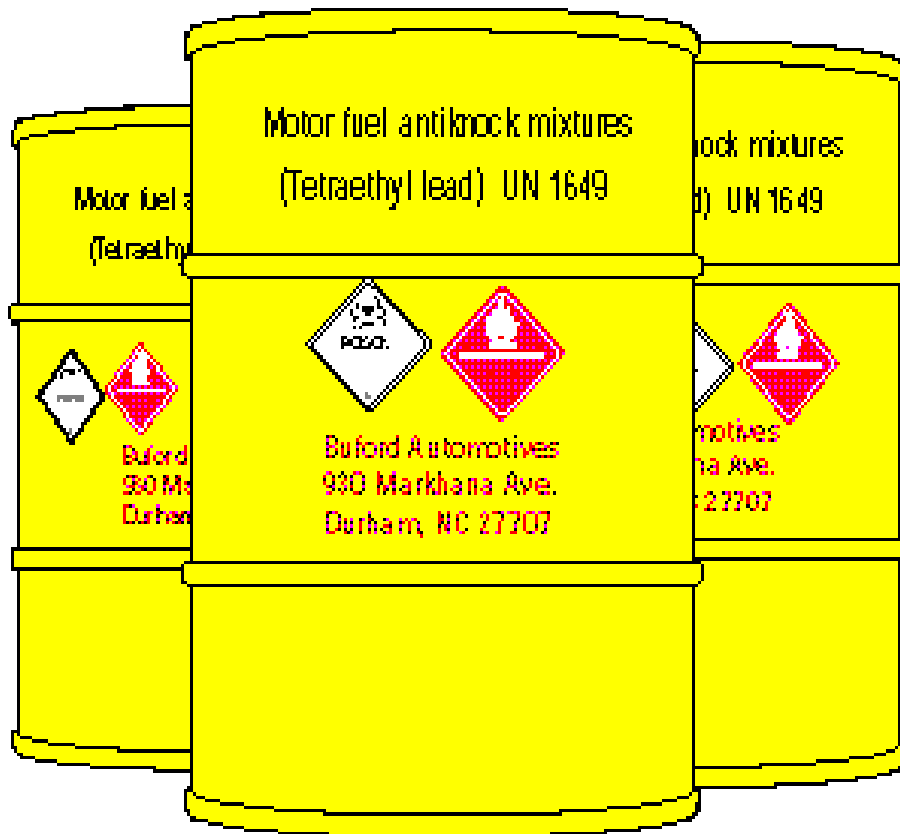


# BILINGUAL HAZARDOUS MATERIALS GENERAL AWARENESS TRAINING Volume III

## MARKING AND LABELING



## MARCACIÓN Y ETIQUETAS

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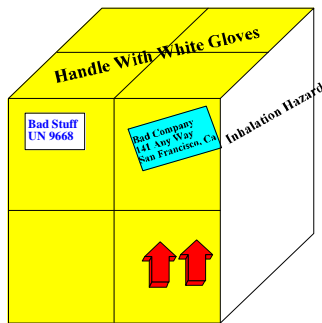
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10/01/98

# Marking

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The Term Marking Means.....



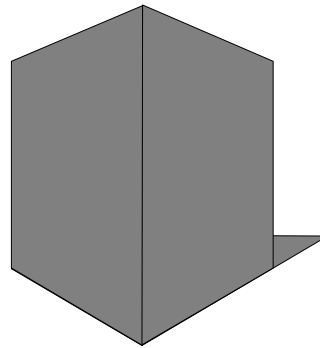
## 4: Marking and Labeling.

The term "marking," as used in the HMR, means applying the required information to the outside of shipping containers. This includes the descriptive name of the hazardous material plus any required instructions and/or cautions.

## ***Before Offering the Package..***

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**Mark It!!**

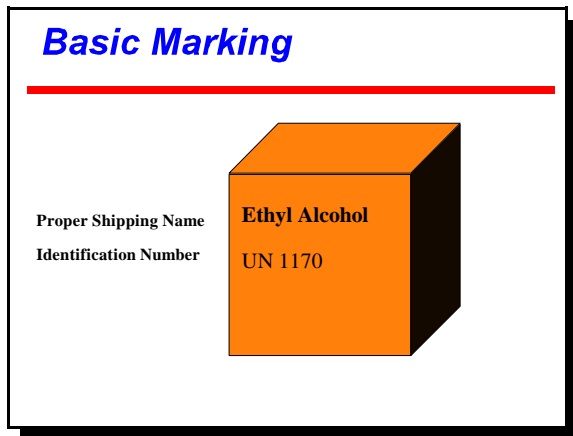


**49 CFR 172.300**

Each person who OFFERS a hazardous material for transportation must mark each package, freight container and the transport vehicle as prescribed in the HMR.

