

(b) No person may display an identification number on a placard, orange panel or white square-on-point display configuration unless —

(1) The identification number is specified for the material in §172.101;

(2) The identification number is displayed on the placard, orange panel or white square-on-point configuration authorized by §172.332 or §172.336(b), as appropriate, and any placard used for display of the identification number corresponds to the hazard class of the material specified in §172.504;

(3) Except as provided under §172.336(c)(4) or (c)(5), the package, freight container, or transport vehicle on which the number is displayed contains the hazardous material associated with that identification number in §172.101.

(c) Except as required by §172.332(c)(4) for a combustible liquid, the identification number of a material may be displayed only on the placards required by the tables in §172.504.

(d) Except as provided in §172.336, a placard bearing an identification number may not be used to meet the requirements of Subpart F of this part unless it is the correct identification number for all hazardous materials of the same class in the transport vehicle or freight container on which it is displayed.

(e) Except as specified in §172.338, an identification number may not be displayed on an orange panel on a cargo tank unless affixed to the cargo tank by the person offering the hazardous material for transportation in the cargo tank.

(f) If a placard is required by §172.504, an identification number may not be displayed on an orange panel unless it is displayed in proximity to the placard.

(g) No person shall add any color, number, letter, symbol, or word other than as specified in this subchapter, to any identification number marking display which is required or authorized by this subchapter.

§172.336 Identification numbers; special provisions.

(a) When not required or prohibited by this subpart, identification numbers may be displayed on a transport vehicle or a freight container in the manner prescribed by this subpart.

(b) For hazardous materials in hazard classes for which hazard warning placards are not specified, identification numbers, when required, must be displayed on either orange panels (see §172.332(b)) or on a plain white square-on-point display configuration having the same outside dimensions as a placard. In addition, for materials in hazard classes for which placards are specified and identification number displays are required, but for which identification numbers may not be displayed on the placards authorized for the material (see §172.334(a)), identification numbers must be displayed on orange panels or on the plain white square-on-point display configuration in association with the required placards. An identification number displayed on a white square-on-point display configuration is not considered to be a placard.

(1) The 100 mm (3.9 inch) by 215 mm (8.5 inches) area containing the identification number shall be located as prescribed by §172.332 (c)(1) and (c)(2) and may be outlined with a solid or dotted line border.

(c) Identification numbers are not required:

(1) On the ends of a portable tank, cargo tank or tank car having more than one compartment if hazardous materials having different identification numbers are being transported therein. In such a circumstance, the identification numbers on the sides of the tank shall be displayed in the same sequence as the compartments containing the materials they identify.

(2) On a cargo tank containing only gasoline, if the cargo tank is marked “Gasoline” on each side and rear in letters no less than 50 mm (2 inches) high, or is placarded in accordance with §172.542(c).

(3) On a cargo tank containing only fuel oil, if the cargo tank is marked “Fuel Oil” on each side and rear in letters no less than 50 mm (2 inches) high, or is placarded in accordance with §172.544(c).

(4) For each of the different liquid petroleum distillate fuels, including gasoline and gasohol in a compartmented cargo tank or tank car, if the identification number is displayed for the distillate fuel having the lowest flash point.

(5) For each of the different liquid petroleum distillate fuels, including gasoline and gasohol transported in a cargo tank, if the identification number is displayed for the liquid petroleum distillate fuel having the lowest flash point.

(6) On nurse tanks meeting the provisions of §173.315(m) of this subchapter.

§172.338 Replacement of identification numbers.

If more than one of the identification number markings on placards, orange panels, or white square-on-point display configurations that are required to be displayed are lost, damaged or destroyed during transportation, the carrier shall replace all the missing or damaged identification numbers as soon as practicable.

However, in such a case, the numbers may be entered by hand on the appropriate placard, orange panel or white square-on-point display configuration providing the correct identification numbers are entered legibly using an indelible marking material. When entered by hand, the identification numbers must be located in the white display area specified in §172.332. This section does not preclude required compliance with the placarding requirements of Subpart F of this subchapter.

