







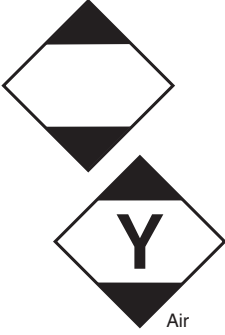

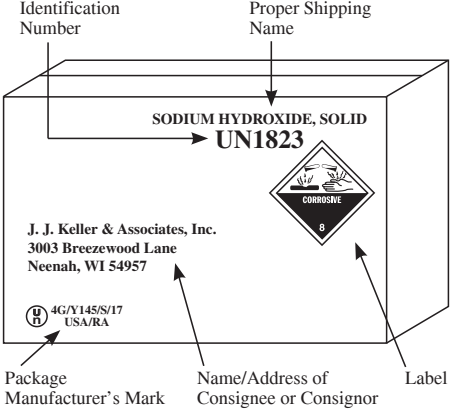
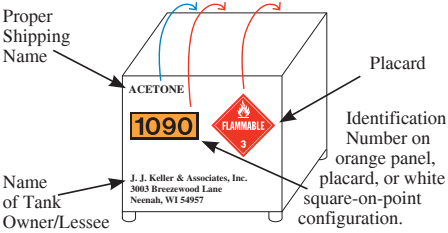
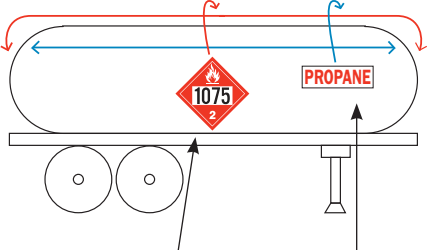