Additionally, when required, each CARRIER shall mark each package, freight container and the transport vehicle, as prescribed.

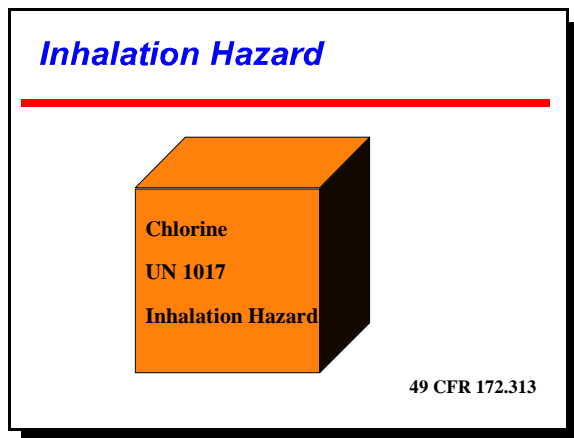
172.300



Each person who offers for transportation a hazardous material in a packaging of 119 gallons rated capacity or less must mark the package with:

- The proper shipping name, and
- The identification number preceded by UN or NA as appropriate.

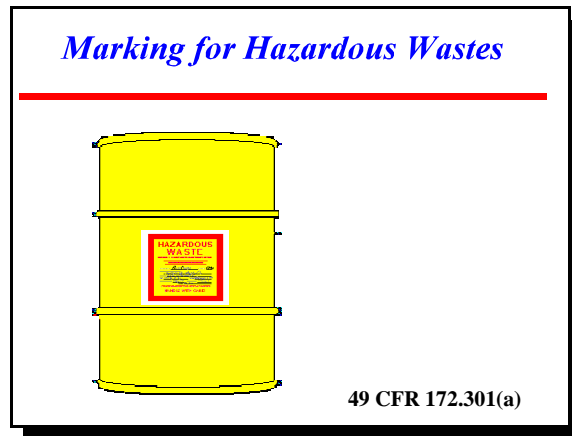
However, there are exceptions.



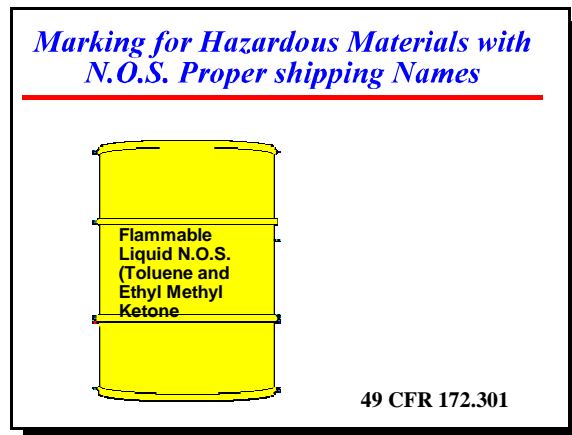
"Inhalation Hazard" must be marked on any package containing material that meets the criteria of a "Poison-Inhalation Hazard" material. The "inhalation hazard" marking must appear in association with the label or labels.

Bulk packagings must be marked on two sides.

If a package of hazardous waste has the EPA marking shown here, the word "waste" need not be repeated on the package. Without this EPA marking, the word "waste" is required to be marked on the package before the proper shipping name. 172.301(a)

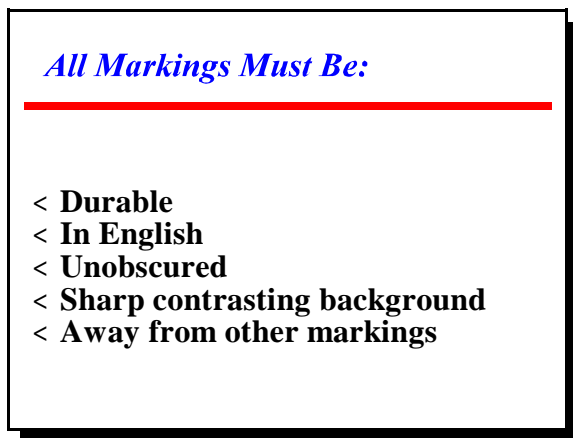


When packagings contain hazardous materials with N.O.S. proper shipping names, always check 172.203(k). If listed in 172.203(k), mark both the n.o.s. proper shipping name and the technical name of the material on the packaging. Put the technical name in parenthesis in association with the proper shipping name. 172.301