Subpart E — Labeling

§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	EXPLOSIVES 1.1	172.411
1.2	EXPLOSIVES 1.2	172.411
1.3	EXPLOSIVES 1.3	172.411
1.4	EXPLOSIVES 1.4	172.411
1.5	EXPLOSIVES 1.5	172.411
1.6	EXPLOSIVES 1.6	172.411
2.1	FLAMMABLE GAS	172.417
2.2	NONFLAMMABLE GAS	172.415
2.3	POISON GAS	172.416
3 (flammable liquid)	FLAMMABLE LIQUID (none)	172.419
Combustible liquid		
4.1	FLAMMABLE SOLID	172.420
4.2	SPONTANEOUSLY COMBUSTIBLE	172.422
4.3	DANGEROUS WHEN WET	172.423
5.1	OXIDIZER	172.426
5.2	ORGANIC PEROXIDE	172.427
6.1 (inhalation hazard, Zone A or B)	POISON INHALATION HAZARD	172.429
6.1 (PG I or II, other than Zone A or B inhalation hazard)	POISON	172.430
6.1 (PG III)	KEEP AWAY FROM FOOD	172.431
6.2	INFECTIOUS SUBSTANCE ¹	172.432
7 (see §172.403)	RADIOACTIVE WHITE-I	172.436
7	RADIOACTIVE YELLOW-II	172.438
7	RADIOACTIVE YELLOW-III	172.440
7 (empty packages, see §173.427)	EMPTY	172.450
8	CORROSIVE	172.442
9	CLASS 9	172.446

¹ The 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 cylinder, or a Dewar flask containing a Division 2.1 or Division 2.2 gas that is —

- (i) Not poisonous;
- (ii) Carried by a private or contract motor carrier;
- (iii) Not overpacked; and
- (iv) Durable and legibly marked in accordance with CGA Pamphlet C-7, appendix A.

(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 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 is visible.

(7) A package of low specific activity radioactive material, when transported under §173.425(b) of this subchapter.

(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 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.

(d) For Division 6.1 Packing Group III materials, a POISON label may be used in place of a KEEP AWAY FROM FOOD label.

§172.401 Prohibited labeling.

(a) Except as provided in paragraph (c) of this section, no person may offer for transportation and 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) Any United Nations recommendation, including the class number (see §172.407), in the document entitled “*Transport of Dangerous Goods*.”
- (2) The International Maritime Organization (IMO) requirements, including the class number (see §172.407), in the document entitled “*International Maritime Dangerous Goods Code*”;
- (3) The ICAO Technical Instructions; or
- (4) The TDG Regulations.

§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 (packing group)	Subsidiary Hazard (Class or Division)						
	3	4.1	4.2	4.3	5.1	6.1	8
I	X	***	***	X	X	X	X
II	X	X	X	X	X	X	X
III	*	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

** - [Removed and reserved]

*** - Impossible as subsidiary hazard.

(b) *Display of hazard class on labels.* The appropriate hazard class or, for Division 5.1 or 5.2 the division number, shall be displayed in the lower corner of a primary hazard label and may not be displayed on a subsidiary 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 of this subpart and for each additional hazard. A subsidiary hazard label is not required on a package containing a Class 7 material that conforms to criteria specified in §173.4 of this subchapter, except §173.4(a)(1)(iv) of this subchapter.

(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.

§172.403 Class 7 (radioactive) material.

(a) Unless excepted from labeling by §§173.421 through 173.428 of this subchapter, each package of radioactive material must be labeled as provided in this section.

(b) The proper label to affix to a package of Class 7 (radioactive) material is based on the radiation level at the surface of the package and the transport index. The proper category of label must be determined in accordance with paragraph (c) of this section. The label to be applied must be the highest category required for any of the two determining conditions for the package. RADIOACTIVE WHITE-I is the lowest category and RADIOACTIVE YELLOW-III is the highest. For example, a package with a transport index of 0.8 and a maximum surface radiation level of 0.6 millisievert (60 millirems) per hour must bear a RADIOACTIVE YELLOW-III label.

