

“Going Postal”



Shipping HazMat by Mail


Hazardous materials...Can the “mailer” answer the \$MM question?



"Does the parcel (item, article) contain anything liquid, fragile, perishable, or potentially hazardous?"

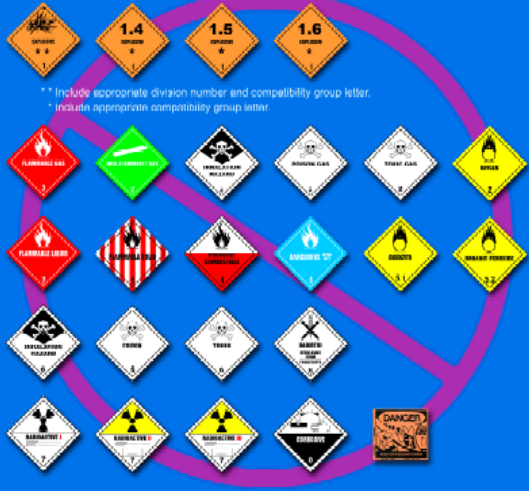
- All post offices mail clerks accepting a parcel are required to follow established USPS HAZMAT procedures and ask customers this important mandatory question and is required for all parcels and any mailpiece where there is suspicion that it may contain hazardous materials.

Mailer's Responsibility

 UNITED STATES POSTAL SERVICE

Department of Transportation
**Hazardous Materials
Warning Labels and Markings**

PROHIBITED in the Mail



** Include appropriate division number and compatibility group letter.
* Include appropriate compatibility group letter.

- With certain limited exceptions, federal law (statute, 18 U.S.C. 1716), declares it a crime to mail anything that may
 - kill or injure persons or,
 - harm property.
- The statute, however, allows the USPS to adopt rules prescribing preparation and packaging conditions under which certain hazardous materials, which are not “outwardly of their own force dangerous or injurious to life, health, or property,” be mailed
- Because these rules are very limited, most hazardous materials are prohibited from mailing.

Mailer's Responsibilities

- Mailers must know the physical characteristics of the hazardous materials they wish to mail.
- Mailers are responsible for ensuring that they do not mail any hazardous material that can injure persons or property unless the hazardous material is permitted under Section 10 of the mailability standards found in the **Domestic Mail Manual (DMM) CO23, 601**
- Further guidance is available from **Publication 52, Hazardous, Restricted, and Perishable Mail.** (Remember the question?)
- The **International Mail Manual (IMM)** contains the standards that apply to hazardous materials intended for foreign addresses.

- 1.0 General Standards
- 2.0 Packaging
- 3.0 Acceptable Containers
- 4.0 Cushioning, Closure, Sealing, and Reinforcements
- 5.0 Content and Extra Service Markings
- 6.0 Special Mailing Containers
- 7.0 Packaging Standards for BMCs
- 8.0 Nonmailable and Restricted Articles and Substances Generally
- 9.0 Perishables
- 10.0 Hazardous Materials
- 11.0 Other Restricted and Nonmailable Matter
- 12.0 Written, Printed, and Graphic Matter Generally



USPS Standards for Hazardous Material

- The USPS standards generally restrict the mailing of hazardous materials to Consumer Commodity ORM-D materials that meet USPS specific quantity limitations and packaging requirements.
- The few non “ORM-D” materials permitted to be mailed are subject to the standards found in Section 10 of the *Domestic Mail Manual (DMM) 601 Mailability and Publication 52, Hazardous, Restricted, and Perishable Mail*.

Potentially May Be Permitted in the Mail*

CD
Modified Microbial

INFECTIOUS SUBSTANCE

42 CFR 72.3
etiological agent
label may apply

(for dry ice only)

CONSUMER COMMODITY
ORM-D-AIR

RESTRICTED COMMODITY
ORM-D

*Additional requirements in DMM 601.10 and Publication 52 must also be met.

Air Transportation Requirements

- Hazmat mailability standards (DMM 601.10) applies to all mailable hazardous materials sent at the First-Class Mail, Priority Mail, or Express Mail rates.
- All mailable hazmat sent at those rates must meet the requirements that apply to air transportation.
- Mailable hazmat sent at any of those rates 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.



Surface Transportation Requirements

- DMM 601.10 also applies to all mailable hazardous materials sent at the Standard Mail or Package Services rates.
- All mailable hazardous materials sent at the Standard Mail or Package Services rates must meet the requirements that apply to surface transportation.