This technical name marking requirement also applies to all shipping descriptions for poisonous material. When the proper shipping name does not specifically identify the poisonous material, add the technical name in parenthesis. 172.301(c)



ALL markings must be durable, in English and printed on or affixed to the surface of the package or on a label, tag or sign.

They must stand out. Place markings on a background of sharply contrasting color, unobscured by labels or other matter.

Locate the required markings away from any other markings, such as advertising, that could reduce the effectiveness of the HMR.

### ***Hazardous Substance***

**For Hazardous Substances Liquid, N.O.S. mark in parenthesis:**

<Name of Hazardous Substance from appendix,  
or  
<The waste Stream number, or  
<The "D" number, or  
<"EPA" plus the appropriate words  
| Ignitability  
| Reactivity  
| Corrosivity  
| Toxicity

A package of 119 gallons capacity or less containing a hazardous substance must identify the hazardous substance by name in the proper shipping name.

If not, the package must bear one of the following descriptions:

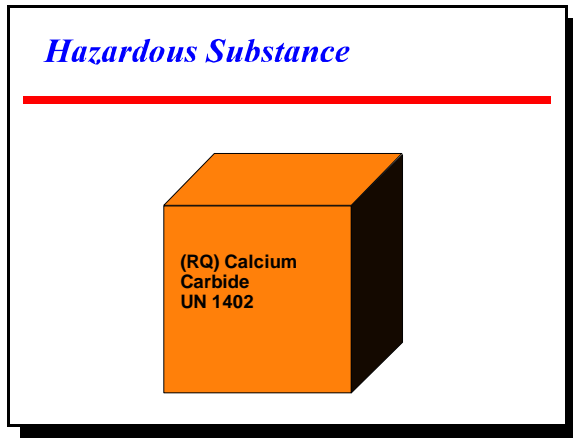
1. the name of the hazardous substance as listed in the Appendix to the HMT;
2. if a waste stream, the waste stream number;
3. for wastes which exhibit an EPA characteristic of ignitability, corrosivity, reactivity or toxicity, the letters "EPA" followed by "ignitability," "corrosivity," "reactivity" or "toxicity" or the corresponding "D" number, as appropriate.

The appropriate description must be marked on the package in parenthesis in association with the proper shipping name.

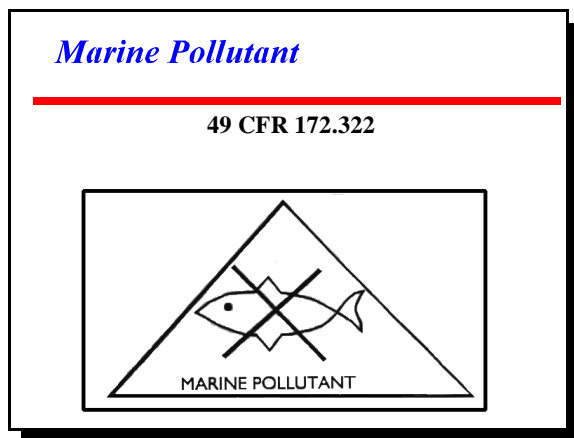
Note: Properly labeled radioactive material is excepted from this requirement.

172.324(a)(1)-(3)





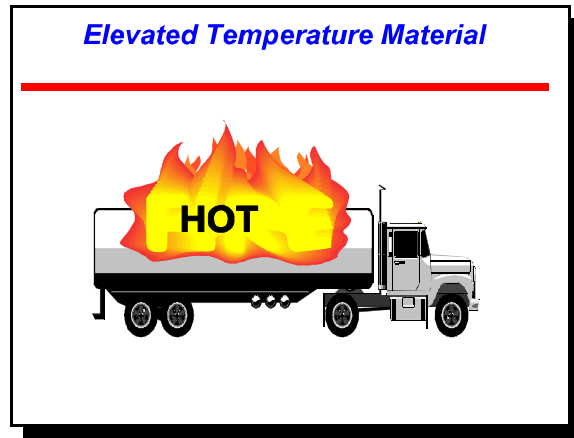
Each package that contains a hazardous substance must also be marked with the letters "RQ." Place the "RQ" in association with the proper shipping name. It's not necessary to mark the amount of the RQ on the package.