(c) Category of label to be applied to Class 7 (radioactive) materials packages:

Transport Index (TI)	Maximum radiation level at any point on the external surface	Label category ¹
O ²	Less than or equal to 0.005 mSv/h (0.5 mrem/h).	WHITE-I
More than 0 but not more than 1	Greater than 0.005 mSv/h (0.5 mrem/h) but less than or equal to 0.5 mSv/h (50 mrem/h).	YELLOW-II
More than 1 but not more than 10	Greater than 0.5 mSv/h (50 mrem/h) but less than or equal to 2 mSv/h (200 mrem/h).	YELLOW-III
More than 10	Greater than 2 mSv/h (200 mrem/h) but less than or equal to 10 mSv/h (1,000 mrem/h).	YELLOW-III (Must be shipped under exclusive use provisions; see §173.441(b) of this subchapter).

¹ Any package containing a “highway route controlled quantity” (§173.403 of this subchapter) must be labeled as RADIOACTIVE YELLOW-III.

² If the measured TI is not greater than 0.05, the value may be considered to be zero.

(d) *EMPTY label.* See §173.428(d) of this subchapter for EMPTY labeling requirements.

(e) [Reserved]

(f) Each package required by this section to be labeled with a RADIOACTIVE label must have two of these labels, affixed to opposite sides of the package. (See §172.406(e)(3) for freight container label requirements).

(g) The following applicable items of information must be entered in the blank spaces on the RADIOACTIVE label by legible printing (manual or mechanical), using a durable weather resistant means of marking:

(1) “*Contents.*” The name of the radionuclides as taken from the listing of radionuclides in §173.435 of this subchapter (symbols which conform to established radiation protection terminology are authorized, i.e., ⁹⁹Mo, ⁶⁰Co, etc.). For mixtures of radionuclides, with consideration of space available on the label, the radionuclides that must be shown must be determined in accordance with §173.433(f) of this subchapter.

(2) “*Activity.*” Activity units must be expressed in appropriate SI units (e.g., Becquerels (Bq), Terabecquerels (TBq), etc.) or in both appropriate SI units and appropriate customary units (Curies (Ci), millicuries (mCi), microcuries (uCi), etc.). Alternatively, for domestic transport, the activity may be expressed solely in terms of curies until April 1, 1997. Abbreviations are authorized. Except for plutonium-238, plutonium-239, and plutonium-241, the weight in grams or kilograms of fissile radionuclides may be inserted instead of activity units. For plutonium-238, plutonium-239, and plutonium-241, the weight in grams or kilograms of fissile radionuclides may be inserted in addition to the activity units.

(3) “*Transport index.*” (See §173.403 of this subchapter.)

§172.404 Labels for mixed and consolidated packaging.

(a) *Mixed packaging.* When hazardous materials having different hazard classes are packed within the same packaging, or within the same outside container or overpack as described in §173.25 and authorized by §173.21 of this subchapter, the packaging, outside container or overpack must be labeled as required for each class of hazardous material contained therein.

(b) *Consolidated packaging.* When two or more packages containing compatible hazardous material (see §173.21 of this subchapter) are placed within the same outside container or overpack, the outside container or overpack must be labeled as required for each class of hazardous material contained therein.

§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 when —

(1) The label otherwise conforms to the provisions of this subpart, and

(2) The hazard class or, for Division 5.1 or 5.2 the division number, is displayed in the lower corner of the label, if the label corresponds to the primary hazard class of the hazardous material.

(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.

§172.406 Placement of labels.

(a) *General.*

(1) Except as provided in paragraphs (b) and (e) of this section, each label required by this subpart must —

(i) Be printed on or affixed to a surface (other than the bottom) of the package or containment device containing the hazardous material; and

(ii) Be located on the same surface of the package and near the proper shipping name marking, if the package dimensions are adequate.

