

- 1. The shipper must attach the appropriate label(s) to each package of hazardous material offered for shipment unless excepted from labeling requirements. (§172.400)
- 2. If the material in a package has more than one hazard classification, the package must be labeled for each hazard. (§172.402)
- 3. When two or more hazardous materials of different classes are packed within the same packaging or outer enclosure, the outside of the package or enclosure must be labeled for each class of hazardous material involved. For exceptions see §172.404. (§172.404)
- 4. Radioactive materials requiring labeling, must be labeled on two opposite sides of the package. (§172.403)
- 5. A label should only be applied to a package containing a hazardous material if it represents the hazard inside. (§172.401)
- No one may offer or transport a package bearing any marking or label which by its color, design, or shape could be confused with or conflict with a hazardous materials label. This does not prohibit the use of labels in conformance with U.N. Recommendations, IMDG Code, ICAO Technical Instructions, TDG Regulations, or GHS. (§172.401)

Copyright 2017 J. J. Keller & Associates, Inc. • Neenah, WI • JJKeller.com • (800) 327-6868 • Printed in the USA

HAZARDOUS MATERIALS LABELING CHART

§172.400 General labeling requirements.

(a) Except as specified in §172.400a, each person who offers for transportation or transports a hazardous material in any of the following packages or containment devices, shall label the package or containment device with labels specified for the material in the §172.101 Table and in this subpart: (1) A non-bulk package:

(2) A bulk packaging, other than a cargo tank, portable tank, or tank car, with a volumetric capacity of less than 18 m³ (640 cubic feet), unless placarded in accordance with subpart F of this part;

(3) A portable tank of less than 3785 L (1000 gallons) capacity, unless placarded in accordance with subpart F of this part;

(4) A DOT Specification 106 or 110 multi-unit tank car tank, unless placarded in accordance with subpart F of this part; and

(5) An overpack, freight container or unit load device, of less than 18 m³ (640 cubic feet), which contains a package for which labels are required, unless placarded or marked in accordance with 172.512 of this part.

(b) Labeling is required for a hazardous material which meets one or more hazard class definitions, in accordance with Column 6 of the §172.101 Table and the following table:

Hazard class or division	Label name	Label design or section reference		
1.1. 1.2. 1.3. 1.4. 1.5. 1.6. 2.1. 2.2. 2.3. 3 Flammable Liquid.	EXPLOSIVES 1.1 EXPLOSIVES 1.2 EXPLOSIVES 1.3 EXPLOSIVES 1.4 EXPLOSIVES 1.5 EXPLOSIVES 1.6 FLAMMABLE GAS NONFLAMMABLE GAS POISON GAS FLAMMABLE LIQUID (none)	172.411 172.411 172.411 172.411 172.411 172.411 172.411 172.417 172.415 172.416 172.419		
(Combustible liquid) 4.1 4.2	FLAMMABLE SOLID SPONTANEOUSLY COMBUSTIBLE	172.420 172.422		
4.3 5.1 5.2 6.1 (material poisonous by	OXIDIZER ORGANIC PEROXIDE POISON INHALATION HAZARD	172.423 172.426 172.427 172.429		
inhalation (see §171.8 of this subchapter)). 6.1 (other than material poisonous by	POISON	172.430		
inhalation). 6.2 7 (see §172.403) 7 7 (fissile radioactive material; see §172.402)	INFECTIOUS SUBSTANCE ¹ RADIOACTIVE WHITE-1 RADIOACTIVE YELLOW-II RADIOACTIVE YELLOW-III FISSILE	172.432 172.436 172.438 172.440 172.441		
 7 (empty packages, see §173.428 of this subchapter). 	EMPTY	172.450		
8 9	CORROSIVE CLASS 9	172.442 172.446		

¹The ETIOLOGIC AGENT label specified in regulations of the Department of Health and Human Services at 42 CFR 72.3 may apply to packages of Infectious substances.

§172.400a Exceptions from labeling.

