
- An indication that the package is to be handled with care and that a flammable hazard exists if the package is damaged;
- An indication that special procedures must be followed in the event the package is damaged, to include inspection and repacking, if necessary; and
- A telephone number for additional information.

## USPS Packaging Instruction 9E

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### Lithium Metal and Lithium-ion Cells and Batteries — International and APO/FPO/DPO

Lithium metal (non-rechargeable) cells and batteries and lithium-ion (rechargeable) cells and batteries are mailable in limited quantities internationally or to and from APO, FPO, or DPO locations only when they are properly installed in the equipment they operate. Lithium batteries must also be accepted by the destination country as designated by the Individual Country Listing in the IMM. APO/FPO/DPO destinations are also subject to the conditions prescribed by the Department of Defense (DOD) as listed in *Overseas Military/Diplomatic Mail* in the *Postal Bulletin*.

#### Proper Shipping Name

- Lithium Metal Battery.
- Lithium-ion Battery.

#### ID Number

- Lithium Metal Battery contained in equipment, UN3091.
- Lithium-ion Battery contained in equipment, UN3481.

#### Mailability

- Lithium metal and lithium-ion cells and batteries *installed in* the equipment they are intended to operate (UN3091 and UN3481) are mailable.
- Lithium metal and lithium-ion cells and batteries *not packed in* equipment (i.e., batteries packed with equipment or individual batteries) are prohibited.

#### Required Packaging

##### Lithium Metal and Lithium-ion Batteries

- The equipment must be cushioned to prevent movement or damage and be contained in a strong enough sealed package to prevent crushing of the package or exposure of the contents during normal handling in the mail.
- All outer packages must have a complete delivery and return address.

#### Markings

- **Lithium metal** batteries properly *installed in* the equipment they are intended to operate:
  - Mailable internationally when permitted by country, including to and from APO, FPO, and DPO locations.
  - No lithium battery markings permitted. Quantities must be within the limits of [622.5](#) and as outlined below.

- **Lithium-ion** batteries properly *installed in* the equipment they are intended to operate:
  - Mailable internationally when permitted by country, including to and from APO, FPO, and DPO locations.
  - No lithium battery markings permitted. Quantities must be within the limits of [622.5](#) and as outlined below.

### **Quantities**

#### **International — Lithium Metal Cells and Batteries:**

*Installed in equipment:*

- Each shipment may contain a maximum of four lithium-ion cells or two lithium-ion batteries.
- The total watt-hour rating for each cell must not exceed 20 Wh.
- The total watt-hour rating for each battery must not exceed 100 Wh.

#### **International — Very Small Lithium Metal and Lithium-ion Cells and Batteries:**

*Installed in equipment:*

- Each shipment containing very small lithium cells and batteries, when installed in the equipment they operate (including circuit boards), may contain a maximum of four lithium cells or two lithium batteries.
- Lithium metal cells and batteries must contain no more than 0.3 gram of lithium content.
- Lithium-ion cells/batteries must have watt-hour rating of not more than 2.7 Wh.

**International Lithium Battery Mailability Exhibit**

	<b>International APO/FPO/DPO<sup>1</sup></b>	<b>Mailpiece Battery Limit</b>
<b>Lithium Metal or Lithium Alloy Batteries<sup>2, 3</sup></b> <i>Small, non-rechargeable, consumer-type batteries</i>		
Contained in (properly installed in equipment)	Mailable	Maximum of 4 cells or 2 batteries
Packed with equipment, but not installed in the equipment	Prohibited	
Without the equipment they operate (individual batteries in originally sealed packaging)	Prohibited	
<b>Lithium-ion or Lithium Polymer Batteries<sup>4, 5</sup></b> <i>Small, rechargeable, consumer-type batteries</i>		
Contained in (properly installed in equipment)	Mailable	Maximum of 4 cells or 2 batteries
Packed with equipment, but not installed in the equipment	Prohibited	
Without the equipment they operate (individual batteries in originally sealed packaging)	Prohibited	
<b>Very Small Lithium Metal or Lithium-ion Batteries<sup>6, 7</sup></b> <i>Exception for very small consumer-type batteries in international mailings</i>		
Contained in (properly installed in equipment)	Mailable	Maximum of 4 cells or 2 batteries
Packed with equipment, but not installed in the equipment	Prohibited	
Without the equipment they operate (individual batteries in originally sealed packaging)	Prohibited	