HAZARDOUS MATERIALS MARKING CHART

 <p>ORIENTATION ARROWS Each non-bulk combination package having inner packagings containing liquid hazardous materials, or single packaging fitted with vents, or open cryogenic receptacles must be marked on two opposing sides with this marking.</p>	<div style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold; color: blue; font-size: 1.2em;">OVERPACK</div> <p>OVERPACK An overpack containing authorized packages must display this marking, unless the specification markings on the inside packages are visible.</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Stacking Allowed</p> </div> <div style="text-align: center;">  <p>No Stacking</p> </div> </div> <p>STACKING IBCs and Large Packagings must be marked with the appropriate stacking marking. If stacking is allowed, the marking will include the maximum stacking load in kilograms.</p>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>THIS PACKAGE CONFORMS TO 49 CFR 173.4 FOR DOMESTIC HIGHWAY OR RAIL TRANSPORT ONLY</p> </div> <p>SMALL QUANTITIES By placing this marking on a package the shipper certifies conformance with the requirements in §173.4 for small quantities when transported domestically by highway or rail.</p>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>DOT-SP 01234</p> <p>SPECIAL PERMIT A package authorized by a special permit must be marked "DOT-SP" followed by the special permit number.</p> </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;">  <p>keep away from heat</p> </div> <p>KEEP AWAY FROM HEAT Each package containing self-reactive substances of Division 4.1 or organic peroxides of Division 5.2 must be marked with this marking for transportation by aircraft.</p>
<div style="border: 2px dashed red; padding: 5px; text-align: center;">  </div> <p>EXCEPTED QUANTITIES Excepted quantities of hazardous materials transported by aircraft and vessel must be marked with this marking. The "*" must be replaced with the hazard class or division of each hazardous material in the package. The "**" must be replaced with the name of the shipper or consignee if not shown elsewhere on the package.</p>	 <p>HAZARDOUS WASTE This marking can be used to meet DOT and EPA marking requirements. Proper shipping names on non-bulk packages are not required to include the word "waste" if this marking is displayed in accordance with 40 CFR 262.32.</p>	<div style="border: 1px solid green; padding: 5px; text-align: center; font-weight: bold; color: green; font-size: 1.2em;">INHALATION HAZARD</div> <p>INHALATION HAZARD Each package containing material that is poisonous by inhalation must be marked "Inhalation Hazard" in association with the required labels or placards, as appropriate, or shipping name when required. Bulk packages must be marked on two opposing sides. This marking is not required if the words "Inhalation Hazard" appear on a label or placard.</p>	 <p>BIOHAZARD A bulk packaging containing a regulated medical waste must be marked with the BIOHAZARD marking, visible from the direction it faces:</p> <ul style="list-style-type: none"> • on two opposing sides or ends if the packaging has a capacity of less than 1,000 gallons (3,785 L), or • on each end and each side if the packaging has a capacity of 1,000 gallons (3,785 L) or more. <p>If the BIOHAZARD markings on a bulk packaging are not visible, the vehicle or freight container containing the bulk packaging must be marked on each side and each end with the BIOHAZARD marking.</p>	<div style="border: 2px dashed red; padding: 5px; text-align: center;">  <p>UN Number Here Telephone Number Here</p> </div> <p>LITHIUM BATTERY This marking must contain the UN number(s) for the lithium proper shipping name(s) and a telephone number for additional information.</p>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>DANGER</p> <p>THIS UNIT IS UNDER FUMIGATION APPLIED ON _____</p> <p>DO NOT ENTER</p> </div> <p>FUMIGANT No person may offer for transport or transport a rail car, freight container, truck body, or trailer that has been or is being fumigated, unless this marking is prominently displayed so it can be seen by any person attempting to enter the transport vehicle or freight container. For domestic transport an EPA warning label (40 CFR Part 156) may be used as an alternative to this marking.</p>
<div style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold; font-size: 1.2em;">HOT</div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold; font-size: 1.2em;">HOT</div> <div style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold; font-size: 0.8em;">HOT 3257</div> </div> <p>ELEVATED TEMPERATURE MATERIAL Bulk packagings of elevated temperature material must be marked on two opposing sides with the word "HOT". The combining of the "HOT" marking and the identification number marking on the same white square-on-point configuration is allowed.</p>	 <p>LIMITED QUANTITY The appropriate marking must be applied to one side or one end of the package.</p>	<p>NON-ODORIZED or NOT ODOORIZED</p> <p>UNODORIZED LPG No person may offer or transport certain specification cylinders, a portable tank, cargo tank, or tank car containing liquefied petroleum gas (LPG) that is unodorized unless one of the above markings appears near the proper shipping name or placards. This marking must appear on two opposing sides on portable tanks, cargo tanks, and tank cars.</p>	 <p>MARINE POLLUTANT Non-bulk packagings which contain marine pollutants that are offered for transportation or transported by vessel must be marked with this marking in association with required labels or proper shipping name. Bulk packagings which contain marine pollutants must be marked on each side and each end with this marking. Except for transportation by vessel, a bulk packaging that bears a label or placard is not required to display this marking.</p>	<div style="text-align: center; font-weight: bold; font-size: 1.5em;">10-17</div> <div style="text-align: center; font-weight: bold; font-size: 1.2em;">V I P L K T</div> <div style="text-align: center; font-weight: bold; font-size: 1.2em;">K-EPA27</div> <p>CARGO TANK TEST/INSPECTION Each cargo tank successfully completing a test/inspection must be marked with the date (month and year) and the type of test/inspection completed. The test/inspection may be abbreviated as follows: V = external visual L = lining I = internal visual K = leakage P = pressure T = thickness K-EPA27 = Method 27</p>	<div style="border: 2px solid orange; padding: 5px; text-align: center; font-weight: bold; font-size: 1.5em; color: orange;">1951</div> <div style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold; font-size: 1.2em;">1824 8</div> <div style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold; font-size: 1.2em;">3082</div> <p>IDENTIFICATION NUMBER DISPLAY When allowed by the regulations, the identification number can be displayed on a placard, orange panel, or white square-on-point configuration.</p>
<p style="text-align: center; font-weight: bold; font-size: 1.2em;">NON-BULK PACKAGE</p>  <p>Diagram showing a box with markings: Identification Number (UN1823), Proper Shipping Name (SODIUM HYDROXIDE, SOLID), Name/Address of Consignee or Consignor (J. J. Keller & Associates, Inc., 3003 Breezewood Lane, Neenah, WI 54957), Label (CORROSIVE 8), and Package Manufacturer's Mark (4G/Y145/S/17 USA/RA).</p>		<p style="text-align: center; font-weight: bold; font-size: 1.2em;">BULK PACKAGE</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p style="text-align: center; font-weight: bold; font-size: 1.1em;">PORTABLE TANK <1,000 gallons capacity</p>  <p>Diagram showing a tank with markings: Proper Shipping Name (ACETONE), Name of Tank Owner/Lessee (J. J. Keller & Associates, Inc., 3003 Breezewood Lane, Neenah, WI 54957), Placard (FLAMMABLE 3), and Identification Number on orange panel (UN1090).</p> <p>If labeled, instead of placarded on two sides, UN1090 may be displayed once in characters at least 0.47 inches (12 mm) high. Tanks with ≥1,000 gallons capacity must have identification numbers displayed on all 4 sides.</p> </div> <div style="width: 48%;"> <p style="text-align: center; font-weight: bold; font-size: 1.1em;">CARGO TANK</p>  <p>Diagram showing a tank with markings: Identification number on placard (UN1075), and Common name or proper shipping name (PROPANE).</p> <p>Identification number on placard, orange panel, or white square-on-point configuration. Display on all 4 sides. Common name or proper shipping name for Class 2 materials. Display on all 4 sides.</p> </div> </div>			

HAZARDOUS MATERIALS MARKING CHART

§172.300 Applicability.