(a) Notwithstanding the provisions of 172.400, a label is not required on —

(1) A Dewar flask meeting the requirements in §173.320 of this subchapter or a cylinder containing a Division 2.1, 2.2, or 2.3 material that is durably and legibly marked in accordance with CGA C-7, Appendix A (IBR; see §171.7 of this subchapter). Notwithstanding this exception, overpacks must be labeled (see §173.25 of this subchapter).

(2) A package or unit of military explosives (including ammunition) shipped by or on behalf of the DOD when in $-\!\!-$

(i) Freight containerload, carload or truckload shipments, if loaded and unloaded by the shipper or DOD; or

 (ii) Unitized or palletized break-bulk shipments by cargo vessel under charter to DOD if at least one

Copyright 2016 J. J. Keller & Associates, Inc., All Rights Reserved • Neenah, WI • USA • 800-327-6868 • JJKeller.com • Printed in the USA

required label is displayed on each unitized or palletized load. (3) A package containing a hazardous material other

than ammunition that is — (i) Loaded and unloaded under the supervision of DOD

personnel, and (ii) Escorted by DOD personnel in a separate vehicle.

(4) A compressed gas cylinder permanently mounted in or on a transport vehicle.

(5) A freight container, aircraft unit load device or portable tank, which —

(i) Is placarded in accordance with subpart F of this part, or

(ii) Conforms to paragraph (a)(3) or (b)(3) of 172.512.

(6) An overpack or unit load device in or on which labels representative of each hazardous material in the overpack or unit load device are visible.

(7) A package of low specific activity radioactive material and surface contaminated objects, when transported under \$173.427(a)(6)(vi) of this subchapter. (8) Packages containing toy plastic or paper caps for toy pistols described as "UN0349, Articles, explosive, n.o.s. (Toy caps), 1.4S" or "NA0337, Toy caps, 1.4S" when offered in conformance with the conditions of \$172.102(c)(1), Special provision 382.

(b) Certain exceptions to labeling requirements are provided for small quantities and limited quantities in applicable sections in part 173 of this subchapter.

(c) Notwithstanding the provisions of \$172.402(a), a Division 6.1 subsidiary hazard label is not required on a package containing a Class 8 (corrosive) material which has a subsidiary hazard of Division 6.1 (poisonous) if the toxicity of the material is based solely on the corrosive destruction of tissue rather than systemic poisoning. In addition, a Division 4.1 subsidiary hazard label is not required on a package bearing a Division 4.2 label.

(d) A package containing a material poisonous by inhalation (see §171.8 of this subchapter) in a closed transport vehicle or freight container may be excepted from the POISON INHALATION HAZARD or POISON GAS label or placard, under the conditions set forth in §171.23(b)(10) of this subchapter.

§172.401 Prohibited labeling.

(a) Except as provided in paragraph (c) of this section, no person may offer for transportation or no carrier may transport any package bearing a label specified in this subpart unless —

(1) The package contains a material that is a hazardous material, and

(2) The label represents a hazard of the hazardous material in the package.

(b) No person may offer for transportation and no carrier may transport a package bearing any marking or label which by its color, design, or shape could be confused with or conflict with a label prescribed by this part.

(c) The restrictions in paragraphs (a) and (b) of this section, do not apply to packages labeled in conformance with:

(1) The UN Recommendations (IBR, see §171.7 of this subchapter);

(2) The IMDG Code (IBR, see §171.7 of this subchapter);
(3) The ICAO Technical Instructions (IBR, see §171.7 of this subchapter);

(4) The TDG Regulations (IBR, see §171.7 of this subchapter).

(5) The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) (IBR, see §171.7 of this subchapter).

(d) The provisions of paragraph (a) of this section do not apply to a packaging bearing a label if that packaging is:

(1) Unused or cleaned and purged of all residue;

(2) Transported in a transport vehicle or freight container in such a manner that the packaging is not visible during transportation; and

(3) Loaded by the shipper and unloaded by the shipper or consignee.

§172.402 Additional Labeling requirements.