1. Unless otherwise prohibited by the international destination country or specific APO/FPO/DPO ZIP Code location.
2. Each lithium metal or lithium alloy cell must not contain more than 1.0 g lithium content.
3. Each lithium metal or lithium alloy battery must not contain more than 2.0 g aggregate lithium content.
4. Each lithium-ion or lithium polymer cell must not exceed more than 20 Wh per cell.
5. Each lithium-ion or lithium polymer battery must not exceed 100 Wh.
6. Each lithium metal or lithium alloy cell or battery must not exceed 0.3 g of lithium content.
7. Each lithium-ion or lithium polymer cell or battery must not exceed a watt-hour rating of 2.7 Wh.

**Note:** Shipments containing lithium batteries are not permitted in Global Express Guaranteed mailpieces.

## USPS Packaging Instruction 10A

### Small Quantity Provision

Some types of hazardous materials, as permitted in [336](#) and 49 CFR 173.4, may be prepared for mailing using the “small quantity” provision. The small quantity provision, like the ORM-D materials category, is unique within the United States, and its use is prohibited in international and APO/FPO/DPO mail.

### Proper Shipping Name and ID Number

- Not applicable.

## **Prototype Testing Requirement**

- The complete mailing package must be capable of withstanding the test criteria in 49 CFR 173.4(a)(6).

## **Mailability**

- International Mail: Prohibited.
- Domestic Mail: Permitted via surface transportation only.

## **Required Packaging**

### **Inner Receptacle**

- Each inner receptacle cannot be liquid-full at 131° F (55° C).
- Each inner receptacle must be constructed of plastic with a minimum thickness of no less than 0.2 mm (0.008 inch) or must be made of earthenware, glass, or metal.
- Each inner receptacle must be securely sealed with wire, tape, or other positive means.

### **Absorbent and Cushioning Material**

- Sufficient absorbent material that will not react chemically with the hazardous material must fully surround each inner receptacle and be capable of absorbing the entire liquid contents of the inner receptacle(s) in case of leakage.
- Each primary receptacle must be surrounded by sufficient cushioning material to absorb shock and prevent breakage.
- The absorbent and cushioning materials used must not violate 49 CFR 173.21.

### **Secondary Packaging**

- Each inner receptacle and the absorbent cushioning material must be placed within a securely sealed secondary packaging.

### **Outer Packaging**

- The secondary packaging must be securely packed in a strong outer packaging.
- The total weight of each mailpiece must not exceed 64 pounds (29 kg).

### **Marking**

- The address side of each mailpiece sent under the small quantity provision must be clearly marked with "This package conforms to 49 CFR 173.4."
- A complete return address and delivery address must be used.

## **USPS Packaging Instruction 10B**

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### **Excepted Quantity Provision**

Some types of hazardous materials, as permitted in 337 and 49 CFR 173.4a, may be prepared for mailing using the excepted quantity provision. The excepted quantity pro-

vision, although applicable to international shipments by commercial shippers, is limited to domestic mail, and its use is prohibited in international and APO/FPO/DPO mail.

### **Proper Shipping Name and ID Number**

- Not applicable.

### **Prototype Testing Requirement**

- The complete mailing package must be capable of withstanding the test criteria in 49 CFR 173.4a(f).

### **Mailability**

- International Mail: Prohibited.
- Domestic Mail: Permitted via air or surface transportation (highway, rail, or vessel).

### **Required Packaging**

#### **Inner (Primary) Receptacle**

- Each inner receptacle must be constructed of plastic, glass, porcelain, stoneware, earthenware, or metal. Plastic inner packaging must have a thickness of not less than 0.2 mm (0.008 inch).
- Each inner packaging with a removable closure must have its closure held securely in place with wire, tape, or other positive means.
- Each inner receptacle having a neck with molded screw threads must have a leak-proof, threaded-type cap.
- Closures must not react chemically with the material.

#### **Intermediate (Secondary) Packaging**

- Each inner receptacle must be securely packed in an intermediate container with cushioning material in such a way that, under normal conditions of transport, will not break, be punctured, or leak.
- Intermediate containers must completely contain the contents in case of breakage or leakage, regardless of package orientation.