(a) Each person who offers a hazardous material for transportation shall mark each package, freight container, and transport vehicle containing the hazardous material in the manner required by this subpart.

(b) When assigned the function by this subpart, each carrier that transports a hazardous material shall mark each package, freight container, and transport vehicle containing the hazardous material in the manner required by this subpart.

(c) Unless otherwise provided in a specific rule, stocks of preprinted packagings marked in accordance with this subpart prior to the effective date of a final rule may be continued in use, in the manner previously authorized, until depleted or for a one-year period subsequent to the compliance date of the marking amendment, whichever is less.

§172.301 General marking requirements for non-bulk packagings.

(a) *Proper shipping name and identification number.* (1) Except as otherwise provided by this subchapter, each person who offers a hazardous material for transportation in a non-bulk packaging must mark the package with the proper shipping name and identification number (preceded by "UN", "NA" or "ID," as appropriate) for the material as shown in the §172.101 Hazardous Materials Table. The identification number marking preceded by "UN", "NA", or "ID" as appropriate must be marked in characters at least 12 mm (0.47 inches) high. Packages with a maximum capacity of 30 liters (8 gallons) or less, 30 kg (66 pounds) maximum net mass, or cylinders with a water capacity of 60 liters (16 gallons) or less must be marked with characters at least 6 mm (0.24 inches) high. Packages with a maximum capacity of 5 liters (1.32 gallons) or 5 kg (11 pounds) or less must be marked in a size appropriate for the size of the package.

(i) *Transitional exception.* For domestic transportation, until January 1, 2017, the identification number markings are not subject to the minimum size requirements specified in paragraph (a)(1).

(ii) Exception for permanently marked packagings. For domestic transportation, a packaging manufactured prior to January 1, 2017 and permanently marked (e.g., by embossing or through a heat stamp process) with the appropriate identification number marking may continue in service until the end of its useful life regardless of whether the identification number markings meet the minimum size requirements specified in this paragraph (a)(1).

(2) The proper shipping name for a hazardous waste (as defined in §171.8 of this subchapter) is not required to include the word "waste" if the package bears the EPA marking prescribed by 40 CFR 262.32.

(3) *Large quantities of a single hazardous material in non-bulk packages.* A transport vehicle or freight container containing only a single hazardous material in non-bulk packages must be marked, on each side and each end as specified in §172.332 or §172.336, with the identification number specified for the hazardous material in the §172.101 Table, subject to the following provisions and limitations:

(i) Each package is marked with the same proper shipping name and identification number;

(ii) The aggregate gross weight of the hazardous material is 4,000 kg (8,820 pounds) or more;

(iii) All of the hazardous material is loaded at one loading facility;

(iv) The transport vehicle or freight container contains no other material, hazardous or otherwise; and

(v) The identification number marking requirement of this paragraph (a)(3) does not apply to Class 1, Class 7, or to non-bulk packagings for which identification numbers are not required.

(b) *Technical names.* In addition to the marking required by paragraph (a) of this section, each non-bulk packaging containing a hazardous material subject to the provisions of §172.203(k) of this part, except for a Division 6.2 material, must be marked with the technical name in parentheses in association with the proper shipping name in accordance with the requirements and exceptions specified for display of technical descriptions on shipping papers in §172.203(k) of this part. A technical name should not be marked on the outer package of a Division 6.2 material.

(c) *Special permit packagings.* Except as provided in §173.23 of this subchapter, the outside of each package authorized by a special permit must be plainly and durably marked "DOT-SP" followed by the special permit number assigned. Packages authorized by an exemption issued prior to October 1, 2007, may be plainly and durably marked "DOT-E" in lieu of "DOT-SP" followed by the number assigned as specified in the most recent version of that exemption.

