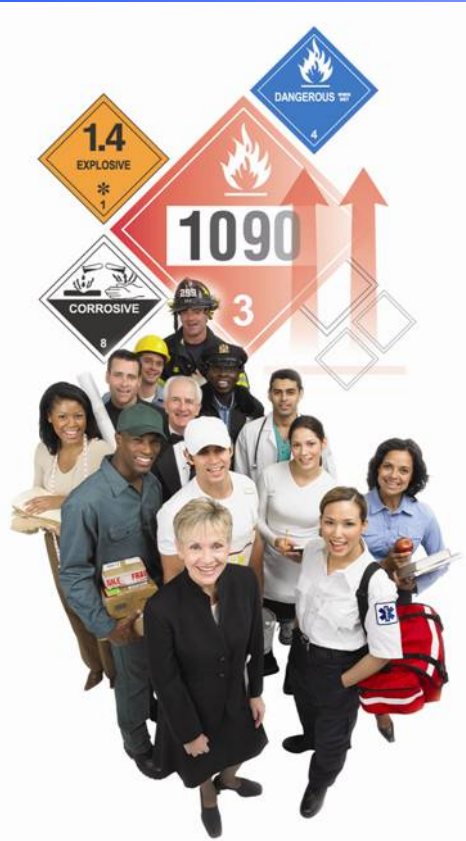




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of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration

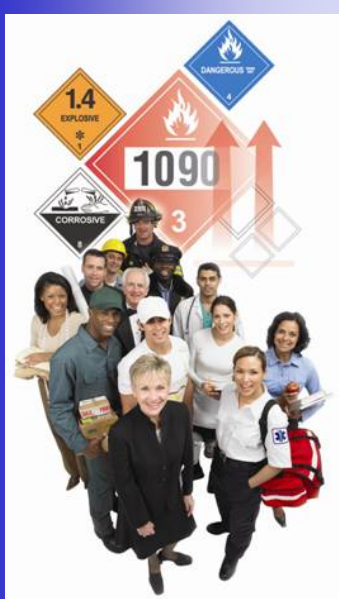


# Hazardous Materials Transportation Placarding Requirements



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Safety Administration



Placarding  
Requirements

## *Placarding – Part 172*

### *Subpart F*

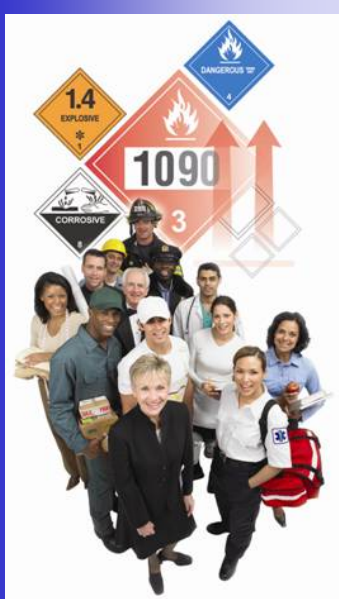
**Each person  
who offers or  
transports  
hazardous  
materials must  
comply with  
the placarding  
requirements.**





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Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *Placarding Requirements*

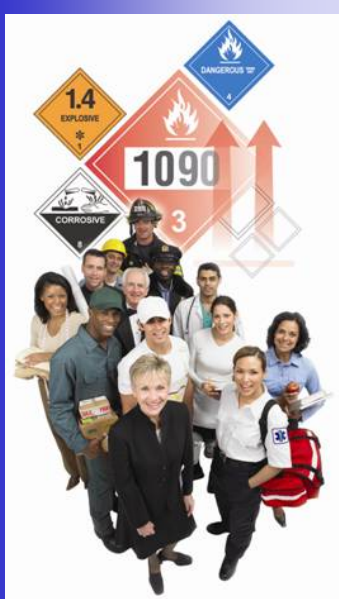
**Placarding requirements *do not* apply to:**

- **Small quantities of certain hazard classes**
- **Limited Quantities (Ltd. Qty.)**
- **Infectious substances**
- **Other Regulated Material (ORM-Ds)**
- **Combustible liquids in non-bulk packagings**
- **Materials prepared in accordance with 173.13**



U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *Prohibited Placarding*

**Placards *may not* be displayed on a transport vehicle, portable tank or freight container *unless*:**

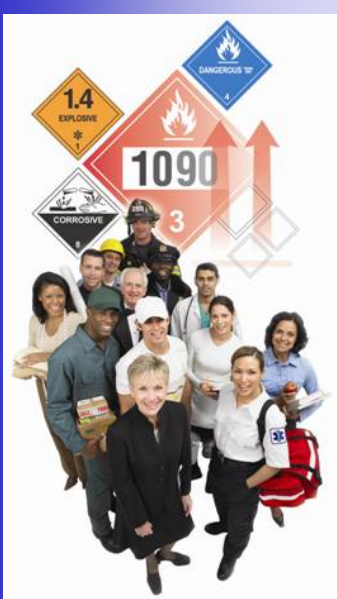
- Transported material is a hazardous material
- Placarding represents a hazard of the material
- Placarding conforms to the regulations