#### **Absorbent and Cushioning Material**

For liquids, intermediate containers must contain sufficient absorbent material that:

- Will absorb the entire contents of the inner packaging.
- Will not react dangerously with the material or reduce the integrity or function of the packaging materials.
- The absorbent material may be the cushioning material.

#### **Outer Packaging**

The intermediate packaging must be securely packed in strong, rigid outer packaging. Placement of the material in the package must not violate 49 CFR 173.21.

Outer packages must be of such a size that there is adequate space to apply all necessary markings.



## Markings

- Mailpieces must be durably and legibly marked with the following marking:



- The “\*” must be replaced by the primary hazard class, or when assigned, the division of each of the hazardous materials contained in the package. The “\*\*\*” must be replaced by the name of the mail owner or mail service provider, if not shown elsewhere on the package.
- The marking must be located on the address side of the mailpiece, not be less than 100 mm (3.9 inches) by 100 mm (3.9 inches), and must be durable and clearly visible.

## Documentation

- For ground transportation (highway or rail), no shipping paper is required.
- For surface transportation by vessel, a shipping paper is required and must include the statement “Dangerous Goods in Excepted Quantities” and indicate the number of packages.
- For transport by air, a shipping paper is not required, except that, if a document such as an air waybill accompanies a shipment, the document must include the statement “Dangerous Goods in Excepted Quantities” and indicate the number of packages.

# USPS Packaging Instructions 10C

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## Cremated Remains

Human and animal ashes are permitted for mailing with restrictions, provided they are properly double-packaged and labeled. For international shipping, cremated remains are permitted to be mailed provided they are not otherwise prohibited by the destination country (see the Individual Country Listings in the IMM) and all packaging and marking requirements are met.

## Proper Shipping Name

Not applicable.

## ID Number

Not applicable.

## Mailability

- International Mail: When permitted by the destination country only via Priority Mail Express International service (this class of mail must also be available to the destination country).
- Domestic Mail: Permitted via Priority Mail Express service only.

## Required Packaging

### Primary Container

- International: A funeral urn is required as the inner container. It must be sealed and siftproof.
- Domestic: The inner container must be strong and durable and be constructed in such a manner as to protect and securely contain the contents inside and it must be properly sealed so that it is siftproof.

**Note:** A siftproof container is any vessel that does not allow loose powder to leak or sift out during transit.

### Cushioning Material

- For both domestic and international shipping, the space between the primary receptacle and the outer packaging must contain enough material to keep the item stable during transit and to absorb the shock to prevent breakage.

### Outer Container

- For both domestic and international shipping, the outer container must be strong, durable, and siftproof. Insert your inner container into the shipping box and add padding to the bottom, sides, and top to prevent movement. Make sure there is no movement of contents within the shipping box.

**Note:** It is recommended that all packages contain a slip of paper with the sender's and recipient's address and phone number. This will provide Postal employees with a means to contact you if the outer mailing label is damaged or found missing during transit.

### Marking

- International: The mailer must indicate the identity of the contents on the required applicable customs declaration form. Label 139, *Cremated Remains*, is an optional marking. A complete return address and delivery address must be used.
- Domestic: A complete return address and delivery address must be used. Label 139, *Cremated Remains*, is an optional marking, and is preferred.

### Documentation

- International: A complete and accurate customs label is required and must indicate the contents of the package. If available, the cremation certificate should be attached to the outer packaging, or made easily accessible. The sender is responsible for obtaining all the necessary permissions required by the national laws in the country of origin and the country of destination prior to dispatching these items.

## Appendix D

# Hazardous Materials Definitions

**Aerosol** means any nonrefillable metal receptacle containing a gas that is compressed, liquified, or dissolved under pressure, the sole purpose of which is to expel a nonpoisonous (other than a Division 6.1 Packing Group III material) liquid, paste, or powder and fitted with a self-closing release device allowing the contents to be ejected by the gas.

**Air transportation** requirements apply to all mailable hazardous materials sent at Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service prices for domestic shipments, or Priority Mail Express International, Priority Mail International, First-Class Mail International, and First-Class Package International Service prices for international shipments. All mailable hazardous materials sent at those prices must meet the requirements that apply to air transportation. Mailable hazardous materials sent at any of those prices may or may not be transported via air depending on the distance between the point of origination and the point of destination, and the ability of the USPS to obtain an air carrier between those points.

