Refer to 49 CFR, Part 172:
Marking - Subpart D
Labeling - Subpart E
Placarding - Subpart F

**NOTE:** This document is for general guidance only and should not be used to determine compliance with 49 CFR, Parts 100-185.

**HAZARDOUS MATERIALS MARKINGS**

- Package Orientation (Red or Black)
- Keep Away from Heat
- Overpack Mark
- Fumigant Marking
- Material Poisonous by Inhalation

- Elevated Temperature Material
- UN ID Number Mark
- Biological Substances, Category B
- Lithium Battery Handling Mark
- Marine Pollutant

- Limited Quantity
- Biohazard Mark
- Petroleum Sour Crude Oil
- Exceptional Quantity

Refer to 49 CFR, Part 172:
Marking - Subpart D
Labeling - Subpart E
Placarding - Subpart F
Hazardous Materials Warning Labels

Actual label size: at least 100 mm (3.9 inches) on all sides

CLASS 1 Explosives:
Divisions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6

CLASS 2 Gases:
Divisions 2.1, 2.2, 2.3

CLASS 3 Flammable Liquid

CLASS 4 Flammable Solid, Spontaneously Combustible, and Dangerous When Wet:
Divisions 4.1, 4.2, 4.3

CLASS 5 Oxidizer, Organic Peroxide:
Divisions 5.1 and 5.2

CLASS 6 Poison (Toxic), Poison Inhalation Hazard, Infectious Substance:
Divisions 6.1 and 6.2

CLASS 7 Radioactive

CLASS 8 Corrosive

CLASS 9 Miscellaneous Hazardous Material

Cargo Aircraft Only

§172.411
§172.405(b), §172.415, §172.416, §172.417
§172.419
§172.420, §172.422, §172.423
§172.426, §172.427

§172.412
§172.436, §172.438, §172.440, §172.441
§172.442
§§172.446, §172.447

§172.448

§172.450

For Regulated Medical Waste (RMW), an Infectious Substance label is not required on an outer packaging if the OSHA Biohazard marking is used as prescribed in 29 CFR 1910.1030(g). A bulk package of RMW must display a BIOHAZARD marking.

§172.323, §172.405(c), §172.429, §172.430, §172.432

§172.436, §172.438, §172.440, §172.441

§172.442

§§172.446, §172.447

* Include compatibility group letter.
** Include division number and compatibility group letter.
Hazardous Materials Warning Placards
Actual placard size: at least 250 mm [9.84 inches] on all sides

CLASS 1 Explosives

CLASS 2 Gases

CLASS 3 Flammable Liquid and Combustible Liquid

CLASS 4 Flammable Solid, Spontaneously Combustible, and Dangerous When Wet

CLASS 5 Oxidizer & Organic Peroxide

CLASS 6 Poison (Toxic) and Poison Inhalation Hazard

CLASS 7 Radioactive

CLASS 8 Corrosive

CLASS 9 Miscellaneous

Safety begins with communication!
**General Guidelines on Use of Warning Labels and Placards**

**LABELS**

See 49 CFR, Part 172, Subpart E, for complete labeling regulations.

- The Hazardous Materials Table (§172.101, Col. 6) identifies the proper label(s) for the hazardous material listed.
- Any person who offers a hazardous material for transportation MUST label the package, if required (§172.400(a)).
- Labels may be affixed to packages when not required by regulations, provided each label represents a hazard of the material contained in the package (§172.401).
- For labeling mixed or consolidated packages, see §172.404.
- The appropriate hazard class or division number must be displayed in the lower corner of a primary and secondary hazardous label (§172.402(b)).
- For classes 1, 2, 3, 4, 5, 6, and 8, testing indicating a hazard (e.g., "CORROSIVE") is NOT required on a primary or subsidiary label. The label must otherwise conform to Subpart E of Part 172 (§172.405).
- Labels must be printed on or affixed to the surface of the package near the proper shipping name marking (§172.406(a)).
- When primary and subsidiary labels are required, they must be displayed next to each other (§172.406(c)).
- For a package containing a Division 6.1, PG III material, the POISON label specified in §172.430 may be modified to display the text PG III instead of POISON or TOXIC. Also see §172.405(c).
- The ORGANIC PEROXIDE label (§172.427) indicates that organic peroxides are highly flammable. Use of the ORGANIC PEROXIDE label eliminates the need for a flammable liquid subsidiary label. The color of the border must be black and the color of the flame may be black or white.

