



Flammable Liquids



Definitions We Need to Know

- **Boiling point** shall mean the boiling point of a liquid at a pressure of 14.7 pounds per square inch.
- **Closed container** shall mean a container as herein defined, so sealed by means of a lid or other device that neither liquid nor vapor will escape from it at ordinary temperatures.
- **Flammable liquid** means any liquid having a flashpoint at or below 199.4 °F (93 °C).
- **Container** shall mean any can, barrel, or drum.



Identification



Warning
Flammable liquid



4 Categories of Flammable Liquids

Category	Flash point	Boiling Point
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Formerly Known as a Combustible Liquid

- Combustible Liquids no longer exist as a category.



Examples of Flammable Liquids

Acetone

Conversion: 1 ppm = 2.38 mg/m³

Synonyms/Trade Names: Dimethyl ketone, Ke

Exposure Limits:

NIOSH REL: TWA 250 ppm (590 mg/m³)

OSHA PEL†: TWA 1000 ppm (2400 mg/m³)

Physical Description: Colorless liquid with a fr

Chemical & Physical Properties:

MW: 58.1

BP: 133°F

Sol: Miscible

F.I.P: 0°F

IP: 9.69 eV

Sp.Gr: 0.79

VP: 180 mmHg

FRZ: -140°F

UEL: 12.8%

LEL: 2.5%

Class IB Flammable Liquid

Personal Protection (see Table 2):

Skin: Prevent s

Eyes: Prevent e

Wash skin: Wh

Remove: Wher

Change: N.R.

LEL

UEL



0%

2.5%

12.8%

100%



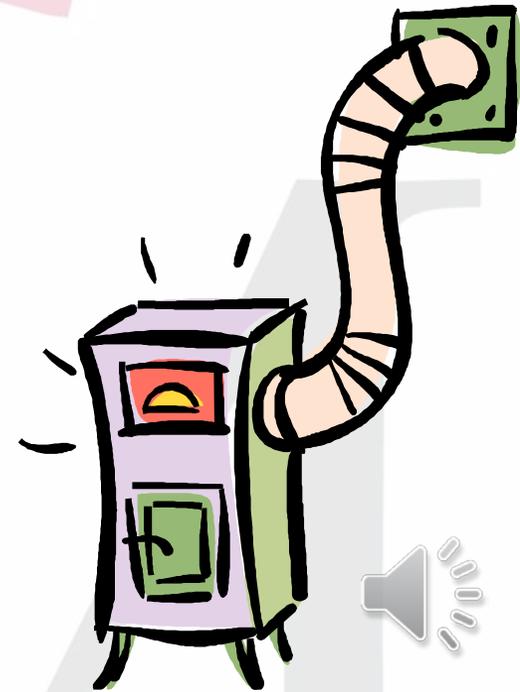
Examples of Flammable Liquids

Gasoline	
Conversion: 1 ppm = 4.5 mg/m ³ (approx)	
Synonyms/Trade Names: Motor fuel, Motor sp	
[Note: A complex mixture of volatile hydrocarbc	
Exposure Limits:	
NIOSH REL: Ca	
See Appendix A	
OSHA PEL†: none	
Physical Description: Clear liquid with a chara	
Chemical & Physical Properties:	Personal
MW: 110 (approx)	(see Tab
BP: 102°F	Skin: Pre
Sol: Insoluble	Eyes: Pr
Fl.P: -45°F	Wash sk
IP: ?	Remove:
Sp.Gr(60°F): 0.72-0.76	Change:
VP: 38-300 mmHg	Provide:
FRZ: ?	
UEL: 7.6%	
LEL: 1.4%	
Class IB Flammable Liquid	



Ignition Sources

- Flames, lightning, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, and mechanical), spontaneous ignition, chemical and physical-chemical reactions, and radiant heat.