**Ammunition** includes all kinds of bombs, grenades, rockets, mines, projectiles, and other similar devices or contrivances. Ammunition is a Class 1 explosive and is nonmailable.

**ASTM** refers to the American Society for Testing and Materials.

**Batteries, dry** are sealed, nonvented batteries of the type used in flashlights or for the operation of small household apparatus. They contain zinc salts and other solids, or may be of the nickel cadmium type or other combinations of metals.

**Biohazard** is a biological material that poses a threat to humans or the environment. The biohazard symbol that is required for certain Division 6.2 materials is an OSHA requirement detailed in 29 CFR 1910.1030.

**Biological products** means a material derived from a living organism that is prepared and manufactured in accordance with 9 CFR 102-104 (licenses for biological products; experimental products, distribution, and evaluation prior to licensing; and permits for biological products), 21 CFR 312 (investigational new drug application), or 21 CFR 600-680 (biologics) and that, under such provisions, may be shipped in interstate commerce. Biological products include, but are not limited to, products such as vaccines.

**Btu** means British thermal unit.

**C** means degrees Celsius or Centigrade. Celsius or Centigrade is a thermometer scale on which the freezing and boiling points of water are divided into 100, with 0° representing the freezing point and 100° the boiling point.

**Cargo aircraft only** means an aircraft that is used to transport cargo and is not engaged in carrying passengers.

**Ci** means curie.

**Clinical (diagnostic) specimen** is any human or animal material including, but not limited to, excreta, secreta, blood, blood components, tissue, and tissue fluids that have been collected and are being mailed to a medical or forensic laboratory for the purpose of diagnosis, or being mailed from a medical or forensic laboratory for return to a law enforcement agency.

**Combination packaging** means one or more inner packagings (i.e., receptacles) secured in a nonbulk outer packaging. This is a term used by DOT in 49 CFR.

**Combustible liquid** is a Class 3 material in a liquid form that has a flashpoint above 140° F (60° C) and below 200° F (93° C).

**Compatibility group** refers to a designated alphabetical letter used to categorize different types of Class 1 explosive substances and articles for purposes of safe stowage and segregation (e.g., Division 1.4S).

**Composite packaging** consists of an outer packaging and an inner receptacle so constructed that they form an integral unit. Once assembled, it remains a single integrated unit; it is filled, stored, shipped, and emptied as such. This is a term used by DOT in 49 CFR.

**Compressed gas** is a material or mixture within a container that is a gas at 68° F (20° C) or less and 14.7 psi (101.3 kPa), or exerts an absolute pressure of 40.6 psia (280 kPa) or greater at 68° F (20° C). Gases are Class 2 hazardous materials.

**Consumer commodity** is the proper shipping name of an ORM-D material that is packaged and distributed in a quantity and form intended or suitable for retail sale, and designed for individual consumption for personal care or household use purposes. This term can also include certain drugs or medicines. Not every hazardous material permitted to be shipped as a limited quantity can qualify as a consumer commodity. The consumer commodity category does not apply to materials, intended for air transportation, in hazard Classes 4, 5, and 8, and portions of hazard Class 9.

**Corrosive material** means a Class 8 liquid or solid material that causes visible destruction of human skin at the site of contact within a specified period of time. A liquid that has a severe corrosion rate on steel or aluminum is also a corrosive material.

**Dangerous goods** is the term used to describe hazardous materials shipped in international commerce.

**Dangerous when wet** material is a Division 4.3 material that by contact with water is liable to become spontaneously flammable or to give off flammable or toxic gas.

**Designated facility** is (for EPA purposes) the hazardous waste treatment, storage, or disposal facility that has been designated on a hazardous waste manifest by the waste generator.

**Diagnostic specimen**, see clinical specimen.

**Division** refers to a subpart of a hazard class (e.g., Division 6.1).

**DOD** refers to the U.S. Department of Defense.

**Domestic transportation** is transportation between locations within the United States.

**DOT** refers to the U.S. Department of Transportation. DOT has the federal authority to regulate the transportation of hazardous materials within domestic commerce. DOT regulations are codified in Title 49, Code of Federal Regulations (49 CFR).

