

(i) The tank car must be marked on each side and each end as required by §172.302 with the identification number specified for the material in the §172.101 table; and

(ii) A tank car containing any of the following materials must be marked on each side with the key words of the proper shipping name specified for the material in the §172.101 table, or with a common name authorized for the material in this subchapter (e.g., "Refrigerant Gas"):

Acrolein, stabilized  
 Ammonia, anhydrous, liquefied  
 Ammonia solutions (more than 50% ammonia)  
 Bromine *or* Bromine solutions  
 Bromine chloride  
 Chloroprene, stabilized  
 Dispersant gas *or* Refrigerant gas (as defined in §173.115 of this subchapter)  
 Division 2.1 materials  
 Division 2.2 materials (in Class DOT 107 tank cars only)  
 Division 2.3 materials  
 Formic acid  
 Hydrocyanic acid, aqueous solutions  
 Hydrofluoric acid, solution  
 Hydrogen cyanide, stabilized (less than 3% water)  
 Hydrogen fluoride, anhydrous  
 Hydrogen peroxide, aqueous solutions (greater than 20% hydrogen peroxide)  
 Hydrogen peroxide, stabilized  
 Hydrogen peroxide and peroxyacetic acid mixtures  
 Nitric acid (other than red fuming)  
 Phosphorus, amorphous  
 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  
 Phosphorus white, molten  
 Potassium nitrate and sodium nitrate mixtures  
 Potassium permanganate  
 Sulfur trioxide, stabilized  
 Sulfur trioxide, uninhibited

(2) In a multi-unit tank car tank, unless the tank is marked on two opposing sides, in letters and numerals no less than 50 mm (2.0 inches) high—

(i) With the proper shipping name specified for the material in the §172.101 table or with a common name authorized for the material in this subchapter (e.g., "Refrigerant Gas"); and

(ii) With the identification number specified for the material in the §172.101 table, unless marked in accord-

ance with §§172.302(a) and 172.332 of this subpart.

(b) A motor vehicle or rail car used to transport a multi-unit tank car tank containing a hazardous material must be marked on each side and each end, as required by §172.332, with the identification number specified for the material in the §172.101 table.

(c) After September 30, 2006, no person may offer for transportation or transport a tank car or multi-unit tank car tank containing liquefied petroleum gas (LPG) that is unodorized unless it is legibly marked NON-ODORIZED or NOT ODORIZED on two opposing sides near the marked proper shipping name required by paragraphs (a)(1) and (a)(2) of this section, or near the placards. The NON-ODORIZED or NOT ODORIZED marking may appear on a tank car or multi-unit tank car tank used for both unodorized and odorized LPG.

[Amdt. 172-123, 55 FR 52593, Dec. 21, 1990, as amended at 56 FR 66255, Dec. 20, 1991; 57 FR 45458, Oct. 1, 1992; Amdt. 172-148, 61 FR 28676, June 5, 1996; Amdt. 172-148, 61 FR 50254, Sept. 25, 1996; 66 FR 33425, June 21, 2001; 69 FR 64471, Nov. 4, 2004]

**§ 172.331 Bulk packagings other than portable tanks, cargo tanks, tank cars and multi-unit tank car tanks.**

(a) Each person who offers a hazardous material to a motor carrier for transportation in a bulk packaging shall provide the motor carrier with the required identification numbers on placards or plain white square-on-point display configurations, as authorized, or shall affix orange panels containing the required identification numbers to the packaging prior to or at the time the material is offered for transportation, unless the packaging is already marked with the identification number as required by this subchapter.

(b) Each person who offers a bulk packaging containing a hazardous material for transportation shall affix to the packaging the required identification numbers on orange panels, square-on-point configurations or placards, as appropriate, prior to, or at the time the packaging is offered for transportation unless it is already marked with identification numbers as required by this subchapter.

(c) For a bulk packaging contained in or on a transport vehicle or freight container, if the identification number marking on the bulk packaging (e.g., an IBC) required by §172.302(a) is not visible, the transport vehicle or freight container must be marked as required by §172.332 on each side and each end with the identification number specified for the material in the §172.101 table.

[Amdt. 172–123, 55 FR 52593, Dec. 21, 1994, as amended by Amdt. 172–151, 62 FR 1228, Jan. 8, 1997; 62 FR 39398, July 22, 1997]

**§ 172.332 Identification number markings.**

(a) *General.* When required by §172.301, §172.302, §172.313, §172.326, §172.328, §172.330, or §172.331, identification number markings must be displayed on orange panels or placards as specified in this section, or on white square-on-point configurations as prescribed in §172.336(b).

(b) *Orange panels.* Display of an identification number on an orange panel shall be in conformance with the following:

(1) The orange panel must be 160 mm (6.3 inches) high by 400 mm (15.7 inches) wide with a 15 mm (0.6 inches) black outer border. The identification number shall be displayed in 100 mm (3.9 inches) black Helvetica Medium numerals on the orange panel. Measurements may vary from those specified plus or minus 5 mm (0.2 inches).

(2) The orange panel may be made of any durable material prescribed for placards in §172.519, and shall be of the orange color specified for labels or placards in appendix A to this part.

(3) The name and hazard class of a material may be shown in the upper left border of the orange panel in letters not more than 18 points (0.25 in.) high.

(4) Except for size and color, the orange panel and identification numbers shall be as illustrated for Liquefied petroleum gas:



(c) *Placards.* Display of an identification number on a hazard warning placard shall be in conformance with the following:

(1) The identification number shall be displayed across the center area of the placard in 88 mm (3.5 inches) black Alpine Gothic or Alternate Gothic No. 3 numerals on a white background 100 mm (3.9 inches) high and approximately 215 mm (8.5 inches) wide and may be outlined with a solid or dotted line border.

(2) The top of the 100 mm (3.9 inches) high white background shall be approximately 40 mm (1.6 inches) above the placard horizontal center line.

(3) An identification number may be displayed only on a placard corresponding to the primary hazard class of the hazardous material.

(4) For a COMBUSTIBLE placard used to display an identification number, the entire background below the white background for the identification number must be white during transportation by rail and may be white during transportation by highway.

(5) The name of the hazardous material and the hazard class may be shown in letters not more than 18 points high immediately within the upper border of the space on the placard bearing the identification number of the material.

(6) If an identification number is placed over the word(s) on a placard, the word(s) should be substantially covered to maximize the effectiveness of the identification number.

(d) Except for size and color, the display of an identification number on a placard shall be as illustrated for Acetone: