

The primary objective of marking and labeling packages that transport hazardous materials is to achieve communication of what is being transported within. Correct marking and labeling of hazardous materials packages is obviously an extremely important step to be taken when preparing shipments for transport.

It is important to note the requirements of marking and labeling may differ slightly depending on the mode of transport, so it is very important that your training and understanding of the specific transport requirements are up to date and compliant with the most current regulations.

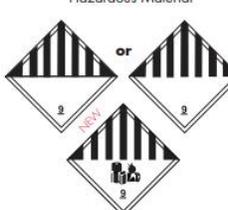
Some examples of marking and labeling differences and changes include:

- New marking and labeling requirements for lithium batteries that became mandatory just this year
- Net quantity marking requirements for air vs. other modes
- The variations in shipping Limited Quantity by air, ground, and sea as it relates to the application of the marks and labels
- Marine pollutant/environmentally hazardous substance marking for ground, air, and ocean

Labels are used as hazardous material identifiers and universally communicate the hazard(s) of the materials in the package. They must meet the specifications described in the various regulations for color, shape, and size. Labels affect handling, storage, safety, and emergency response. They can assist the shipper in creating compliant shipments, the forwarder, cargo agent, and operator in the proper segregation requirements for storage and transport, and the emergency responder in mitigating incidents or accidents of these materials.

Hazardous Materials Warning Labels

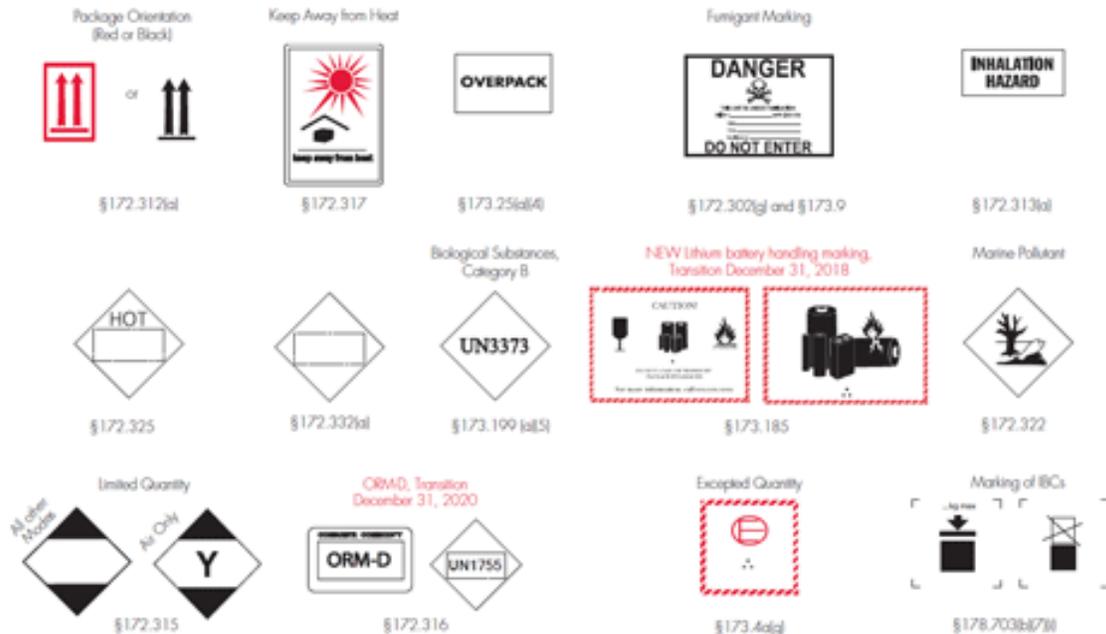
Actual label size: at least 100 mm (3.9 inches) on all sides

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
 <p>§172.411</p>	 <p>§172.405(b), §172.415, §172.416, §172.417</p>	 <p>§172.419</p>	 <p>§172.420, §172.422, §172.423</p>	 <p>§172.426, §172.427</p>
<p>* Include compatibility group letter. ** Include division number and compatibility group letter.</p>				
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
 <p>§172.323, §172.405(c), §172.429, §172.430, §172.432</p>	 <p>§172.436, §172.438, §172.440, §172.441</p>	 <p>§172.442</p>	 <p>§§172.446, §172.447</p>	 <p>§172.448</p> <p>Empty Label</p> <p>EMPTY</p> <p>§172.450</p>
<p>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.</p>			<p>Effective January 2019, the NEW Class 9 lithium battery handling label must be used for lithium battery shipments.</p>	

49 CFR §172.406 states that labels must be printed on or affixed to a surface (other than the bottom) of the package or containment device containing the hazardous material, and they must be located on the same surface of the package and near the proper shipping name marking if the package dimensions are adequate.

Marks are essentially identifiers used to describe package contents in more detail than just the labels. They include the proper shipping name, identification number, limited and excepted quantities, and environmentally hazardous substances to name a few.

HAZARDOUS MATERIALS MARKINGS



Marking Requirements

- Must be durable, in English, and printed on or affixed to the surface of a package or on a label, tag, or sign;
- Must be displayed on a background of sharply contrasting color;
- Must be unobscured by labels or attachments; and
- Must be located away from any other marking (such as advertising) that could substantially reduce its effectiveness.

More information on the specific regulations for the marking and labeling of packages can be found in Title 49 of the Code of Federal Regulation in sections §172.300 and §172.400 respectively.