(a) Subsidiary hazard labels. Each package containing a hazardous material —

(1) Shall be labeled with primary and subsidiary hazard labels as specified in Column 6 of the §172.101 Table (unless excepted in paragraph (a)(2) of this section); and (2) For other than Class 1 or Class 2 materials (for

subsidiary labeling requirements for Class 1 or Class 2 materials see paragraph (e) or paragraphs (f) and (g), respectively, of this section), if not already labeled under paragraph (a)(1) of this section, shall be labeled with subsidiary hazard labels in accordance with the following table:

SUBSIDIARY HAZARD LABELS

Subsidiary hazard level	Subsidiary Hazard (Class or Division)							
(packing group)	3	4.1	4.2	4.3	5.1	6.1	8	
□ □ ■	X X •	 X X	 X X	X X X	X X X	X X X	X X X	

X—Required for all modes.

•—Required for all modes, except for a material with a flash point at or above 38°C (100°F) transported by rail or highway. •••—Impossible as subsidiary hazard.

(b) *Display of hazard class on labels*. The appropriate hazard class or division number must be displayed in the lower corner of a primary hazard label and a subsidiary hazard label.

(c) Cargo Aircraft Only label. Each person who offers for transportation or transports by aircraft a package containing a hazardous material which is authorized on cargo aircraft only shall label the package with a CARGO AIRCRAFT ONLY label specified in §172.448 of this subpart.

(d) Class 7 (Radioactive) Materials. Except as otherwise provided in this paragraph, each package containing a Class 7 material that also meets the definition of one or more additional hazard classes must be labeled as a Class 7 material as required by §172.403 and for each additional hazard.

(1) For a package containing a Class 7 material that also meets the definition of one or more additional hazard classes, whether or not the material satisfies \$173.4a(b)(7) of this subchapter, a subsidiary label is not required on the package if the material conforms to the remaining criteria in \$173.4a of this subchapter.

(2) Each package or overpack containing fissile material, other than fissile-excepted material (see §173.453 of this subchapter) must bear two FISSILE labels, affixed to opposite sides of the package or overpack, which conforms to the figure shown in §172.441; such labels, where applicable, must be affixed adjacent to the labels for radioactive materials.

(e) Class 1 (explosive) Materials. In addition to the label specified in Column 6 of the 172.101 Table, each package of Class 1 material that also meets the definition for:

(1) Division 6.1, Packing Groups I or II, shall be labeled POISON or POISON INHALATION HAZARD, as appropriate.

(2) Class 7, shall be labeled in accordance with §172.403 of this subpart.

(f) *Division 2.2 materials*. In addition to the label specified in Column 6 of the §172.101 Table, each package of Division 2.2 material that also meets the definition for an oxidizing gas (see §171.8 of this subchapter) must be labeled OXIDIZER.

(g) *Division 2.3 materials*. In addition to the label specified in Column 6 of the §172.101 Table, each package of Division 2.3 material that also meets the definition for:

(1) Division 2.1, must be labeled Flammable Gas;

(2) Division 5.1, must be labeled Oxidizer; and

(3) Class 8, must be labeled Corrosive.

§172.405 Authorized label modifications.

(a) For Classes 1, 2, 3, 4, 5, 6, and 8, text indicating a hazard (for example FLAMMABLE LIQUID) is not required on a primary or subsidiary label.

(b) For a package containing Oxygen, compressed, or Oxygen, refrigerated liquid, the OXIDIZER label specified in §172.426 of this subpart, modified to display the word "OXYGEN" instead of "OXIDIZER", and the class number "2" instead of "5.1", may be used in place of the NON-FLAMMABLE GAS and OXIDIZER labels. Notwithstanding the provisions of paragraph (a) of this section, the word "OXYGEN" must appear on the label. (c) For a package containing a Division 6.1, Packing Group III material, the POISON label specified in §172.430 may be modified to display the text "PG III"

Group III material, the POISON label specified in §172.430 may be modified to display the text "PG III" instead of "POISON" or "TOXIC" below the mid line of the label. Also see §172.313(d).