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**PLACARDING TABLES**

[§172.504(e)]

| TABLE 1
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Category of material (Hazard Class or division number and additional description, as appropriate)</td>
</tr>
<tr>
<td>1 1</td>
</tr>
<tr>
<td>1 2</td>
</tr>
<tr>
<td>1 3</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5 1 (Materials poisonous by inhalation) [see §171.8)]</td>
</tr>
<tr>
<td>5 2 (Organic peroxide, Type B, liquid or solid, temperature controlled)</td>
</tr>
<tr>
<td>6 1 (Materials poisonous by inhalation) [see §171.8)]</td>
</tr>
<tr>
<td>7 (Radioactive Yellow III label only)</td>
</tr>
</tbody>
</table>

* RADIOACTIVE placard also required for exclusive-use shipments of low-specific-activity material and surface-contaminated objects transported in accordance with §173.427(b)(4) and (5) or (c) of the subchapter.

| TABLE 2
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Category of material (Hazard Class or division number and additional description, as appropriate)</td>
</tr>
<tr>
<td>1 4</td>
</tr>
<tr>
<td>1 5</td>
</tr>
<tr>
<td>1 6</td>
</tr>
<tr>
<td>2 1</td>
</tr>
<tr>
<td>2 2</td>
</tr>
<tr>
<td>2 3</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4 1</td>
</tr>
<tr>
<td>4 2</td>
</tr>
<tr>
<td>5 1</td>
</tr>
<tr>
<td>6 1 (Other than organic peroxide, Type B, liquid or solid, temperature controlled)</td>
</tr>
<tr>
<td>6 2</td>
</tr>
<tr>
<td>9</td>
</tr>
</tbody>
</table>

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**IDENTIFICATION NUMBER DISPLAYS**

See 49 CFR, Part 172, Subpart F, for complete placarding regulations.

- Each person who offers for transportation or transports any hazardous material subject to the Hazardous Materials Regulations must comply with all applicable requirements of Subpart F (§172.500).
- Placards may be displayed for a hazardous material, even when not required, if the placarding otherwise conforms to the requirements of Subpart F of Part 172 (§172.502(c)).
- For other than Class 7 or the DANGEROUS placard, text indicating a hazard (e.g., “FLAMMABLE”) is not required. Text may be omitted from the OXYGEN placard only if the specific ID number is displayed on the placard (§172.519(b)(3)).
- For a placard corresponding to the primary or subsidiary hazard class of a material, the hazard class or division number must be displayed in the lower corner of the placard (§172.519(b)(4)).
- Except as otherwise provided, any bulk packaging, freight container, unit load device, transport vehicle or rail car containing any quantity of material listed in Table 1 must be placarded (§172.504).
- When the aggregate gross weight of all hazardous materials in non-bulk packages covered in Table 2 is less than 454 kg (1,000 lbs.), no placard is required on a transport vehicle or freight container when transported by highway or rail (§172.504(c)).
- Notes: See §172.504(f)(10) for placarding Division 6.1, PG III materials.
- Placarded loads require registration with USDOT. See §107.601 for registration regulations.

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**For additional information contact:**

The Hazardous Materials

Info Center
1-800-HMR-4922
(1-800-467-4922)
E-mail: infocntr@dot.gov
http://hazmat.dot.gov

This Chart is available on line at the following link: http://phmsa.dot.gov/hazmat

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