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Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *General Placarding Requirements*

**Placard a container or vehicle on each side and each end for any quantity of hazardous material it contains.**

**Some exceptions to these requirements exist based on the hazard and quantity present.**

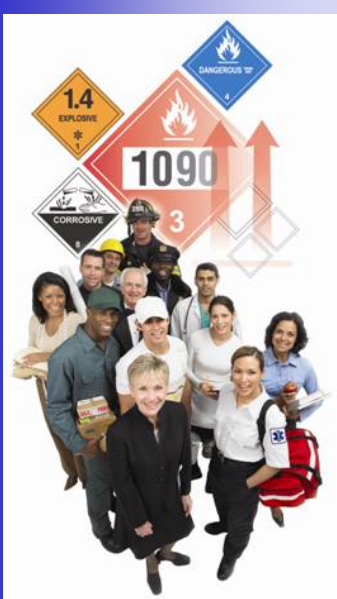






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of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *ID Numbers*

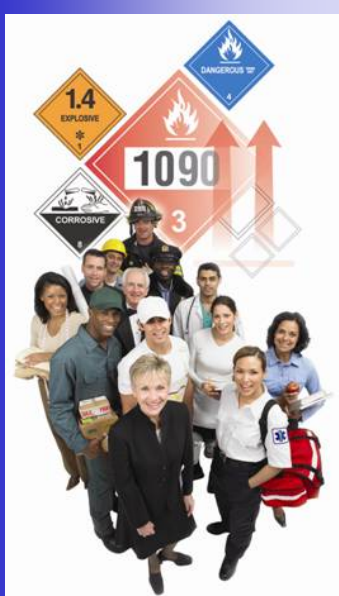
**Prohibited  
placarding  
restrictions *do  
not apply* to ID  
numbers  
displayed on  
white square-  
on-point  
placards.**





U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

# Placarding Tables

## Placarding Tables 172.504 (e)

TABLE 1

Category of material (Hazard class or division number and additional description, as appropriate)	Placard name	Placard design section reference (§)
1.1 .....	EXPLOSIVES 1.1 .....	172.522
1.2 .....	EXPLOSIVES 1.2 .....	172.522
1.3 .....	EXPLOSIVES 1.3 .....	172.522
2.3 .....	POISON GAS .....	172.540
4.3 .....	DANGEROUS WHEN WET .....	172.548
5.2 (Organic peroxide, Type B, liquid or solid, temperature controlled) .....	ORGANIC PEROXIDE .....	172.552
6.1 (material poisonous by inhalation (see § 171.8 of this subchapter)) .....	POISON INHALATION HAZARD .....	172.555
7 (Radioactive Yellow III label only) .....	RADIOACTIVE <sup>1</sup> .....	172.556

<sup>1</sup> 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 this subchapter.

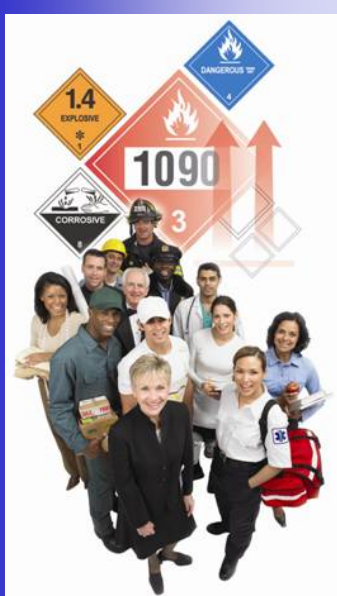
TABLE 2

Category of material (Hazard class or division number and additional description, as appropriate)	Placard name	Placard design section reference (§)
1.4 .....	EXPLOSIVES 1.4 .....	172.523
1.5 .....	EXPLOSIVES 1.5 .....	172.524
1.6 .....	EXPLOSIVES 1.6 .....	172.525
2.1 .....	FLAMMABLE GAS .....	172.532
2.2 .....	NON-FLAMMABLE GAS .....	172.528
3 .....	FLAMMABLE .....	172.542
Combustible liquid .....	COMBUSTIBLE .....	172.544
4.1 .....	FLAMMABLE SOLID .....	172.546
4.2 .....	SPONTANEOUSLY COMBUSTIBLE .....	172.547
5.1 .....	OXIDIZER .....	172.550
5.2 (Other than organic peroxide, Type B, liquid or solid, temperature controlled) .....	ORGANIC PEROXIDE .....	172.552
6.1 (other than material poisonous by inhalation) .....	POISON .....	172.554
6.2 .....	(None) .....	
8 .....	CORROSIVE .....	172.558
9 .....	Class 9 (see § 172.504(f)(9)) .....	172.560
ORM-D .....	(None) .....	