**Elevated temperature material** means a material that, when offered for transportation, is in a liquid phase and at a temperature at or above 212° F (100° C); is in a liquid phase with a flashpoint at or above 100° F (37.8° C) that is intentionally heated and offered for transportation at or above its flashpoint; or is in a solid phase and at a temperature at or above 464° F (240° C). Elevated temperature materials are Class 9 hazardous materials and are nonmailable.

**EPA** refers to the U.S. Environmental Protection Agency. EPA regulations are codified in Title 40, Code of Federal Regulations (40 CFR).

**Etiologic agent**, see infectious substance.

**Explosive** is any Class 1 substance or article, including a device, that is designed to function by explosion (i.e., an extremely rapid release of gas and heat) or that, by chemical reaction within itself, is able to function in a similar manner.

**F** means degrees Fahrenheit. Fahrenheit is a thermometer scale on which the boiling point of water is 212° above zero and the freezing point is 32° above zero.

**Flammable gas** is a Division 2.1 material that is ignitable at 14.7 psi (101.3 kPa) when in a mixture of 13 percent or less by volume, or has a flammable range at 14.7 psi (101.3 kPa) with air of at least 12 percent regardless of the lower limit.

**Flammable liquid** is a Class 3 material in a liquid form that has a flashpoint of not more than 140° F (60° C), or any material in a liquid phase with a flashpoint at or above 100° F (38° C).

**Flammable solid** is a Division 4.1 material that includes any solid material (other than one classed as an explosive) that under normal transport and handling conditions is likely to cause fire through friction or retained heat from manufacturing or processing, or that can be ignited readily and, when ignited, can burn vigorously and persistently and create a serious transportation hazard.

**Flashpoint** means the minimum temperature at which a liquid gives off vapor within a test vessel in sufficient concentration to form an ignitable mixture with air near the surface of the liquid. The test criteria is cited in 49 CFR 173.120(c).

**Gas** means a material that has a vapor pressure greater than 43.5 psi (300 kPa) at 122° F (50° C) or is completely gaseous at 68° F (20° C) at a standard pressure of 14.7psi (101.3 kPa). Also, see compressed gas.

**Hazard class** means the category to which a hazardous material is assigned under the definitions set by DOT in 49 CFR. Even though a material is assigned to only one hazard class, it may meet the defining criteria for more than one hazard class. Some hazardous materials may also have subsidiary hazard class assignment.

**Hazard zone** refers to one of the four levels of hazards (Hazard Zones A through D) assigned to gases and liquids that are poisonous by inhalation. A hazard zone is based on the LC<sub>50</sub> value for acute inhalation and toxicity of gases and vapors. Hazardous materials assigned a hazard zone are nonmailable.

**Hazardous material** is any article or substance designated by the U.S. Department of Transportation (DOT) as being capable of posing an unreasonable risk to health, safety, or property during transportation. In international commerce, hazardous materials are known as “dangerous goods.”

**Hazardous substance** is a hazardous material that when shipped in certain quantities can be an environmental hazard. Appendix A in 49 CFR 172.101 lists all hazardous substances. All hazardous substances are hazardous materials, but not all hazardous materials are hazardous substances. Hazardous substances are nonmailable.

**Hazardous waste** is any material subject to the Hazardous Waste Manifest Requirements of EPA as specified in 40 CFR 262. The only type of hazardous waste permitted in domestic mail is medical waste (i.e., sharps and other medical devices) as specified in [346](#).

**IATA** refers to the International Air Transportation Association. IATA annually publishes the IATA Dangerous Goods Regulations, which provides procedures for shippers to prepare hazardous materials for safe transport by air via commercial air transportation. The IATA regulations contain all of the ICAO Technical Instructions as well as some more restrictive requirements that reflect air transport industry standard practices or operational considerations.

**ICAO** refers to the International Civil Aviation Organization. ICAO biannually publishes the Technical Instructions for the Safe Transport of Dangerous Goods by Air, which specifies the procedures for shipping hazardous materials via air transportation and is recognized by DOT in 49 CFR 171.11.

**IMO** refers to the International Maritime Organization, which provides requirements for shipping hazardous materials via waterways.

**Infectious substance (etiologic agent)** is a Division 6.2 material that is a viable microorganism, or its toxin, and causes or may cause disease in human beings or animals, and includes those agents listed in 42 CFR 72.3 and any other agent that causes or may cause severe, disabling, or fatal disease. The terms “infectious substance” and “etiologic agent” are synonymous.