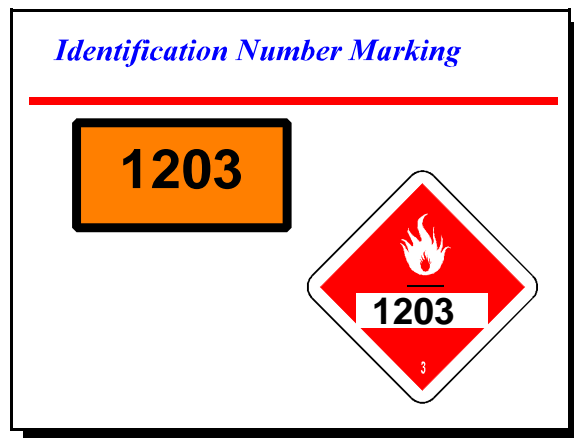
### MARINE POLLUTANTS 172.322

Bulk packages containing material classed as Marine Pollutants must be marked on each end with the Marine Pollutant Mark in association with the hazard label or shipping name if no label is required.

For transportation by vessel this requirement applies to non-bulk packages also.



Bulk packages containing Elevated Temperature material must be marked on two sides with the word "HOT". Molten Aluminum and Molten Sulfur must be marked "MOLTEN ALUMINUM or MOLTEN SULFUR" as appropriate.



#### Identification Number Marking

Non Bulk packages: A transport vehicle or freight container containing 4,000 kg(8,820lbs.) or more aggregate gross weight of a hazardous material having a single identification number must be marked as required by Sections 172.326 through 172.338.

Bulk packages must be marked with the Identification Number either on orange panels, placards, or white square on-point panels as required by Sections 172.326 through 172.338.



A transport vehicle or freight container containing 1,000 kg(2,205 lbs.) or more aggregate gross weight of a hazardous material, poisonous by inhalation in Hazard Zone A or B shall be marked with the identification number as required by Sections 172.313 and 172.332

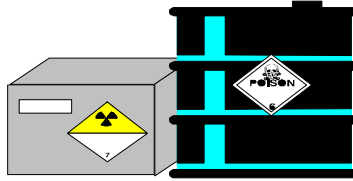


No person may offer for transportation or transport a rail car, freight container, truck body, or trailer in which the lading has been fumigated or treated with any material, or is undergoing fumigation, unless the FUMIGANT Marking is prominently displayed.

Additionally, for international shipments, transport documents must indicate the date of fumigation, type and amount of fumigant used, and instructions for disposal of any residual fumigant, including fumigation devices.

### ***The Term Label Means...***

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The term "label," as used in the HMR, means a printed hazard warning notice. Labels must be at least four inches by four inches. Labels are applied to the outside of shipping containers of hazardous materials. Labels identify the primary and secondary hazards specific to materials and may give information about handling precautions and prohibitions. 172.407(b)

### ***Column 6, Label codes***

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(3)	(4)	(5)	Label codes
			4.1, 4.3
			6.1
			1.1A

Column 6 of the HMT contains a listing of the label codes which represent the label(s) required for each hazardous material. The initial step in determining appropriate labeling requirements is to check Column 6 of the HMT for any required label(s).

172.101 Table, Col. 6

**Column 6, Label codes**

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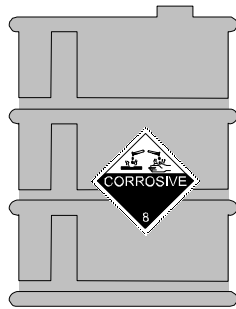
(3)	(4)	(5)	Label codes
			4.1, 4.3
			6.1
			None

If Column 6 of the HMT says "none," then no label is required. Some sections of the HMR provide exceptions to labeling requirements. In those cases, even though the HMT specifies a label or label(s), labeling is not required.