U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## Table 1 – Placard Any Quantity

**Note specifics for Division 5.2, 6.1  
and Class 7.**

TABLE 1

Category of material (Hazard class or division number and additional description, as appropriate)	Placard name	Placard design section reference (§)
1.1 .....	EXPLOSIVES 1.1 .....	172.522
1.2 .....	EXPLOSIVES 1.2 .....	172.522
1.3 .....	EXPLOSIVES 1.3 .....	172.522
2.3 .....	POISON GAS .....	172.540
4.3 .....	DANGEROUS WHEN WET .....	172.548
5.2 (Organic peroxide, Type B, liquid or solid, temperature controlled).	ORGANIC PEROXIDE .....	172.552
6.1 (material poisonous by inhalation (see § 171.8 of this subchapter)).	POISON INHALATION HAZARD .....	172.555
7 (Radioactive Yellow III label only) .....	RADIOACTIVE <sup>1</sup> .....	172.556

<sup>1</sup> 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 this subchapter.

4.3 .....

5.2 (Organic peroxide, Type B, liquid or solid, temperature controlled).

6.1 (material poisonous by inhalation (see § 171.8 of this subchapter)).

7 (Radioactive Yellow III label only) .....

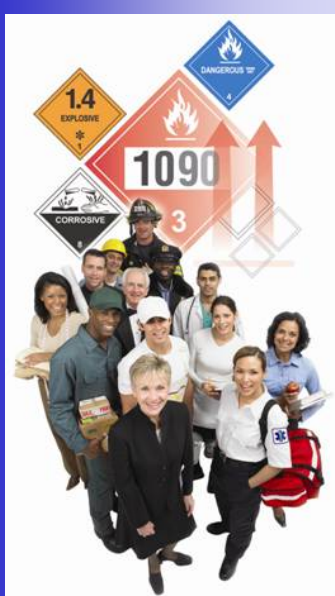
§172.504(a)





U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *Placard for Table 2 Materials (unless excepted)*

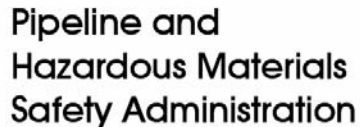
**454 kg (1,001 lbs.) aggregate gross  
weight or more must be placarded**

TABLE 2

Category of material (Hazard class or division number and additional description, as appropriate)	Placard name	Placard design section reference (§)
1.4	EXPLOSIVES 1.4	172.523
1.5	EXPLOSIVES 1.5	172.524
1.6	EXPLOSIVES 1.6	172.525
2.1	FLAMMABLE GAS	172.532
2.2	NON-FLAMMABLE GAS	172.528
3	FLAMMABLE	172.542
Combustible liquid	COMBUSTIBLE	172.544
4.1	FLAMMABLE SOLID	172.546
4.2	SPONTANEOUSLY COMBUSTIBLE	172.547
5.1	OXIDIZER	172.550
5.2 (Other than organic peroxide, Type B, liquid or solid, temperature controlled).	ORGANIC PEROXIDE	172.552
6.1 (other than material poisonous by inhalation)	POISON	172.554
6.2	(None)	
8	CORROSIVE	172.558
9	Class 9 (see § 172.504(a))	172.560
ORM-D	(None)	



§172.504(a)



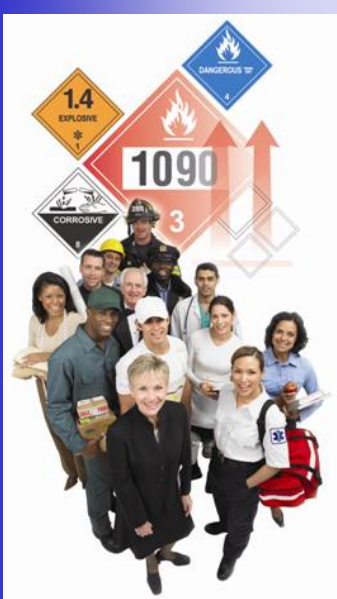
**Less than 454 kg (1,001 lbs.) aggregate gross weight may be placarded, but is not required**

## §172.504(c)



U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *Use of Dangerous Placard*

**The Dangerous Placard may be used if the shipment contains non-bulk packages of two or more classes, requiring different placards from Table 2.**