**Inhalation hazard**, see hazard zone.

**Inner receptacle**, see primary receptacle.

**Irritating material** is any Division 6.1 liquid or solid substance (e.g., tear gas) that gives off intense fumes and causes extreme but temporary irritation and impairment to a person’s ability to function.

**kPa** means kilopascals.

**L or l** means liter.

**Limited quantity** is the maximum amount of a specific hazardous material that is exempted from the labeling or packaging requirements in 49 CFR. Not every hazardous material is eligible to be shipped as a limited quantity. Almost all limited quantity materials are nonmailable. Most hazardous material permitted to be shipped as a limited quantity does not qualify under the Consumer Commodity, Mailable Limited Quantity, or ORM-D categories. See also Mailable Limited Quantity.

**Liquid** is a material, other than an elevated temperature material, with a melting point of 68° F (20° C) or lower at a standard pressure of 14.7 psi (101.3 kPa).

**Liquid phase** means a material that meets the definition of a liquid when elevated at the higher of the temperature at which it is offered for transportation, not at the 100° F (38° C) temperature.

**Mailable Limited Quantity** is a hazardous material in hazard Classes 4, 5, 8 or portions of 9 that presents a limited hazard during transportation (specifically air transport), and is mailable in USPS air networks under certain conditions and in limited quantities.

**Magnetized material** is an article that has a magnetic field strength capable of causing the deviation of aircraft instruments and producing erroneous aircraft magnetic compass readings.

**Marine pollutant** is any hazardous material listed in Appendix B of 49 CFR 172.101, including mixtures or solutions of certain concentrations that are capable of polluting water habitats. Marine pollutants are not mailable.

**Material Safety Data Sheet (MSDS)** is a document that details the physical characteristics and health hazards of a chemical or hazardous product. In 29 CFR 1910.1200(g), OSHA requires chemical manufacturers and importers to obtain or develop an MSDS for each hazardous chemical they produce or import, and provide copies to their customers. OSHA also requires that employers have an MSDS on hand for each hazardous chemical present in their workplace. For postal purposes, the information on an MSDS can be useful in determining the mailability of a hazardous material.

**Maximum capacity** means the maximum volume permitted in the inner receptacle or packaging.

**Miscellaneous hazardous materials** are Class 9 substances or articles that present a hazard during transportation but do not meet the definition of any other hazard class. Examples are dry ice and magnetized materials.

**ml** means milliliter.

**mm** means millimeters.

**NA number** refers to the North American (NA) four-digit identification number assigned to a hazardous material that is not recognized for international transportation. Hazardous materials having NA numbers may be shipped in commercial commerce only within the United States or between the United States and Canada. Hazardous materials with NA numbers may be mailed within the United States only as permitted in Chapter [3](#).

**Nonflammable gas** is a Division 2.2 material that exerts an absolute pressure of 40.6 psia (280 kPa) or greater at 68° F (20° C).

**n.o.s.** means not otherwise specified.

**Organic peroxide** is a Division 5.2 material that includes any organic compound containing oxygen in the bivalent structure and that may be considered a derivative of hydrogen peroxide, where one or more of the hydrogen atoms have been replaced by organic radicals.

**ORM** means other regulated material.

**ORM-D (Other Regulated Material)** is a limited quantity of a hazardous material that presents a limited hazard during transportation due to its form, quantity, and packaging. Not all hazardous materials permitted to be shipped as a limited quantity can qualify as an ORM-D material. The ORM-D category is only applicable for materials intended for ground transportation. The ORM-D category is recognized for use within the United States only. ORM-D materials cannot be sent via international mail. Effective January 1, 2021, the ORM-D category will be eliminated for materials intended for surface transportation. After this date, the mailability of materials previously fitting the description of ORM-D must be evaluated based on its eligibility under the applicable consumer commodity or mailable limited quantity categories.

**OSHA** refers to the Occupational Safety and Health Administration of the U.S. Department of Labor. OSHA regulations are codified in Title 29, Code of Federal Regulations (29 CFR).

**Other medical devices** are Division 6.2 materials that include all articles or devices used in animal or human patient care or treatment or in medical research that are not, or do not contain, a projecting sharp and are not known or not reasonably believed to contain an infectious substance (etiologic agent).