39 CFR

- 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 as commercial carriers are.
- Unlike the commercial carriers, the Postal Service is, however, subject to the statutes found in title 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”.
- Accordingly, for legal and safety reasons, the postal mailing standards for hazardous materials not only closely adhere to 49 CFR, but also include many additional limitations and prohibitions.
- In many instances, the postal standards 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.



DMM 601.10

Mailers are responsible for the following:

- Ensuring no hazardous material is mailed unless it is permitted under Postal Service mailing standards described in the DMM 601.10
- Knowing the physical characteristics of the hazardous materials they wish to mail.
- Making sure all Postal Service regulations are followed regarding the packaging, markings, labeling, and declaration of hazardous materials placed in the mail. (*including Publication 52, Hazardous, Restricted, and Perishable Mail*).
- Reused packaging and boxes are only acceptable when all markings and labels are removed or completely marked out so they cannot be read.
- Regardless of what is actually inside your package, markings or labels for hazardous or restricted materials may prevent your package from being delivered.
- For more information, DMM 601.5.1b.
- Failure to comply with any USPS requirements may result in the delay or non-delivery of the mailpiece.



Air Transportation Prohibitions

The following types of hazardous materials are prohibited from transport via aircraft under any circumstances:

- 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.
- Flammable materials (gases, liquids, and solids).
- Infectious Substances Category A. (New interim rule introduced November 1st, 2006)
- Radioactive materials.
- 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.
- Hazardous materials which are also excluded from air shipment by the regulations of
 - 49 CFR 100–185, or
 - by the applicable state (country), or
 - air carrier operator variations.

(601 mentions reference to the technical instruction of the International Civil Aviation Organization (ICAO) for air carrier operator variations.?)



Hazard Classes & Mailability Summary

Hazard Class & Div.	Domestic Mail Air Transportation	Domestic Mail Surface Transportation
Explosives, Div. - 1.1, 1.2, 1.3, 1.4, 1.5, 1.6	Prohibited	Prohibited except with written permission as allowed in 10.11.2
Gases Div. 2.1, 2.2, 2.3	Div. 2.1 and 2.3: Prohibited. Div. 2.2: Only ORM-D per 10.12.2	Div. 2.1 and 2.2: Only ORM-D per 10.12.2 . Div. 2.3: Prohibited
Flammable and Combustible Liquids Class 3	Flammable liquids: Prohibited. Combustibles: Only ORM-D per 10.13.3	Flammable liquids: Only ORM-D per 10.13.2 . Combustibles: Only ORM-D per 10.13.3
Flammable Solids Div. 4.1, 4.2, 4.3	Prohibited	Only ORM-D per 10.14.2
Oxidizing Substances, Div. 5.1, 5.2	Only ORM-D per 10.15.2	Only ORM-D per 10.15.2
Toxic Substances Div. 6.1,	Div. 6.1: Only ORM-D per 10.16.2 .	Div. 6.1: Only ORM-D per 10.16.2
Infectious Substances Div. 6.2	Div. 6.2: Only per 10.17	Div. 6.2: Only per 10.17
Radioactive Materials Class 7	Prohibited	Only in limits per 9.0 and Publication 52
Corrosives Class 8	Only ORM-D per 10.19.2	Only ORM-D per 10.19.2
Miscellaneous Class 9	Only ORM-D per 10.20	Only ORM-D per 10.20

International Mailability Summary

Class	International Mail
1	Prohibited
2	Prohibited
3	Prohibited
4	Prohibited
5	Prohibited
6	Prohibited
7	Only mailable in limits per IMM 135
8	Prohibited
9	Prohibited, except magnetized materials per IMM 136



135.6 Radioactive Materials

Shipments containing radioactive materials are acceptable in the international mail subject to the provisions of DMM 601 (Publication 52, Acceptance of Hazardous, Restricted, or Perishable Matter), and under the following conditions:

- a. Shipments may be sent only in registered letter-post mailpieces.
- b. Shipments may be sent only to those countries that have expressed a willingness to accept radioactive materials. See "Prohibitions and Restrictions" in the Individual Country Listings.
- c. Shipments must comply with the International Atomic Energy Agency rules and regulations.
- d. Senders and recipients of radioactive materials must receive prior authorization from the appropriate regulatory authorities within their countries.
- e. A white package label bearing the French words "Matières Radioactives" (Radioactive Materials) must be applied to the address side of each package containing radioactive materials. Senders are responsible for supplying and affixing this label to the package.
- f. The package must also bear the following endorsements in bold letters: "RETURN TO SENDER IN CASE OF NONDELIVERY" and "RADIOACTIVE MATERIALS, QUANTITIES PERMITTED FOR MOVEMENT BY POST."



