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
(Read or Black)
§172.312(a)

Keep Away from Heat
§172.317

Fumigant Marking
(Red or Black)
§173.310(g) and §173.9

Biological Substances,
Category B

§173.199(a)(5)

§172.312(a)

§172.317

§173.310(g) and §173.9

§172.313(a)

§172.325

§172.332(a)

§172.332(a)

§173.40(a)

§178.703(b)(7)(i)

§172.322

Limited Quantity*

ORM-D, Transition
December 31, 2020

NEW

Air-Only

§172.315

§172.316

ORM-D

UN1755

Exempted Quantity

§172.310

Marking of IBCs

Marine Pollutant

§172.315

§172.316

§173.40(a)

§178.703(b)(7)(i)

§172.322

* The new limited quantity marking designates hazardous material packages prepared for air transport (Y) and packages not prepared for air transport (all other modes). The ORM-D classification and the use of packagings marked “Consumer commodity, ORM-D” is authorized until December 31, 2020, for domestic highway, rail, and vessel transportation. Transitional exception—Square-on-point with Identification Number: except for transportation by aircraft and until December 31, 2014, a package containing a limited quantity may be marked with identification number, preceded by the letters “UN” or “NA.”
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

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.

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

§172.411

§172.405(b), §172.415, §172.416, §172.417

§172.420, §172.422, §172.423

§172.426, §172.427

§172.411

§172.405(b), §172.415, §172.416, §172.417

$172.420, $172.422, $172.423

$172.426, $172.427

§172.323, §172.405(c), §172.419, §172.430, §172.432

§172.436, §172.440, §172.441

§172.442

§172.446

§172.448

§172.450

* Include compatibility group letter.
** Include division number and compatibility group letter.

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.
Hazardous Materials Warning Placards

Actual placard size: at least 250 mm (9.84 inches) on all sides

CLASS 1 Explosives

1.4 EXPLOSIVES
1.5 BLASTING AGENTS
1.6 EXPLOSIVES

CLASS 2 Gases

NON-FLAMMABLE GAS
FLAMMABLE GAS
INHALATION HAZARD

CLASS 3 Flammable Liquid and Combustible Liquid

GASOLINE
FUEL OIL

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

FLAMMABLE SOLID
SPONTANEOUSLY COMBUSTIBLE
DANGEROUS WHEN WET

CLASS 5 Oxidizer & Organic Peroxide

OXIDIZER
ORGANIC PEROXIDE

CLASS 6 Poison (Toxic) and Poison Inhalation Hazard

POISON
INHALATION HAZARD

CLASS 7 Radioactive

RADIOACTIVE

CLASS 8 Corrosive

CORROSIVE

CLASS 9 Miscellaneous

DANGEROUS

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 subsidiary hazard label [§172.402(b)].
- For classes 1, 2, 3, 4, 5, 6, and 8, text 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(c)].
- 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.

PLACARDING TABLES

[§172.504(a)]

<table>
<thead>
<tr>
<th>Category of material (Hazard Class or division number and additional description, as appropriate)</th>
<th>Placard name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 .................................................................</td>
<td>EXPLOSIVES 1.1 .......................................</td>
</tr>
<tr>
<td>1.2 .................................................................</td>
<td>EXPLOSIVES 1.2 .......................................</td>
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<tr>
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<td>EXPLOSIVES 1.3 .......................................</td>
</tr>
<tr>
<td>1.4 .................................................................</td>
<td>POISON GAS .............................................</td>
</tr>
<tr>
<td>1.5 .................................................................</td>
<td>DANGEROUS WHEN WET ................................…</td>
</tr>
<tr>
<td>1.6 .................................................................</td>
<td>RADIOACTIVE ............................................</td>
</tr>
<tr>
<td>1.7 .................................................................</td>
<td>ORGANIC PEROXIDE .....................................</td>
</tr>
<tr>
<td>1.8 .................................................................</td>
<td>POISON INHALATION HAZARD ...........................</td>
</tr>
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<td>NON-FLAMMABLE GAS ...................................</td>
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<tr>
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</tr>
<tr>
<td>1.15 ...............................................................</td>
<td>COMBUSTIBLE ............................................</td>
</tr>
<tr>
<td>1.16 ...............................................................</td>
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</tr>
<tr>
<td>1.19 ...............................................................</td>
<td>ORGANIC PEROXIDE .....................................</td>
</tr>
</tbody>
</table>

Placard name

- EXPLOSIVES
- POISON
- COMBUSTIBLE
- FLAMMABLE
- NON-FLAMMABLE
- NON-FLAMMABLE GAS
- SPONTANEOUSLY COMBUSTIBLE
- OXIDIZER
- ORGANIC PEROXIDE
- DANGEROUS WHEN WET
- DANGEROUS WHEN WET
- PHOTOGRAPHIC
- PHOTOGRAPHIC
- ORGANIC PEROXIDE

I

1.1090  and  or  1993

§172.332

Appropriate placard must be used with orange panel.

IDENTIFICATION NUMBER DISPLAYS

<table>
<thead>
<tr>
<th>Number</th>
<th>Placard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1090</td>
<td>FLAMMABLE</td>
</tr>
<tr>
<td>3</td>
<td>1993</td>
</tr>
</tbody>
</table>

§172.527

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

U.S. Department
of Transportation
Pipeline and
Hazardous Materials
Safety Administration

USDOT/PHMSA/OHMIT/PHH-50
1200 New Jersey Avenue, SE
Washington, D.C. 20590
Phone: (202) 366-4900
Email: training@dot.gov

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 (1,001 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.
- The new ORGANIC PEROXIDE placard became mandatory 1 January 2011 for transportation by rail, vessel, or aircraft and becomes mandatory 1 January 2014 for transportation by highway. The placard will enable transport workers to readily distinguish peroxides from oxidizers [§172.552].

List of Tables

TABLE 1

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