**Outer packaging** is the outermost enclosure that provides protection against the unintentional release of the contents under normal handling conditions. The outer packaging holds the primary receptacle, the secondary packaging (if required), and the absorbent material and cushioning. The outer packaging bears the addressing information along with all required markings and labels.

**Oxidizing gas** means a gas that more than air may cause or contribute to the combustion of other material by generally providing oxygen.

**Oxidizing substance** is a Division 5.2 material that may, generally by yielding oxygen, cause or enhance the combustion of other materials.

**Packing group (PG)** is the DOT grouping assignment that is based on the degree of danger present in an individual hazardous material. Packing Group I indicates a great danger; Packing Group II, medium danger; Packing Group III, minor danger. Not every hazard class uses packing group assignments. ORM-D materials most often fall within Packing Group III.

**Passenger-carrying aircraft** means an aircraft that carries any person other than a crew member or company employee, an authorized representative of the United States, or a person accompanying the shipment.

**Poisonous gas**, see toxic gas.

**Poisonous material**, see toxic substance.



**Primary hazard** refers to the single or most dangerous hazard characteristic of a hazardous material (i.e., hazard class or division assignment).

**Primary receptacle** is the innermost container (i.e., tube, vial, bottle, vessel) that holds the hazardous material. Sometimes the primary receptacle may be referred to as the inner receptacle or the primary container.

**Proper shipping name** is the name of a hazardous material that must be used to identify a substance or article in the shipping documents and on the packaging, as required. See Appendix [A](#) and [B](#) for listings of proper shipping names.

**psi** means pounds per square inch.

**psia** means pounds per square inch absolute.

**psig** means pounds per square inch gauge.

**Pyrophoric material** is a liquid or solid that, even in a small amount and without an external ignition source, can ignite within 5 minutes after coming in contact with air.

**Radiation level** means the radiation dose-equivalent rate expressed in millisievert per hour (mSv/h) or millirem per hour (mrem/h).

**Radioactive instrument or article** means any manufactured instrument or article, such as an instrument, clock, electronic tube or apparatus, or similar item, having a Class 7 radioactive material in gaseous or nondispersible solid form as a component part.

**Radioactive material** is defined in 49 CFR 173.403 as any material containing radionuclides where both the activity concentration and the total activity in the consignment exceed the values specified in the table in 49 CFR 173.436 or values derived according to the instructions in 49 CFR 173.433. Activity limits for mailable Class 7 radioactive materials are listed in [Exhibit 347.22](#).

**Regulated medical waste** is the DOT term for a Division 6.2 waste or reusable material, other than a culture or stock of an infectious substance, that may or may not contain an infectious substance and is generated from: the diagnosis, treatment, or immunization of human beings or animals; research pertaining to the diagnosis, treatment, or immunization of human beings or animals; or the production or testing of biological products. Only the types of medical waste named in [346](#) are mailable.

**Reportable quantity (RQ)** mean the minimum amount of a hazardous substance that is subject to the additional marking and documentation requirements in Appendix A of 49 CFR 172.101. A hazardous material having an RQ is nonmailable.

**Residue** means the hazardous material remaining in a packaging after the contents have been unloaded to the maximum extent practicable and before the packaging is either cleaned, refilled, or properly disposed of.

**Salvage packaging** is a special form of packaging into which damaged, defective, or leaking hazardous materials packages are placed for purposes of recovery or disposal. Salvage packaging must meet the specifications in 49 CFR 173.3.

**Secondary packaging container** is the packaging component into which the primary receptacle(s) and any required absorbent and cushioning material is securely placed. The packaging of certain mailable hazardous materials requires the use of a secondary container. The secondary packaging container is then secured in an outer shipping container.

**Self-heating material** is a material that, when in contact with air and without an energy supply, is liable to self-heat and may spontaneously ignite.

**Sharps** is a Division 6.2 material that includes any item of medical waste having a projecting cutting edge or fine point that was used in animal or human patient care or treatment or in medical research or industrial laboratories. The term includes, but is not limited to, hypodermic needles, syringes (with or without the attached needles), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of the presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides or cover slips. The term does not include new unused medical devices such as hypodermic needles, syringes, and scalpel blades.