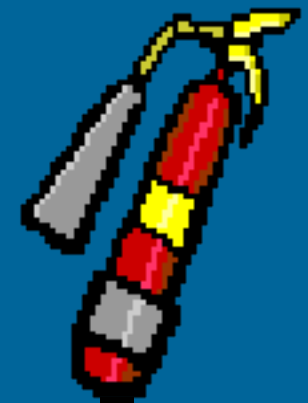
Mailability Rulings for Hazardous Materials

- The acceptability for mailing chemicals and other types of hazardous materials depends on container fluid/vapor capacities,
- the ability of the complete mailpiece to contain the material, and
- the method of absorbing and containing the product in case of accidental leakage of the primary receptacle.



USPS Flammable Liquid Mailability

- Prohibited in international mail.
- Flashpoint of 20°F (-7°C) or below is prohibited in domestic mail.
- Other flammable liquid is prohibited in domestic mail via air transportation but is permitted via surface transportation if the material can qualify as an ORM-D material and meet the following conditions as applicable:



Packing Instruction 3A(a).

- the flashpoint is $> 20^{\circ}\text{F}$ (-7°C) but $\leq 73^{\circ}\text{F}$ (23°C);
- the liquid is in a metal primary receptacle not exceeding 1 quart, or in another type of primary receptacle not exceeding 1 pint, per mailpiece;
- enough cushioning surrounds the primary receptacle to absorb all potential leakage;
- the cushioning and primary receptacle are packed within a securely sealed secondary packaging that is placed within a strong outer shipping container; and
- each mailpiece is 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.



Packing Instruction 3A(b).

- the flashpoint is $>73^{\circ}\text{F}$ (23°C) but $< 100^{\circ}\text{F}$ (38°C);
- the liquid is in a metal primary receptacle not exceeding 1 gallon, or in another type of primary receptacle not exceeding 1 quart, per mailpiece;
- enough cushioning surrounds the primary receptacle to absorb all potential leakage;
- the cushioning and primary receptacle are packed within a securely sealed secondary packaging that is placed within a strong outer shipping container; and
- each mailpiece is 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



New Packaging Standards for Div. 6.2 Infectious Substances

Material being mailed	Packaging standards		
	Nonregulated	Category A	Category B
Blood for Transfusion	10.17.9	nm	10.17.5
Biological Product	10.17.9	nm	10.17.5
Culture or Stock	10.17.9	nm	10.17.5
Patient Specimen	na	nm	10.17.5
Exempt Human or Animal Specimen	10.17.10	na	na
Forensic Material	10.17.9	nm	10.17.5
Regulated Medical Waste	10.17.6	nm	10.17.6
Sharps Waste	10.17.6	nm	10.17.6
Toxin *	10.16.4	nm	10.17.5
Treated Medical Waste	10.17.9	n/a	n/a
Used Health Care Product	10.17.7	nm	10.17.7

nm = Not mailable. n/a = Not applicable.

* *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 UN 2814, UN 2900, or UN 3373, as appropriate. A Division 6.1 toxin that can qualify as an ORM-D material is permitted when packaged under 10.16.3 or 10.16.4.




Mailability Rulings cont.,

- To determine mailability of a specific material, a mailer must submit a material safety data sheet (MSDS) and the following information to the Pricing and Classification Service Center (PCSC):
 - Name of material, hazard class, and assigned United Nations (UN) or North America (NA) identification number.
 - Chemical composition by percentage of ingredient.
 - Flashpoint.
 - Toxic properties.
 - Irritant action when inhaled, swallowed, or contacted by eyes or skin.
 - Special precautions necessary to permit handling without harm to USPS employees or damage to property or other mail.
 - Explanation of warning labels and shipping papers required by state or federal regulations.
 - Proposed packaging method, including the addressing and required markings.
 - Proposed number of pieces to be mailed, class of mail, and post office(s) of mailing.



