



MISSISSIPPI STATE UNIVERSITY™
MS AGRICULTURAL AND FORESTRY
EXPERIMENT STATION

MAFES DAWG TRACKS

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

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. (Gasoline is a flammable, where diesel is a 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.



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.

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Precautions to take with flammable liquids:

- Avoid accumulation of vapors and to control sources of ignition including open flames, electrical equipment and sources of static electricity.
- Never re-fuel running or hot equipment such as generators, trimmers, 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 a regular refrigerator for flammables that must be kept cool; only use UL listed explosion proof refrigerators.
- On flammable 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.

Sources:

ThyssenKrupp Elevator Toolbox Talks
<http://www.ehstoday.com/environment/hazardous-waste/safe-handling-flammable-liquids-0309>
<https://www.seton.com>