(2) Except as provided in paragraph (e) of this section, duplicate labeling is not required on a package or containment device (such as to satisfy redundant labeling requirements).

(b) *Exceptions.* A label may be printed on or placed on a securely affixed tag, or may be affixed by other suitable means to:

(1) A package that contains no radioactive material and which has dimensions less than those of the required label;

(2) A cylinder; and

(3) A package which has such an irregular surface that a label cannot be satisfactorily affixed.

(c) *Placement of multiple labels.* When primary and subsidiary hazard labels are required, they must be displayed next to each other. Placement conforms to this requirement if labels are within 150 mm (6 inches) of one another.

(d) *Contrast with background.* Each label must be printed on or affixed to a background of contrasting color, or must have a dotted or solid line outer border.

(e) *Duplicate labeling.* Generally, only one of each different required label must be displayed on a package. However, duplicate labels must be displayed on at least two sides or two ends (other than the bottom) of —

(1) Each package or overpack having a volume of 1.8 m³ (64 cubic feet) or more-

(2) Each non-bulk package containing a radioactive material;

(3) Each DOT 106 or 110 multi-unit tank car tank. Labels must be displayed on each end;

(4) Each portable tank of less than 3,785 L (1000 gallons) capacity; and

(5) Each freight container or aircraft unit load device having a volume of 1.8³ (64 cubic feet) or more, but less than 18 m³ (640 cubic feet). One of each required label must be displayed on or near the closure.

(f) *Visibility.* A label must be clearly visible and may not be obscured by markings or attachments.

§172.407 Label specifications.

(a) *Durability.* Each label, whether printed on or affixed to a package, must be durable and weather resistant. A label on a package must be able to withstand, without deterioration or a substantial change in color, a 30-day exposure to conditions incident to transportation that reasonably could be expected to be encountered by the labeled package.

(b) *Design.*

(1) Except for size and color, the printing, inner border, and symbol on each label must be as shown in §§172.411 through 172.448 of this subpart, as appropriate.

(2) The dotted line border shown on each label is not part of the label specification, except when used as an alternative for the solid line outer border to meet the requirements of §172.406(d) of this subpart.

(c) *Size.*

(1) Each diamond (square-on-point) label prescribed in this subpart must be at least 100 mm (3.9 inches) on each side with each side having a solid line inner border 5.0 to 6.3 mm (0.2 to 0.25 inches) from the edge.

(2) The CARGO AIRCRAFT ONLY label must be a rectangle measuring at least 110 mm (4.3 inches) in height by 120 mm (4.7 inches) in width. The word “DANGER” must be shown in letters measuring at least 12.7 mm (0.5 inches) in height.

(3) Except as otherwise provided in this subpart, the hazard class number, or division number, as appropriate, must be at least 6.3 mm (0.25 inches) and not greater than 12.7 mm (0.5 inches).

(4) When text indicating a hazard is displayed on a label, the label name must be shown in letters measuring at least 7.6 mm (0.3 inches) in height except that —

(i) For a SPONTANEOUSLY COMBUSTIBLE or DANGEROUS WHEN WET label, respectively, the words “Spontaneously” and “When Wet” must be shown in letters measuring at least 5.1 mm (0.2 inches) in height.

(ii) For a KEEP AWAY FROM FOOD label, the word “HARMFUL” must be shown in letters measuring at least 7.6 mm (0.3 inches) in height.

(5) The symbol on each label must be proportionate in size to that shown in the appropriate section of this subpart.

(d) *Color.*

(1) The background color on each label must be as prescribed in §§172.411 through 172.448 of this subpart, as appropriate.

(2) The symbol, text, numbers, and border must be shown in black on a label except that —

(i) White may be used on a label with a one color background of green, red or blue; and

(ii) White must be used for the text and class number for the CORROSIVE label.

(3) Black and any color on a label must be able to withstand, without substantial change, a 72-hour fadeometer test (for a description of equipment designed for this purpose, see ASTM G 23-69 (1975) or ASTM G 26-70).