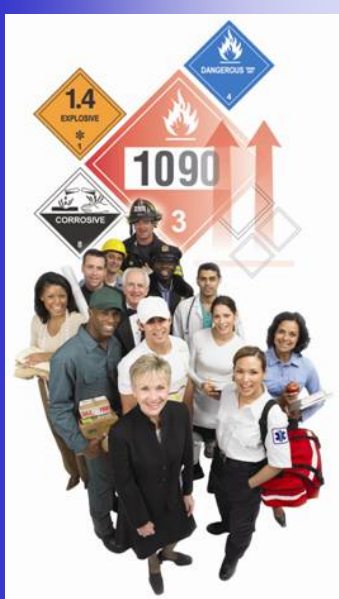
§172.504(b)





U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *Dangerous Placard Exception*

- **1,000 kg (2,205 lbs) or more of one class from Table 2**
- **Loaded at one point**
- **Must use placard for that hazard class, not the Dangerous placard**

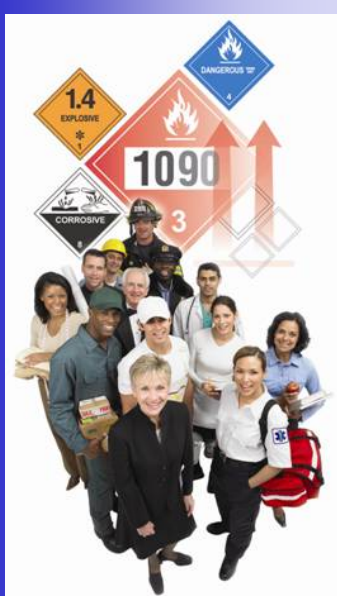


§172.504(b)



U.S. Department  
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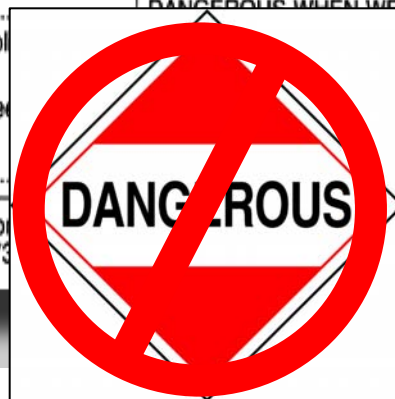
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Hazardous Materials  
Safety Administration



Placarding  
Requirements

*Dangerous Placard is NOT allowed  
for Table 1*

TABLE 1		
Category of material (Hazard class or division number and additional description, as appropriate)	Placard name	Placard design section reference (§)
1.1 .....	EXPLOSIVES 1.1 .....	172.522
1.2 .....	EXPLOSIVES 1.2 .....	172.522
1.3 .....	EXPLOSIVES 1.3 .....	172.522
2.3 .....	POISON GAS .....	172.540
4.3 .....	DANGEROUS WHEN WET .....	172.548
5.2 (Organic peroxide, Type B, liquid or solid, temperature controlled).	.....	172.552
6.1 (material poisonous by inhalation (see this subchapter)).	.....	172.555
7 (Radioactive Yellow III label only) .....	.....	172.556
<sup>1</sup> RADIOACTIVE placard also required for activity material and surface contaminated objects transported in accordance with § 173.16.		



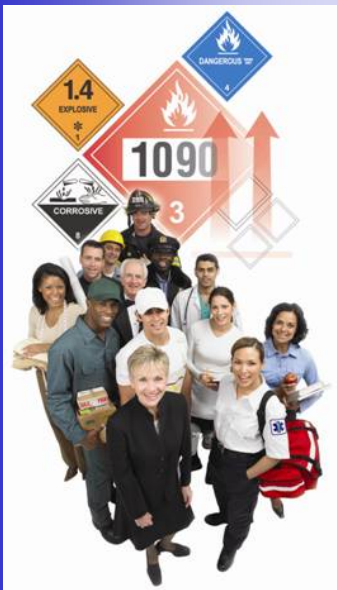
§172.504(b)