172.101 Table, Col. 6

**Before Offering the Package...**

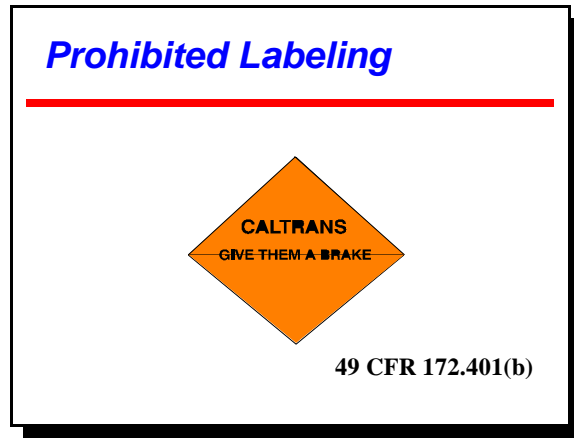
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**Label It!**

Unless otherwise provided, anyone offering for transportation a package, overpack or freight container of hazardous material must label it, when required.

172.400(a)



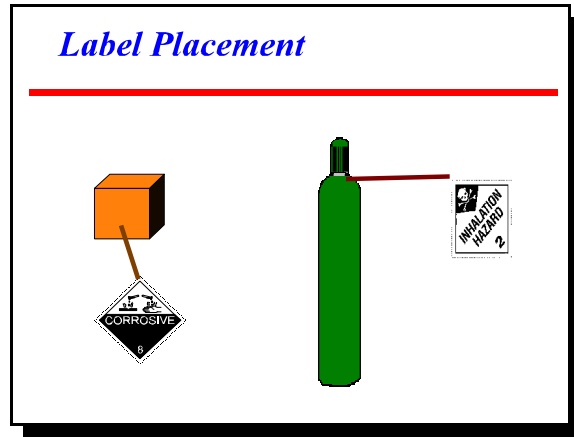
No person may offer and no carrier may transport a package of hazardous material that displays markings or labels that could:

- be confused with or
- be in conflict with the label(s) prescribed by the HMR.

172.401(b)

The required label(s) must be printed on or affixed to the surface of the package near the marked proper shipping name, unless exceptions are provided.

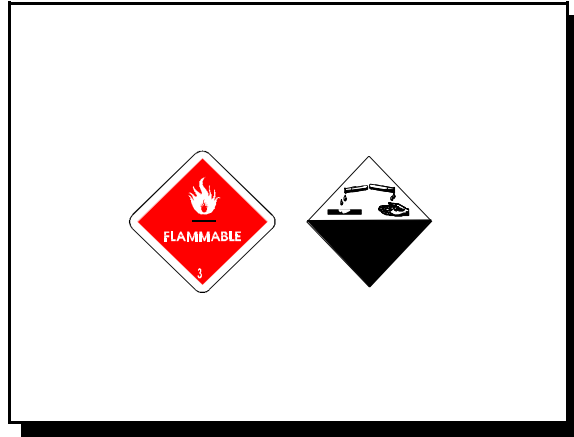
172.406(a)



The label may be printed on or affixed to a tag or by other suitable means when:

- the package contains no radioactive material and the label is larger than the package;
- the package surface is such that a label cannot be affixed; and/or
- when the package is a compressed gas cylinder.

172.406(b)(1)-(3)



When labels are required, they must be:

- on a background of contrasting color or have a dotted or solid line outer border and
- unobscured by markings or attachments.

When two or more labels are required, they must also be:

- displayed next to each other.

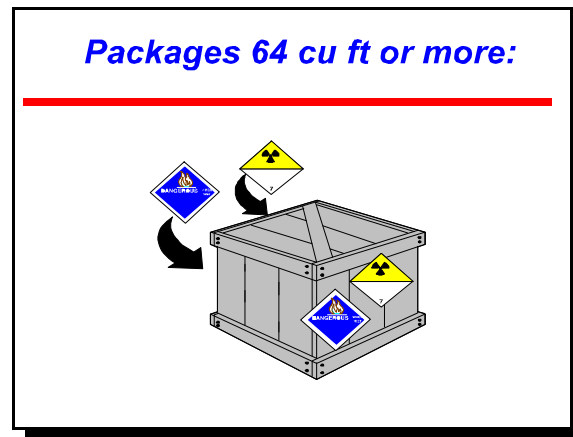
172.406(c)-(d),(f)



When required, two labels on at least two sides or ends, excluding the bottom, must appear on:

- packages having a volume of 64 cubic feet or more,
- packages of radioactive material.

172.406(e)(1)-(2)



A freight container having a volume of between 64 and 640 cubic feet:

- At least one label must be displayed on or near the closure for the freight container. Placarding may not be used in place of labeling on a freight container containing radioactive material.

172.406(e)(5)