(4) (i) A color on a label, upon visual examination, must fall within the color tolerances —

(A) Displayed on color charts conforming to the technical specifications for charts set forth in Table 1 or 2 in appendix A to this part; or

(B) For labels printed on packaging surfaces, specified in Table 3 in appendix A to this part.

(ii) Color charts conforming to appendix A to this part are on display in Room 8421, Nassif Building, 400 Seventh St. S.W., Washington, DC 20590-0001.

(5) The specified label color must extend to the edge of the label in the area designated on each label except the CORROSIVE, RADIOACTIVE YELLOW-II AND RADIOACTIVE YELLOW-III labels on which the color must extend only to the inner border.

(e) *Form identification.* A label may contain form identification information, including the name of its maker, provided that information is printed outside the solid line inner border in no larger than 10-point type.

(f) *Exceptions.* A label conforming to specifications in the UN Recommendations may be used in place of a corresponding label which conforms to the requirements of this subpart.

(g) *Trefoil symbol.* The trefoil symbol on the RADIOACTIVE WHITE-I, RADIOACTIVE YELLOW-II, and RADIOACTIVE YELLOW-III labels must meet the appropriate specifications in Appendix B of this part.

§172.411 EXPLOSIVE 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 labels, and EXPLOSIVE Subsidiary label.

(a) Except for size and color, the EXPLOSIVE 1.1, EXPLOSIVE 1.2 and EXPLOSIVE 1.3 labels must be as follows:



(b) In addition to complying with §172.407, the background color on the EXPLOSIVE 1.1, EXPLOSIVE 1.2 and EXPLOSIVE 1.3 labels must be orange. The “**” shall be replaced with the appropriate division number and compatibility group. The compatibility group letter must be the same size as the division number and must be shown as a capitalized Roman letter.

(c) Except for size and color, the EXPLOSIVE 1.4, EXPLOSIVE 1.5, EXPLOSIVE 1.6 labels, and EXPLOSIVE Subsidiary label must be as follows:

EXPLOSIVE 1.4:



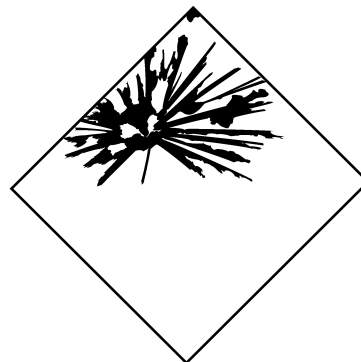
EXPLOSIVE 1.5:



EXPLOSIVE 1.6:



EXPLOSIVE Subsidiary label:



(d) In addition to complying with §172.407, the background color on the EXPLOSIVE 1.4, EXPLOSIVE 1.5, EXPLOSIVE 1.6, and EXPLOSIVE Subsidiary label must be orange. Except for the EXPLOSIVE subsidiary label,

the “*” shall be replaced with the appropriate compatibility group. The compatibility group letter must be shown as a capitalized Roman letter. Except for the EXPLOSIVE subsidiary label, division numerals must measure at least 30 mm (1.2 inches) in height and at least 5 mm (0.2 inches) in width.

§172.415 NON-FLAMMABLE GAS Label.

(a) Except for size and color, the NON-FLAMMABLE GAS label must be as follows:



(b) In addition to complying with §172.407, the background color on the NON-FLAMMABLE GAS label must be green.

§172.416 POISON GAS label.

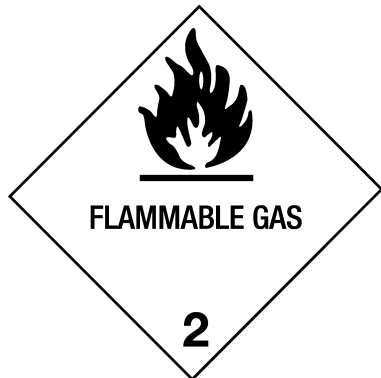
(a) Except for size and color, the POISON GAS label must be as follows:



(b) In addition to complying with §172.407, the background on the POISON GAS label and the symbol must be white. The background of the upper diamond must be black and the lower point of the upper diamond must be 14 mm (0.54 inches) above the horizontal center line.