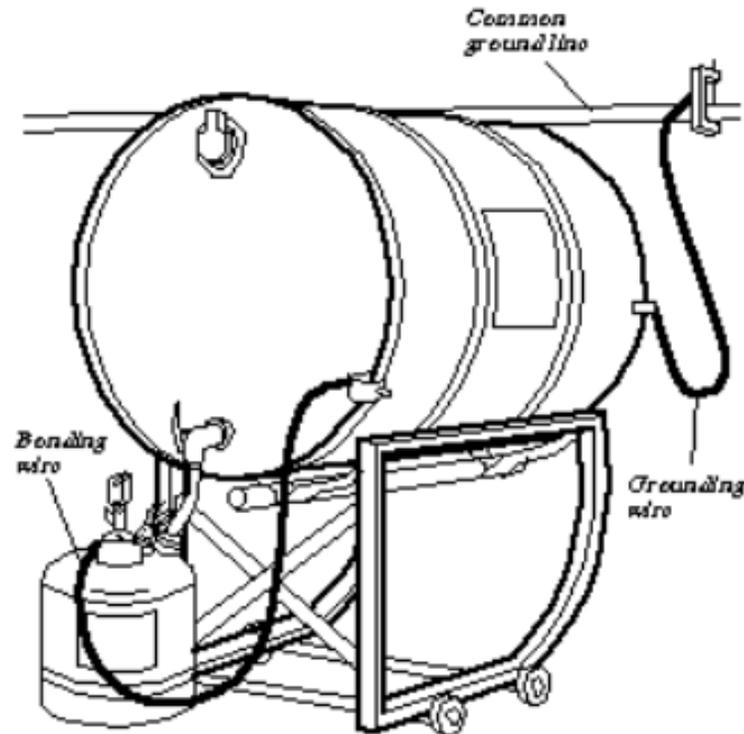
Storage

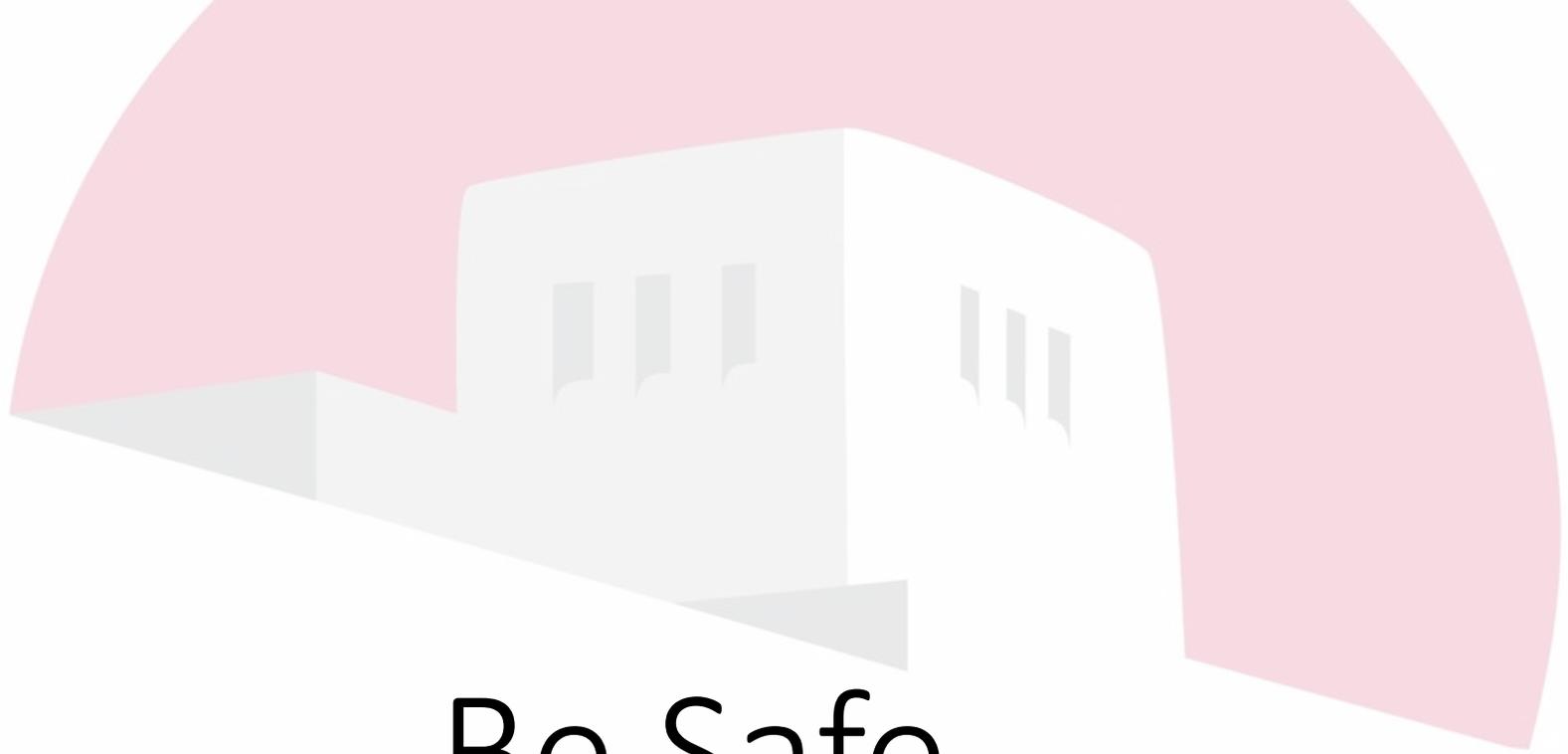
- *Maximum capacity.* Not more than 60 gallons of Category 1, 2, or 3 flammable liquids, nor more than 120 gallons of Category 4 flammable liquids may be stored in a storage cabinet.
- Cabinets shall be labeled in conspicuous lettering, "Flammable - Keep Fire Away."
- "Egress." flammable liquids, including stock for sale, shall not be stored so as to limit use of exits, stairways, or areas normally used for the safe egress of people.



Grounding While Transferring Liquids

- Category 1 or 2 flammable liquids, or Category 3 flammable liquids with a flashpoint below 100 °F (37.8 °C), shall not be dispensed into containers unless the nozzle and container are electrically interconnected.





Be Safe

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Acknowledgement

I _____, have completed the Flammable Liquids training.
(Print Name)

Date: _____

Please print the acknowledgement sheet, fill in requested information and email to srsweb@unm.edu to complete training.