

# Hazardous Materials Bulletin

## LABELING REQUIREMENTS

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**Revised December 2005**

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The requirements for package labeling are found in 49 CFR, Part 172, Subpart E. Unless excepted, all packages must be labeled, or if permitted, placarded. Labels are based on Column 6 of the Hazardous Materials Table (§172.101). A package must be labeled for all of the hazards listed in Column 6 (§172.400).

### **Exceptions**

The following materials are excepted from labeling (§172.400a):

Most cylinders, if the CGA label is present*	LSA Radioactive Materials (see §172.427(a)(6))
Certain US Dept. of Defense shipments	Small quantities
Any placarded package	Limited quantities
A tube trailer of compressed gas cylinders	

\*May not be a poison, may not be in an overpack, and must be carried by a private or contract motor carrier.

### **Requirements, Prohibitions, and Placement**

The label must correspond to the hazard, and the hazardous material must be present in the package. There cannot be any other marking or symbol that may be confused with the label (§172.401). Text is optional on labels except for the Oxygen and Radioactive labels (§172.405).

Labels must be placed on the same surface and as near as possible to the required markings, but labels for cylinders and small packages may be affixed using a tag. Primary and subsidiary labels must be within 150 mm (6") of each other. Labels must be clearly visible and unobstructed (§172.406).

Only one label per package is required, except for the following packages, which require a label on two opposing sides or ends: (note: some packages can optionally placard instead of label (consult the regulations)).

Packages of 1.8 m <sup>3</sup> (64 cubic ft.) or more	Non-bulk packages of radioactive materials
DOT 106 or 110 tanks (one-ton cylinders)	Portable tanks of less than 3,785 L (1,000gal.)
Freight containers of 1.8 m <sup>3</sup> (640 cubic ft.) or more by volume	

### **Primary and Subsidiary Labels**

The primary label is the hazard class that is listed first in Column 6 of the Hazardous Materials Table. All other hazards listed, if any, are subsidiary labels. The primary hazard label **must** display the hazard class number in the bottom corner of the label. Subsidiary labels must show the hazard class **except**, a subsidiary label meeting the specifications of this section which were in effect on September 30, 2001, such as a label without the hazard class or division number displayed in the lower corner may continue to be used until October 1, 2005. See §172.402(b) for specifics. Section §172.402 also includes additional subsidiary label provisions for radioactive materials, explosives, non-flammable gases, and poison gases. Packages containing certain fissile materials must bear two FISSILE labels affixed to opposite sides of the package or overpack. See 49 CFR 172.402(d) for additional specifics.

### **Poison Inhalation Hazard (PIH) Label**

The Poison Gas label design has been changed to indicate "Inhalation Hazard" rather than poison gas (Division 2.3), and the skull and crossbones symbol has a black background (§172.416). A Poisonous Inhalation Hazard (PIH) label has been added to be used on liquid poisons (Division 6.1) that meet the Packing Group I, Inhalation Hazard, Zone A and B standards (§172.429). For a 6.1, PG III material, the poison label may have "PG III" in lieu of the text, or "PG III" may be marked near the poison label.

**The Empty Label**

The only authorized use for the Empty label is for packagings that previously contained radioactive materials, although it is occasionally improperly applied on drums that contained other hazardous materials. Section 173.428(d) provides for its use on radioactive packages that have not been cleaned or purged.

Since its only authorized use is for radioactive materials, using it on packages that contain or previously contained other hazardous materials is a violation of the communication standards (§173.22 requires the shipper to ensure a package is marked in accordance with the regulations).

Section 172.403 contains additional requirements for radioactive labels, including contents, activity, and transport index.

**Mixed and Consolidated Packagings**

When materials of different hazard classes are packed in the same overpack, consolidated package, or mixed packaging, the outside of the packaging must be labeled for each class of hazardous materials that it contains (§172.404).

**Empty Packages**

If a package normally may not bear a label indicating it contains a hazardous material when that hazardous material is not present. If a labeled package is unused or has been cleaned and purged, the labels do not have to be removed if the package is not visible during transportation, and it is loaded by the shipper and unloaded by the shipper or consignee (§172.401(d)).

Additional provisions for transporting empty non-bulk packages with labels and markings present can be found in §173.29.

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Michigan State Police Motor Carrier Division, [www.michigan.gov/motorcarrier](http://www.michigan.gov/motorcarrier)

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