

Container Marking and Labeling for LP-Gas Shipments

Description:

U.S. DOT regulations state that no person may offer for transportation or transport a hazardous material unless the packaging [container and over-package, if applicable] is marked with the identification number specified for the material in the hazardous material table in 49 CFR § 172.101. Other specific marking requirements apply to the type of container or packaging used.

Regulatory Reference

49 CFR § 171.8	Definitions and abbreviations
49 CFR § 172.101	Purpose and use of hazardous materials table
49 CFR § 172.301	General marking requirements for non-bulk packaging
49 CFR § 172.302	General marking requirements for bulk packaging
49 CFR § 172.303	Prohibited marking
49 CFR § 172.304	Marking requirements
49 CFR § 172.326	Portable tanks
49 CFR § 172.328	Cargo tanks
49 CFR § 172.330	Tank cars and multi-unit tank car tanks
49 CFR § 173.332	Identification number markings
49 CFR § 172.400	General labeling requirements
49 CFR § 172.400a	Exceptions from labeling
49 CFR § 172.401	Prohibited labeling
49 CFR § 172.402	Additional labeling requirements
49 CFR § 172.406	Placement of labels
49 CFR § 172.407	Label specifications
49 CFR § 172.417	FLAMMABLE GAS label

Applies to:

The regulations apply to shipments of LP-gas and any other hazardous material or hazardous substance.

General Requirements:

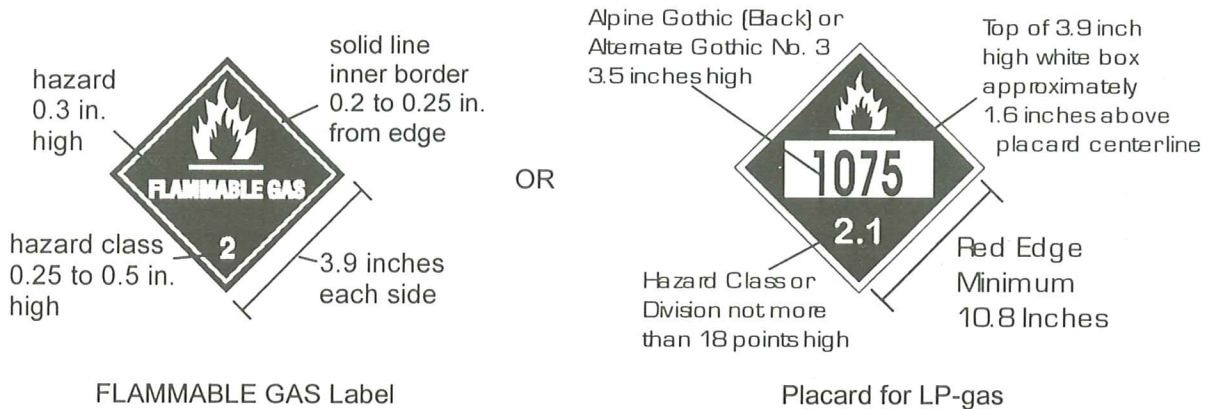
In the definitions given in 49 CFR § 171.8, "*Marking* means a descriptive name, identification number, instructions, cautions, weight, specification, or UN marks, or combination thereof, required by this subchapter on outer packaging of hazardous materials." Each person who offers a hazardous material for transportation or transports hazardous material is required to mark each package, freight container, and transport vehicle containing hazardous material as prescribed in U.S. DOT regulations

- (1) Markings for DOT Cylinders. 49 CFR § 172.400a allows the use of labels that conform to CGA Pamphlet C-7 standards on DOT specification cylinders. An illustration of a typical CGA LP-gas shipping label used on DOT cylinders is shown on the next page. Elements of the CGA label may be incorporated into what is commonly known in the propane industry as a "3-in-one" shipping label that combines consumer warning information and NFPA 704 hazard identification labeling, provided that adequate separation is provided between the CGA label elements and other warnings and information.



CGA Shipping Label for LP-gas

- (2) ASME tanks transported to and from stationary installations. ASME tanks that contain propane or other LP-gas must be marked with either FLAMMABLE GAS labels or placards during transportation, independent of placards that may be required for the vehicle.

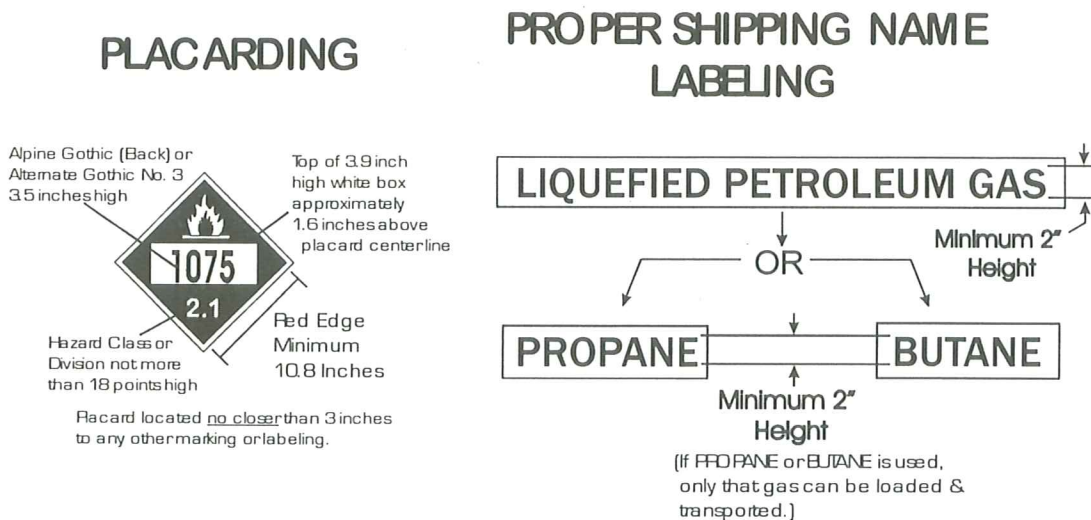


FLAMMABLE GAS Label

Placard for LP-gas

49 CFR § 172.302 requires the labels or placards to be placed on both sides and both ends of the tank if the tank has a water capacity of 1,000 gallons or more, and on two sides if the tank capacity is less than 1,000 gallons.

- (3) Cargo Tanks. Cargo tanks containing LP-gas require placarding that can be seen from the vehicle front, rear and each side. Proper shipping name labeling is on each side and each end required as well.



- (4) Railcars. Railcars containing LP-gas are be marked as shown for cargo tanks in (3) on the previous page, except that the proper shipping name is typically LIQUEFIED PETROLEUM GAS, and shipping name labeling on railcars must be at least 3.9 inches high.

Training Requirements:

Proper container labeling is a required element of function-specific training for hazmat employees.

Maintenance and Review

Documented periodic review of employee performance of container labeling functions along with recurring safety meetings or refresher training are effective compliance measures. Observing employees at work, containers in shipment, and unloading operations on a systematic and documented basis are the best method to promote and assure compliance.