

## Training Module: Safe Use Of Flammable Liquids

**Objective:** To be able to use flammable liquids in a safe manner.

**Trainer's Note:** Review the following information with workers. Stress the importance of keeping flammables away from any possible sparking. Encourage workers to discuss situations where sparking flammables was a problem.

### Background

#### Safe Practices to Follow When Using Flammable Liquids:

Flammables should be stored in a self-closing safety can. Storing flammables in open containers can cause the liquid to vaporize and create an ignitable mixture. This could result in an explosion, if a lit match or spark is present.

Only store gasoline in a red container. Remember it will ignite when coming into contact with a sufficiently hot surface. This is why it is important to allow the engine to cool before refueling.

#### Storing Liquid-Soaked Rags

Store liquid-soaked rags in a metal container with a tight-fitting lid. This keeps oxygen away from the rags, reducing the possibility of a fire. When exposed to air, some rags can produce enough heat to ignite spontaneously. Keep all flammables in a specific storage cabinet, well identified with warning signs.

#### Fire Control

Control all ignition sources. Ignition sources around flammables increase the likelihood of a fire. Enforce the **“no smoking” rule** around flammable liquids. Keep sparking tools away from flammables. Use explosion-proof electrical equipment.

Ground and bond all bulk containers during dispensing operations. It is important to ground and bond bulk containers because some materials can be ignited by the minimal energy in a static spark. There must be a conductive connection between the receiving container, dispensing container and a specially installed ground pipe. When drawing liquids from a bulk tank to a portable use container, the container should have a solid connection between the tank or barrel and the container. Using self-closing valves with the dispensing containers limits spills.

#### Clean Up

Clean up and dispose of spilled material according to local, state and federal regulations.

#### Identification

Identify flammable liquid containers by a red diamond shape label with black lettering.

### Review The Following Points

- Flammables should not be stored in open or unapproved containers.
- Store flammables in a special storage cabinet that is well identified with warning signs for everyone to see.
- Control all ignition sources around flammable liquids.
- Never smoke around flammable liquids.
- Ground and bond bulk containers because some materials can be ignited by the minimal energy in a static spark.

**True or False Answer Key**

1. F, 2. T, 3. F, 4. T, 5. T

## Safe Use Of Flammable Liquids Quiz

**True or False**

**Name** \_\_\_\_\_

- |  |   |   |
|--|---|---|
| 1. Smoking is permitted near flammables.   | T | F |
| 2. Keep all sparking tools away from flammables.   | T | F |
| 3. Flammable liquids should be identified by a black diamond shape symbol with green lettering.                                      | T | F |
| 4. It is important to know and understand the concepts on flammable liquids.   | T | F |
| 5. When rags or other materials are used with a flammable liquid, they should be stored in metal containers with tight-fitting lids. | T | F |