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of Transportation

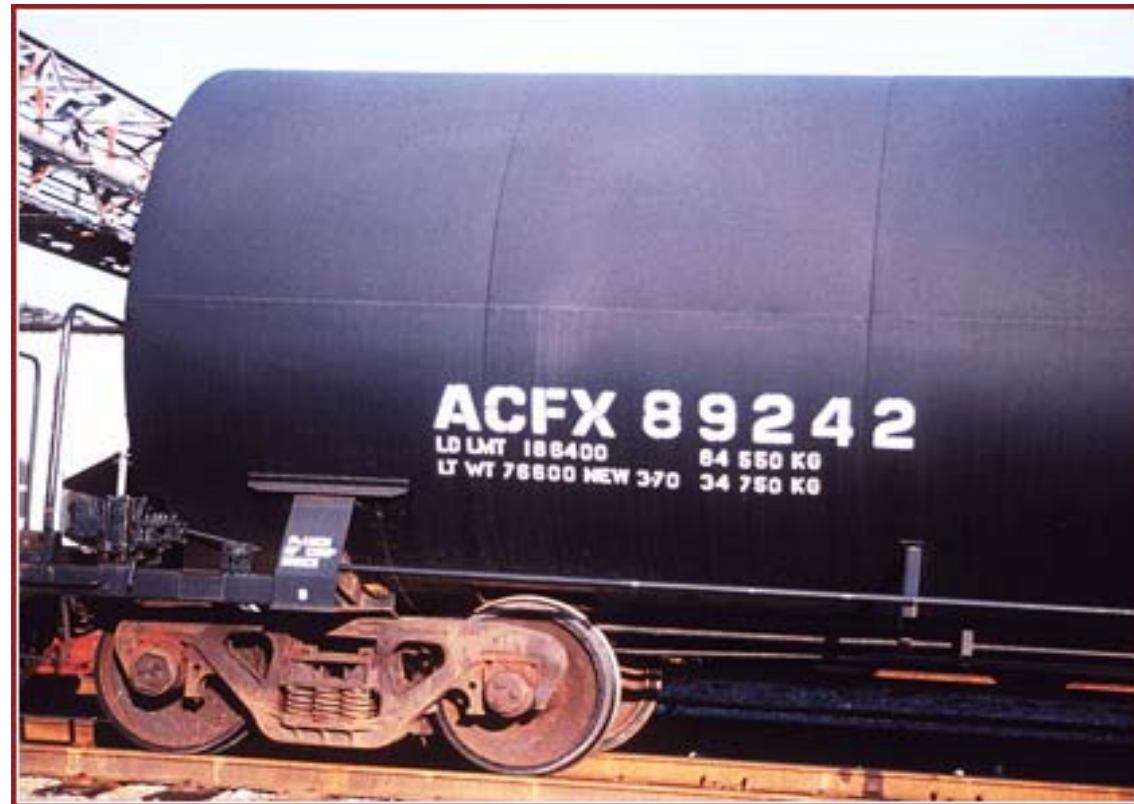
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Placarding  
Requirements

## *Bulk Exceptions*

- **Tank cars -2 opposite sides**

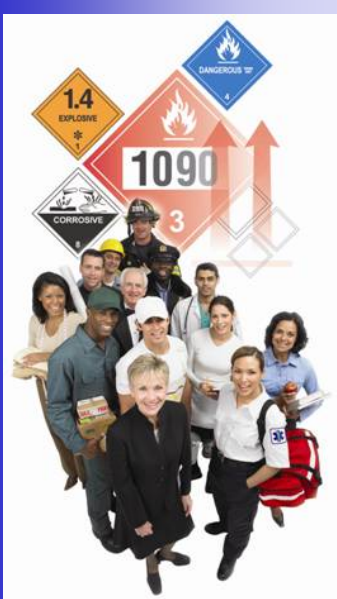


§172.514(c)(2)



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Pipeline and  
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Safety Administration



Placarding  
Requirements

## *Bulk Exceptions (cont'd)*

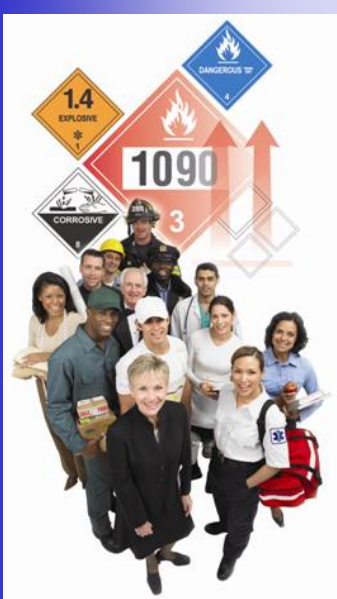
- Tank cars
- **Cargo tanks – nurse tanks**