**Shipping papers** means the shipping order, bill of lading, manifest, or other shipping document that contains the information required by 49 CFR 172.200 through 172.204. Most hazardous materials (including ORM-D materials) sent via air transportation require a shipper's declaration for dangerous goods. See [326](#) and [Exhibit 326](#). The Packaging Instructions in Appendix [C](#) specify when a shipper's declaration is required.

**Siftproof packaging** means a packaging that is impermeable to dry contents, including any fine solid material produced during transportation.

**Small quantity** is the maximum amount of a specific hazardous material that is not subject to any requirements other than those in 49 CFR 173.4. Not every hazardous material is eligible to be shipped as a small quantity. The small quantity provision is recognized for use within the United States only. A hazardous material cannot be sent in international mail using the small quantity provision.

**Solid** is a material that is not a liquid or a gas.

**Solution** is any homogeneous liquid mixture of two or more chemical compounds or elements that will not undergo any segregation under normal transportation conditions.

**Specific activity** refers to the activity of the radionuclide per unit mass of that nuclide for a Class 7 material.

**Specification packaging** means a packaging conforming to one of the specifications or standards in 49 CFR 178 and 179. ORM-D materials do not require specification packaging (but they must meet postal packaging requirements).

**Spontaneously combustible material** is a pyrophoric or a self-heating material that is capable of spontaneous ignition.

**Subsidiary hazard** means a hazard characteristic, other than the primary hazard, present in a hazardous material that is of lesser significance than the primary hazard.

**Surface transportation** requirements apply to all mailable hazardous materials sent at the USPS Retail Ground, Standard Mail, Parcel Select, or Package Services prices and must meet the requirements that apply to surface transportation.

**TBq** means terabecquerel.

**Toxic gas** is a Division 2.3 material that is poisonous by inhalation and is a gas at 68° F (20° C) or less and a pressure of 14.7 psi (101.3 kPa); or a material that has a boiling point of 68° F (20° C) or less at 14.7 psi (101.3 kPa).

**Toxic substance** means a material, other than a gas, that is known to be so toxic to humans as to cause death, injury, or harm to health if swallowed, inhaled, or contacted by the skin. See [346](#) for information on toxicity levels.

**UN number** refers to the United Nations (UN) four-digit identification number assigned to a hazardous material that is recognized for use in international and domestic commerce and transportation.

**UN standard packaging** means a packaging that conforms to the standards in the UN Recommendations on the Transport of Dangerous Goods.

**Viscosity** is the tendency of a fluid to resist internal flow without regard to its density.

**Volatility** refers to the relative rate of evaporation of materials to assume a vapor state at ordinary temperatures.

**Water reactive material**, see dangerous when wet material.

**Water resistant** means having a degree of resistance to permeability and damage caused by water.

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## References

### Postal Service Publications and Reference Materials

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- *Mailing Standards of the United States Postal Service, Domestic Mail Manual (DMM®).*
- *Mailing Standards of the United States Postal Service, International Mail Manual (IMM®).*
- *Postal Operations Manual (POM).*
- *Administrative Support Manual (ASM).*
- Publication 14, *Prohibitions and Restrictions on Mailing Animals, Plants, and Related Matter.*
- Handbook EL-812, *Hazardous Materials and Spill Response.*
- *Aviation Mail Security, Management Instructions.*
- Notice 107, *Let's Keep the Mail Safe.*
- Poster 298, *DOT Hazardous Materials Warning Labels and Markings.*
- Poster 702, *Dangerous Goods Warning Labels Prohibited in International Mail.*

### Other Publications

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- Title 18 of the United States Code (U.S.C.) 921, 1715, 1716 (18 U.S.C. 921, 1715, 1716).
- 39 U.S.C. 3001 (nonmailable matter).
- 21 U.S.C. 801–830 (drugs).
- Title 29 *Code of Federal Regulations* (29 CFR), Occupational Safety and Health Administration (OSHA), U.S. Department of Labor.
- 42 CFR, Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC).
- 49 CFR, Parts 100–185, U.S. Department of Transportation (DOT).
- International Civil Aviation Organization (ICAO), *Technical Instructions for the Safe Transport of Dangerous Goods by Air.*
- International Air Transport Association (IATA), *Dangerous Goods Regulations.*

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**Note:** Any item with an asterisk (\*) is *NONMAILABLE* under any conditions.

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