§172.417 FLAMMABLE GAS label.

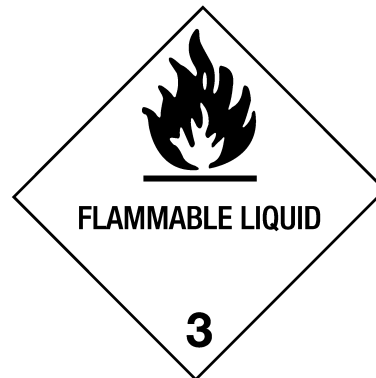
(a) Except for size and color, the FLAMMABLE GAS label must be as follows:



(b) In addition to complying with §172.407, the background color on the FLAMMABLE GAS label must be red.

§172.419 FLAMMABLE LIQUID label.

(a) Except for size and color the FLAMMABLE LIQUID label must be as follows:



(b) In addition to complying with §172.407, the background color on the FLAMMABLE LIQUID label must be red.

§172.420 FLAMMABLE SOLID label.

(a) Except for size and color, the FLAMMABLE SOLID label must be as follows:



(b) In addition to complying with §172.407, the background on the FLAMMABLE SOLID label must be white with vertical red stripes equally spaced on each side of a red stripe placed in the center of the label. The red vertical stripes must be spaced so that, visually, they appear equal in width to the white spaces between them. The symbol (flame) and text (when used) must be overprinted. The text “FLAMMABLE SOLID” may be placed in a white rectangle.

§172.422 SPONTANEOUSLY COMBUSTIBLE label.

(a) Except for size and color, the SPONTANEOUSLY COMBUSTIBLE label must be as follows:



(b) In addition to complying with §172.407, the background color on the lower half of the SPONTANEOUSLY COMBUSTIBLE label must be red and the upper half must be white.

§172.423 DANGEROUS WHEN WET label.

(a) Except for size and color, the DANGEROUS WHEN WET label must be as follows:



(b) In addition to complying with §172.407, the background color on the DANGEROUS WHEN WET label must be blue.

§172.426 OXIDIZER label.

(a) Except for size and color, the OXIDIZER label must be as follows:



(b) In addition to complying with §172.407, the background color on the OXIDIZER label must be yellow.

§172.427 ORGANIC PEROXIDE label.

(a) Except for size and color, the ORGANIC PEROXIDE label must be as follows:



(b) In addition to complying with §172.407, the background color on the ORGANIC PEROXIDE label must be yellow.

§172.429 POISON INHALATION HAZARD label.

(a) Except for size and color, the POISON INHALATION HAZARD label must be as follows:



(b) In addition to complying with §172.407, the background on the POISON INHALATION HAZARD label and the symbol must be white. The background of the upper diamond must be black and the lower point of the upper diamond must be 14 mm (0.54 inches) above the horizontal center line.

§172.430 POISON label.

(a) Except for size and color, the POISON label must be as follows:



(b) In addition to complying with §172.407, the background on the POISON label must be white. The word "TOXIC" may be used in lieu of the word "POISON".

§172.431 KEEP AWAY FROM FOOD label.

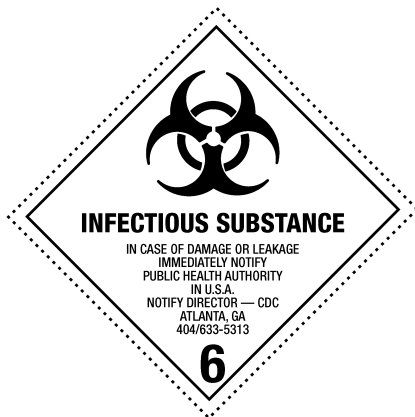
(a) Except for size and color, the KEEP AWAY FROM FOOD label must be as follows:



(b) In addition to complying with §172.407, the background on the KEEP AWAY FROM FOOD label must be white.