Keep the Mail Safe Chart

Hazard Class	Type	Common Examples	Domestic		International	Domestic Mail		Maximum Amount Permitted in Mail	Additional Information
			Air	Surface		DMM	Pub 52		
Hazard Class 3 Flammable and Combustible Liquids									
	Flammable Liquids (Flashpoint not more than 141°F)	Acetone, rubbing alcohol, witch hazel	N	Y	N	601.10.13	343.21	601.10.13	ORM-D only (dependent on flashpoint).
		Gasoline and items containing gasoline or gasoline fumes	N	N	N	601.10.13	343.23b	None	Gasoline and items containing gasoline or gasoline fumes are always prohibited.
		Paint, paint-related materials	N	Y	N	601.10.13	343.26	601.10.13	ORM-D only (dependent on flashpoint).
		Cigarette lighters (flammable liquid)	N	Y	N	601.10.13	343.25	601.10.13	Pre-approval from PCSC required as per DMM.
	Combustible Liquids (Flashpoint above 141°F and below 200°F)	Diesel fuel, kerosene	Y	Y	N	601.10.13	343.24e	601.10.13	ORM-D only. Flashpoint must be greater than 141° F.
		Waxes & polishes	Y	Y	N	601.10.13	343.24j	601.10.13	ORM-D only (dependent on flashpoint).
		Adhesives & cements	Y	Y	N	601.10.13	343.24g	601.10.13	ORM-D only (dependent on flashpoint).

Mailability Domestic Limits

- **IMM 131.1** All articles that are nonmailable in domestic mail are nonmailable in international mail. See DMM 601 and Publication 52, *Hazardous, Restricted, and Perishable Mail*.



Mailability International Limits

- **IMM131.2** Many articles that are mailable in domestic mail are nonmailable in international mail. See section 630 of Publication 52 and "Prohibitions and Restrictions" in the Individual Country Listings.



Your package was not accepted for one of the following reasons:

Improper packaging.

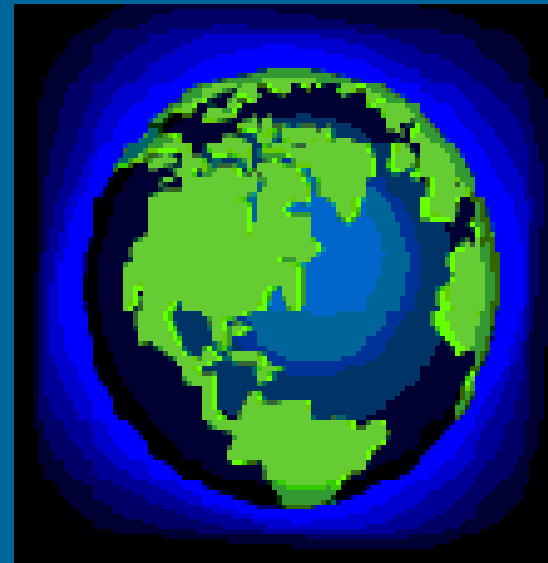
Prohibited or restricted markings and/or labels.

Stained or leaking mail piece.

Contact your local Post Office™ to determine if this package is mailable.

Mailability Individual Country Prohibitions and Restrictions

- **IMM 131.31** Information on articles that are prohibited or restricted to individual countries appears under "Prohibitions and Restrictions" in the Individual Country Listings. These prohibitions and restrictions are based on information furnished by the countries concerned. Customers should inquire at the Post Office facility about specific prohibitions or restrictions.



Shipping Papers

- The shipping paper must be affixed to the outside of the mailpiece. A plastic envelope or carrier can be used for this purpose.

- The following conditions also apply:

Air Transportation.

Most mailable hazardous materials (including ORM-D materials) must be accompanied by a shipper's declaration for dangerous goods (i.e., shipping paper). The document must be properly completed and signed in triplicate by the mailer.

To determine which mailable hazardous materials require a shipping paper when sent via air transportation, refer to the appropriate sections in Publication 52, the appropriate Packaging Instruction in Appendix C, and DMM C023.

Surface Transportation.

A mailpiece containing a mailable hazardous material other than an ORM-D material must be accompanied by a properly prepared shipping paper.



Refusal by Air Carriers

- The air carrier is not authorized to carry hazardous materials under the provisions of the Federal Aviation Administration (FAA) Operator's Certificate.
- The air carrier's corporate policy prohibits carrying hazardous materials.
- The pilot of an individual flight rejects any mailpieces perceived as questionable or unsafe.
- The mailpiece contains a nonmailable hazardous material that was mistakenly accepted or deposited in the mailstream.
- The mailpiece is not properly packaged, marked, or labeled for air transportation.
- The mailpiece does not carry a properly completed shipper's declaration for dangerous goods.
- The mailpiece is unidentified as to its contents and appears to contain a hazardous material.



References

- USPS Postal Explorer

<http://pe.usps.com/>

Presenter Information

Robert M. Smith, President

3215-A Wellington Court

Raleigh, NC 27615

Toll free: 800-266-0652

Tel:(919)878-9933

Fax(919)878-9244

Website: www.cargopak.com

Email: rsmith@cargopak.com