U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *Bulk Exceptions (cont'd)*

- Tank cars
- Cargo tanks
- **Portable tanks**



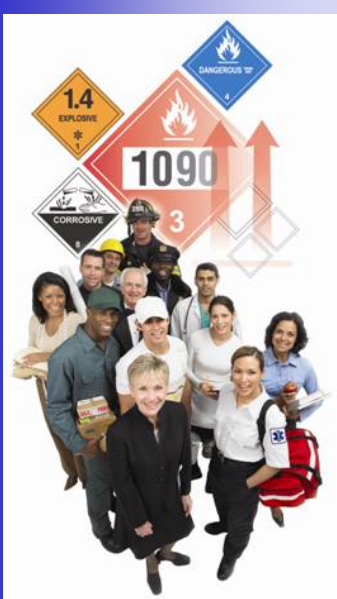
§172.514





U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *Bulk Exceptions (cont'd)*

- Tank cars
- Cargo tanks
- Portable tanks
- **Other bulk packagings**

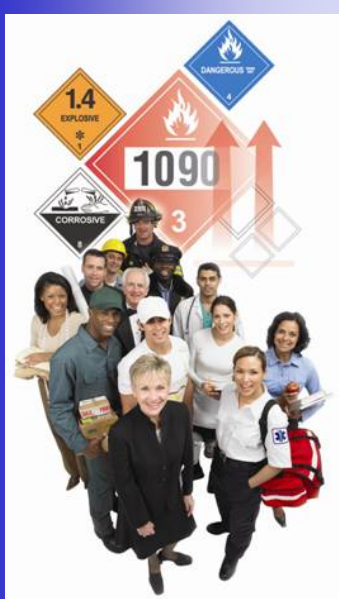


§172.514(c)



U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *Bulk Exceptions (cont'd)*

- Tank cars
- Cargo tanks
- Portable tanks
- Other bulk packagings
- **Freight containers and Aircraft unit load devices**



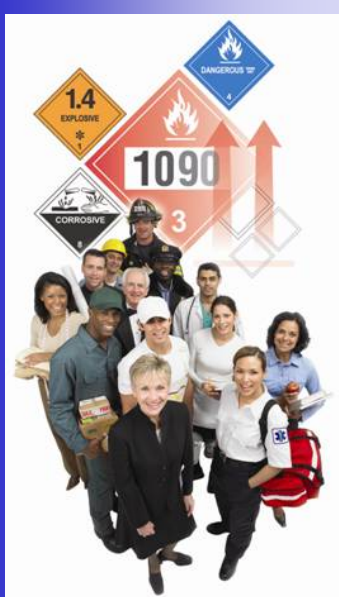
§172.512





U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *Other Exceptions*

- Tank cars
- Cargo tanks
- Portable tanks
- Other bulk packagings
- Freight containers and aircraft unit load devices
- **Poison inhalation materials/poison gas**

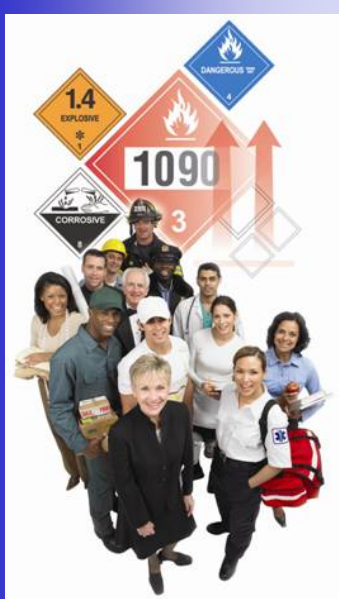


§172.505(a)



U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *Other Exceptions (cont'd)*

- Tank cars
- Cargo tanks
- Portable tanks
- Other bulk packagings
- Freight containers and Aircraft unit load devices
- Poison inhalation material/poison gas
- **Dangerous when wet material**

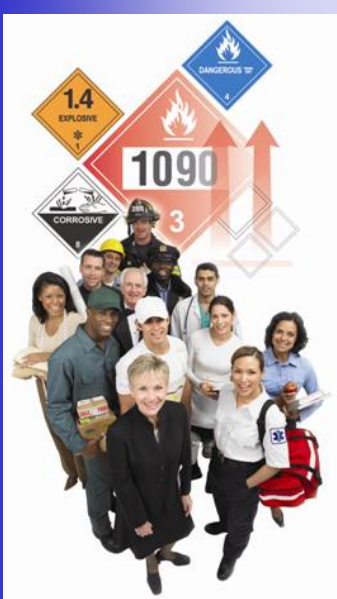


§172.505



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Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *Placarding Empty or Unpurged Tanks*

**Tanks remain placarded unless:**

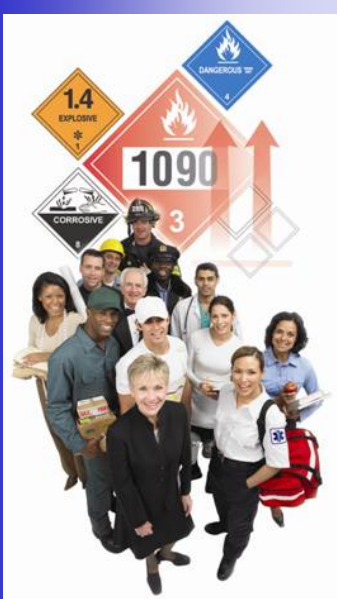
- **Cleaned and purged**
- **Reloaded with a non-hazardous material**
- **Another class of hazardous material**