§172.432 INFECTIOUS SUBSTANCE label.

(a) Except for size and color, the INFECTIOUS SUBSTANCE label must be as follows:



(b) In addition to complying with §172.407, the background on the INFECTIOUS SUBSTANCE label must be white.

§172.436 RADIOACTIVE WHITE-I label.

(a) Except for size and color, the RADIOACTIVE WHITE-I label must be as follows:



(b) In addition to complying with §172.407, the background on the RADIOACTIVE WHITE-I label must be white. The printing and symbol must be black, except for the "I" which must be red.

§172.438 RADIOACTIVE YELLOW-II label.

(a) Except for size and color, the RADIOACTIVE YELLOW-II must be as follows:



(b) In addition to complying with §172.407, the background color on the RADIOACTIVE YELLOW-II label must be yellow in the top half and white in the lower half. The printing and symbol must be black, except for the "II" which must be red.

§172.440 RADIOACTIVE YELLOW-III label.

(a) Except for size and color, the RADIOACTIVE YELLOW-III label must be as follows:



(b) In addition to complying with §172.407, the background color on the RADIOACTIVE YELLOW-III label must be yellow in the top half and white in the lower half. The printing and symbol must be black, except for the "III" which must be red.

§172.442 CORROSIVE label.

(a) Except for size and color, the CORROSIVE label must be as follows:

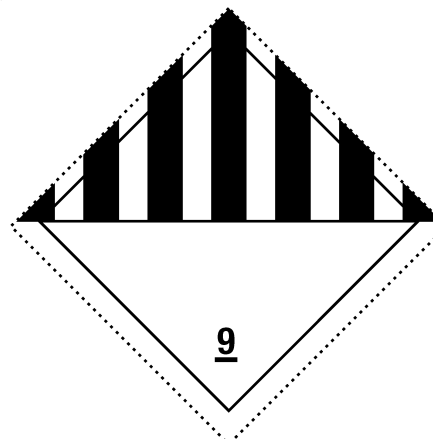


(b) In addition to complying with §172.407, the background on the CORROSIVE label must be white in the top half and black in the lower half.

§172.444 [Reserved]

§172.446 CLASS 9 label.

(a) Except for size and color, the "CLASS 9" (miscellaneous hazardous materials) label must be as follows:



(b) In addition to complying with §172.407, the background on the CLASS 9 label must be white with seven black vertical stripes on the top half. The black vertical stripes must be spaced, so that, visually, they appear equal in width to the six white spaces between them. The lower half of the label must be white with the class number “9” underlined and centered at the bottom.

§172.448 CARGO AIRCRAFT ONLY label.

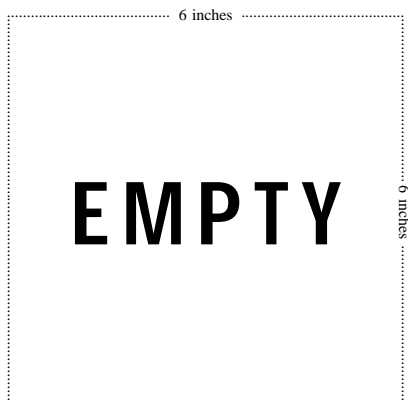
(a) Except for size and color, the CARGO AIRCRAFT ONLY label must be as follows:



(b) The CARGO AIRCRAFT ONLY label must be black on an orange background.

§172.450 EMPTY label.

(a) Each EMPTY label, except for size, must be as follows:



- (1) Each side must be at least 6 inches (152 mm) with each letter at least 1 inch (25.4 mm) in height.
- (2) The label must be white with black printing.

Subpart F — Placarding

§172.500 Applicability of placarding requirements.

(a) Each person who offers for transportation or transports any hazardous material subject to this subchapter shall comply with the applicable placarding requirements of this subpart.

