

# MAFES Dawg Tracks

October 16, 2017



MISSISSIPPI STATE UNIVERSITY™  
MS AGRICULTURAL AND  
FORESTRY EXPERIMENT STATION

*Flammable Liquids*

Flammable liquids are used at most all our departments and stations. Identify the ones in your work area and ensure safety precautions are understood.

What is a flammable liquid? A flammable liquid is defined by OSHA and by the National Fire Protection Association (NFPA) 30, “Flammable and Combustible Liquids Code,” as any liquid with a flashpoint below 100° F. (37.8° C) and a vapor pressure not exceeding 40 psia 100° F. Flammable liquids are called Class 1 liquids and are divided into three groups — Class 1A, 1B and 1C — according to the degree of the hazard. Liquids with flashpoints above 100° F are called combustible.

When you see a flammables symbol or the word “FLAMMABLE” on a can, jug, tank, or drum you must keep sparks and other forms of ignition away from that container.

## FLAMMABLE SYMBOLS



A fact that may surprise some people is that flammable liquids themselves do not burn; their vapors burn. This is why it is vitally important to keep the tops on flammable liquid containers. An apparently empty flammable container (full of vapors) is potentially more dangerous than a full container of flammable liquid.

It has been said that 1 gallon of vaporized gasoline can explode with the same force as 20 sticks of dynamite. Because flammable liquids obviously are so hazardous, precautions must be taken to keep them protected, if not isolated, from exposure to fire.

Precautions to take with flammable liquids:

- Avoid accumulation of vapors and to control sources of ignition including: open flames, electrical equipment & sources of static electricity.
- Never re-fuel running or hot equipment such as generators, weed eaters, or chainsaws.
- In laboratories, when working with open containers, use a fume hood to control the accumulation of flammable vapor.
- Store, use, and transport flammable liquids only in approved containers.
- Use UL approved flammable storage cabinets for smaller containers and aerosols.
- Do not use regular refrigerators for flammable that must be kept cool; only use UL listed explosion proof refrigerators.
- On drums install grounding/bonding wires and a safety drum vent - designed to automatically prevent pressure from building up inside the drum if it is exposed to heat. It also prevents a vacuum from forming if the drum is subjected to sudden cooling. Increased pressure in a drum is a major cause of the explosion of flammable liquids. Both pressure and vacuum can cause a drum to fail or leak.
- Always inspect your work area for gas jugs, lacquer thinner cans or any flammable items before welding, cutting or grinding.

For more info contact – Leslie Woolington  
MAFES /MSU-EXTENSION  
Risk Mgmt. / Loss Control  
(662) 325-3204

Written 10-12-17 with sources:

ThyssenKrupp Elevator Toolbox Talks

<http://www.ehstoday.com/environment/hazardous-waste/safe-handling-flammable-liquids-0309>

<https://www.seton.com>