U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *Visibility*

**Each placard must be readily visible from the direction it faces.**

**Placards must be on each side and each end.**

**If coupled to another motor vehicle or rail car, visibility is not required from the direction it faces.**

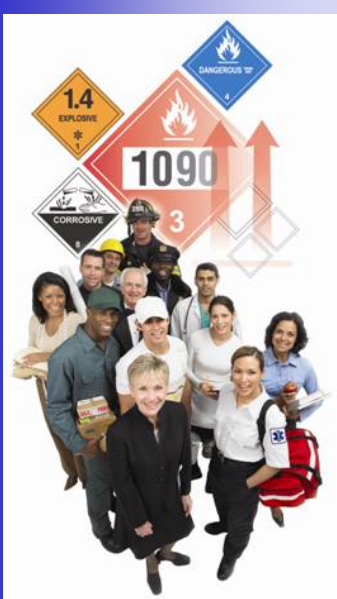






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Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *Attaching Placards*

- Attach securely
- Maintain in good condition
- Clear of advertising, dirt and water, and tarps, etc.
- Printed and displayed horizontally

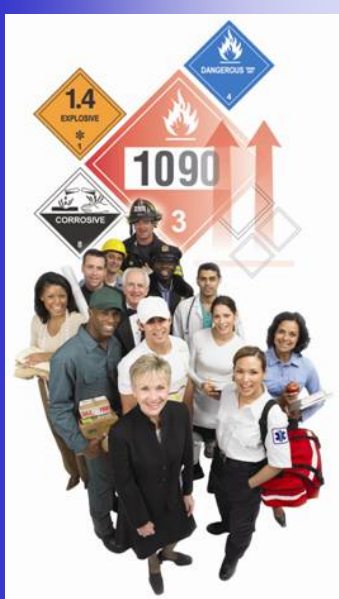






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Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *Placarding – A Joint Responsibility*

**It is the responsibility of shipper or carrier to make sure the correct placards are offered or affixed.**

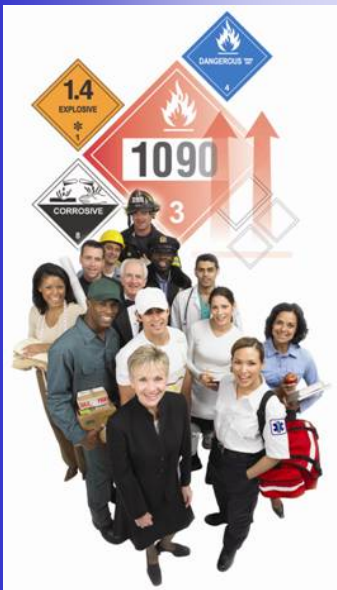
**Since placarding is complex and crucial, do not rely solely on the information in this presentation.**