(d) *Consignee's or consignor's name and address.* Each person who offers for transportation a hazardous material in a non-bulk package shall mark that package with the name and address of the consignor or consignee except when the package is—

(1) Transported by highway only and will not be transferred from one motor carrier to another; or

(2) Part of a carload lot, truckload lot or freight container load, and the entire contents of the rail car, truck or freight container are shipped from one consignor to one consignee.

(e) *Previously marked packagings.* A package which has been previously marked as required for the material it contains and on which the marking remains legible, need not be remarked. (For empty packagings, see §173.29 of this subchapter.)

(f) *NON-ODORIZED marking on cylinders containing LPG.* No person may offer for transportation or transport a specification cylinder, except a Specification 2P or 2Q container or a Specification 39 cylinder, that contains an unodorized Liquefied petroleum gas (LPG) unless it is legibly marked NON-ODORIZED or NOT ODORIZED in letters not less than 6.3 mm (0.25 inches) in height near the marked proper shipping name required by paragraph (a) of this section.

§172.302 General marking requirements for bulk packagings.

(a) *Identification numbers.* Except as otherwise provided in this subpart, no person may offer for transportation or transport a hazardous material in a bulk packaging unless the packaging is marked as required by §172.332 with the identification number specified for the material in the §172.101 Table—

(1) On each side and each end, if the packaging has a capacity of 3,785 L (1,000 gallons) or more;

(2) On two opposing sides, if the packaging has a capacity of less than 3,785 L (1,000 gallons); or

(3) For cylinders permanently installed on a tube trailer motor vehicle, on each side and each end of the motor vehicle.

(b) *Size of markings.* Except as otherwise provided, markings required by this subpart on bulk packagings must—

(1) Have a width of at least 6.0 mm (0.24 inch) and a height of at least 100 mm (3.9 inches) for rail cars;

(2) Have a width of at least 4.0 mm (0.16 inch) and a height of at least 12 mm (0.47 inch) for portable tanks with capacities of less than 3,785 L (1,000 gallons) and a width of at least 4.0 mm (0.16 inch) and a height of 25 mm (one inch) for IBCs; and

(3) Have a width of at least 6.0 mm (0.24 inch) and a height of at least 50 mm (2.0 inches) for cargo tanks and other bulk packagings.

(c) *Special permit packagings.* Except as provided in §173.23 of this subchapter, the outside of each package used under the terms of a special permit must be plainly and durably marked "DOT-SP" followed by the special permit number assigned. Packages authorized by an exemption issued prior to October 1, 2007 may be plainly and durably marked "DOT-E" in lieu of "DOT-SP" followed by the number assigned as specified in the most recent version of that exemption.

(d) Each bulk packaging marked with a proper shipping name, common name or identification number as required by this subpart must remain marked when it is emptied unless it is—

(1) Sufficiently cleaned of residue and purged of vapors to remove any potential hazard; or

(2) Refilled, with a material requiring different markings or no markings, to such an extent that any residue remaining in the packaging is no longer hazardous.

(e) Additional requirements for marking portable tanks, cargo tanks, tank cars, multi-unit tank car tanks, and other bulk packagings are prescribed in §§172.326, 172.328, 172.330, and 172.331, respectively, of this subpart.

(f) A bulk packaging marked prior to October 1, 1991, in conformance to the regulations of this subchapter in effect on September 30, 1991, need not be remarked if the key words of the proper shipping name are identical to those currently specified in the §172.101 Table. For example, a tank car marked "NITRIC OXIDE" need not be remarked "NITRIC OXIDE, COMPRESSED".

(g) A rail car, freight container, truck body or trailer in which the lading has been fumigated with any hazardous material, or is undergoing fumigation, must be marked as specified in §173.9 of this subchapter.

§172.303 Prohibited markings.

(a) No person may offer for transportation or transport a package which is marked with the proper shipping name, the identification number of a hazardous material or any other markings indicating that the material is hazardous (e.g., RQ, INHALATION HAZARD) unless the package contains the identified hazardous material or its residue.

(b) This section does not apply to—

(1) Transportation of a package in a transport vehicle or freight container if the package is not visible during transportation and is loaded by the shipper and unloaded by the shipper or consignee.

(2) Markings on a package which are securely covered in transportation.

(3) The marking of a shipping name on a package when the name describes a material not regulated under this subchapter.

§172.304 Marking requirements.

(a) The marking required in this subpart—

(1) Must be durable, in English and printed on or affixed to the surface of a package or on a label, tag, or sign;

(2) Must be displayed on a background of sharply contrasting color;

(3) Must be unobscured by labels or attachments; and

(4) Must be located away from any other marking (such as advertising) that could substantially reduce its effectiveness.