



# Tailgate Safety Training for Landscaping and Horticultural Services

Agricultural Safety Program, 590 Woody Hayes Drive, Columbus, OH 43210

## Safe Use of Flammable Liquids

**Objective: Use flammable liquids in a safe manner.**

### *How to Use This Module*

Flammable liquids must be safely handled to prevent fires. For this module:

- Read the information below on storage, fire control, clean up, and disposal.
- Ask your supervisor to demonstrate safe storage, clean up, and disposal.
- Share experiences with handling flammables with your supervisor and other workers.
- Review the important points.
- Take the True/False quiz to check your learning.

### Background

Many useful liquids are flammable — they can cause a fire. To prevent fires, all flammable liquids must be clearly labeled. Liquids and rags must be stored in the right container. Sparks and smoking must be avoided. You must dispose of spilled liquids or leftovers safely.

### Storing Flammable Liquids

Flammables should be stored in a self-closing safety can. Flammables stored in open containers can vaporize. Vapors can ignite or explode if a lighted match or spark is present.

Store gasoline only in a red container. Remember it will ignite if it comes into contact with a hot surface. So, allow any 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, reducing the chance 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 marked with warning signs.

### Fire Control

Control all ignition sources around flammables. Enforce the **No Smoking Rule** around flammable liquids. Keep sparking tools away from flammables. Use non-sparking electrical equipment around flammables. There **must** be a fire extinguisher within 75 feet of all bulk transfer stations.

Some materials can ignite from the small energy in a static spark. So, ground and bond all bulk containers during dispensing and pouring. 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 container, there should be a solid connection between the tank and the container. Self-closing valves on dispensing and pouring containers will minimize spills. Drums stored outdoors in warm weather may require pressure relief venting caps.

## **Clean Up and Disposal**

You might spill flammable liquids and other chemicals — solvents, pesticides, nitrate fertilizers, or bleach. Or, you may have leftovers. Spills or leftovers become chemical hazardous waste. Clean up and dispose of hazardous waste according to local, state, and federal regulations. Chemical hazardous waste disposal is expensive. Leftovers can often be used or applied elsewhere. But you must take care to use them before they expire.

## **Identification**

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

## **Review These Important Points**

- Never store flammables in open or unapproved containers.
- Store flammables in a special storage cabinet that is well marked 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.

## **About These Modules**

The author team for the training modules in the landscape and horticultural tailgate training series includes Dee Jepsen, Program Director, Agricultural Safety and Health, Ohio State University Extension; Michael Wonacott, Research Specialist, Vocational Education; Peter Ling, Greenhouse Specialist; and Thomas Bean, Agricultural Safety Specialist. Modules were developed with funding from the Occupational Safety and Health Administration, U.S. Department of Labor, Grant Number 46E3-HT09.

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Answer Key: 1 = F, 2 = T, 3 = T, 4 = T, 5 = T.

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

### True or False?

- |  |   |   |
|--|---|---|
| 1. Smoking is permitted near flammables.   | T | F |
| 2. Keep all sparking tools away from flammables.   | T | F |
| 3. Chemicals become hazardous waste when they are spilled or when you no longer have a use for them.                                 | 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 |