**Use the HMR and remember to refer to both placarding Table 1 and Table 2 and the exceptions in 172.504(f).**



U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

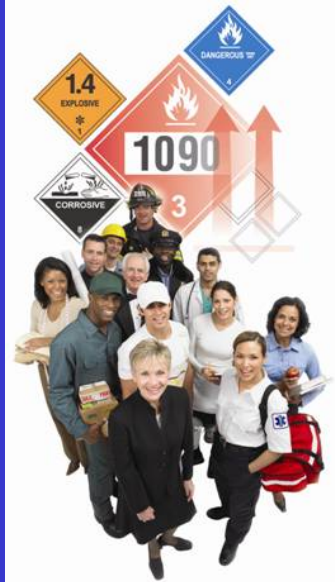
## *Summary*





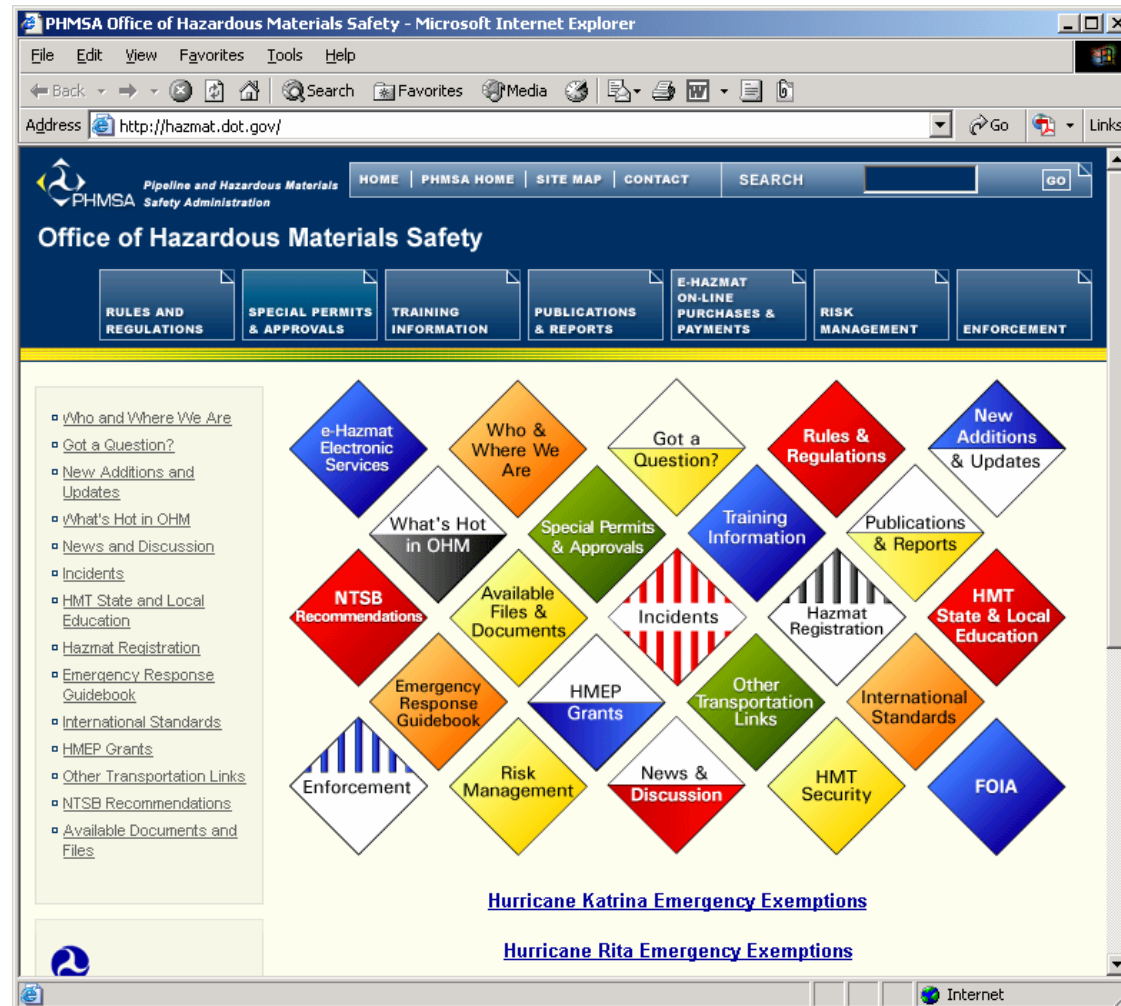
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Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *Where to Find More Information . . .*

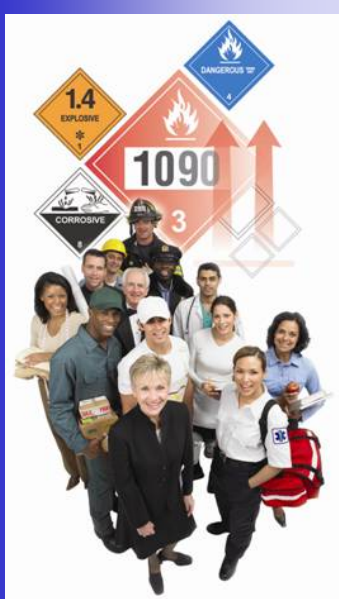


<http://hazmat.dot.gov>



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of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

## *How Can You Reach Us?*

Hazardous Materials

# INFO-LINE

## 1-800-HMR49-22

(1-800-467-4922)

Hours of Operation: 9 am – 5 pm ET



DOT/PHMSA Photo

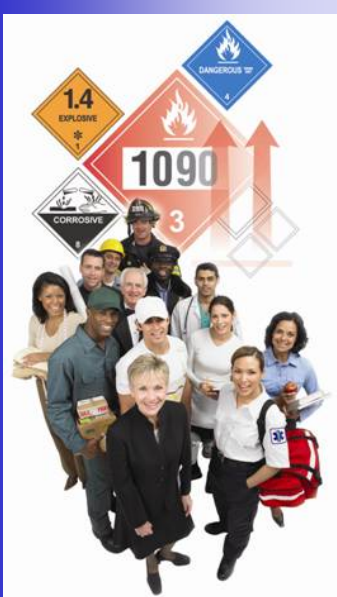
- Obtain answers to HMR questions
- Request copies of Federal Register, special permits or training materials
- Report HMR violations
- Fax on Demand

E-mail: [infocntr@dot.gov](mailto:infocntr@dot.gov)



U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration



Placarding  
Requirements

Got A  
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