(b) This subpart does not apply to —

- (1) Infectious substances;
- (2) Hazardous materials classed as ORM-D;
- (3) Hazardous materials authorized by this subchapter to be offered for transportation as Limited Quantities when identified as such on shipping papers in accordance with §172.203(b);
- (4) Hazardous materials prepared in accordance with §173.13 of this subchapter;
- (5) Hazardous materials which are packaged as small quantities under the provisions of §173.4 of this subchapter; and
- (6) Combustible liquids in non-bulk packagings.

§172.502 Prohibited and permissive placarding.

(a) *Prohibited placarding.* Except as provided in paragraph (b) of this section, no person may affix or display on a packaging, freight container, unit load device, motor vehicle or rail car —

(1) Any placard described in this subpart unless —

- (i) The material being offered or transported is a hazardous material;
 - (ii) The placard represents a hazard of the hazardous material being offered or transported; and
 - (iii) Any placarding conforms to the requirements of this subpart.
- (2) Any sign, advertisement, slogan (such as “Drive Safely”), or device that, by its color, design, shape or content, could be confused with any placard prescribed in this subpart.

(b) *Exceptions.*

(1) The restrictions in paragraph (a) of this section do not apply to a bulk packaging, freight container, unit load device, transport vehicle or rail car which is placarded in conformance with the TDG Regulations, the IMDG Code or the UN Recommendations.

(2) The restrictions of paragraph (a) of this section do not apply to the display of an identification number on a white square-on-point configuration in accordance with §172.336(b) of this part.

(3) The restrictions in paragraph (a)(2) of this section do not apply until October 1, 2001 to a safety sign or safety slogan (e.g., “Drive Safely” or “Drive Carefully”), which was permanently marked on a transport vehicle, bulk packaging, or freight container on or before August 21, 1997.

(c) *Permissive placarding.* Placards may be displayed for a hazardous material, even when not required, if the placarding otherwise conforms to the requirements of this subpart.

§172.503 Identification number display on placards.

For procedures and limitations pertaining to the display of identification numbers on placards, see §172.334.

§172.504 General placarding requirements.

(a) *General.* Except as otherwise provided in this subchapter, each bulk packaging, freight container, unit load device, transport vehicle or rail car containing any quantity of a hazardous material must be placarded on each side and each end with the type of placards specified in Tables 1 and 2 of this section and in accordance with other placarding requirements of this subpart, including the specifications for the placards named in the tables and described in detail in §§172.519 through 172.558.

(b) *DANGEROUS placard.* A freight container, unit load device, transport vehicle, or rail car which contains non-bulk packages with two or more categories of hazardous materials that require different placards specified in Table 2 of paragraph (e) of this section may be placarded with a DANGEROUS placard instead of the separate placarding specified for each of the materials in Table 2 of paragraph (e) of this section. However, when 1,000 kg (2,205 pounds) aggregate gross weight or more of one category of material is loaded therein at one loading facility on a freight container, unit load device, transport vehicle, or rail car, the placard specified in Table 2 of paragraph (e) of this section for that category must be applied.

(c) *Exception for less than 454 kg (1,001 pounds).* Except for bulk packagings and hazardous materials subject to §172.505, when hazardous materials covered by Table 2 of this section are transported by highway or rail, placards are not required on —

(1) A transport vehicle or freight container which contains less than 454 kg (1001 pounds) aggregate gross weight of hazardous materials covered by Table 2 of paragraph (e) of this section; or

(2) A rail car loaded with transport vehicles or freight containers, none of which is required to be placarded. The exceptions provided in paragraph (c) of this section do not prohibit the display of placards in the manner prescribed in this subpart, if not otherwise prohibited (see §172.502), on transport vehicles or freight containers which are not required to be placarded.

(d) *Exception for empty non-bulk packages.* A non-bulk packaging that contains only the residue of a hazardous material covered by Table 2 of paragraph (e) of this section need not be included in determining placarding requirements.

(e) *Placarding tables.* Placards are specified for hazardous materials in accordance with the following tables: