



Tailgate Safety Talk

Information You Can Use to Prevent Accidents & Injuries

Use a Safety Can for Gasoline

Gasoline is an extremely flammable liquid fuel. It should always be handled and stored properly in order to reduce the likelihood of fires and explosions. Personal injuries ranging from first degree burns to fatalities can result from improper handling and storage practices. Safety cans are designed to control the flammable vapors of gasoline and to provide a safe and convenient means for storage and transfer. Underwriters Laboratories (UL) *approved* safety cans should be used to carry, dispense, and store gasoline in quantities up to five gallons.

Failure to use approved *metal* containers for flammable or combustible liquids has often been cited by compliance officers. However OSHA revised the rule on safety cans (1926.152(a)(1), allowing D.O.T. approved *plastic* safety cans. It was further determined that these plastic containers need not be equipped with a spring closing lid, spout cover and flash arresting screen.

Nevertheless, many state safety codes and jurisdictions will allow only metal safety cans on the worksite, at least until local codes are changed. Construction managers may feel that plastic will not hold up as well under heavy use and handling. Whatever standards must be followed, it is important to understand the features and benefits of a safety container so that you and your co-workers can best guard against fire or explosion.

Approved safety cans have several basic design qualities:

1. They have a spring loaded cap that closes the spout automatically when released. Tension in the spring forces the cap closed and provides a leak proof seal.
2. The spring tension is also designed to lift the cap slightly in the event of excessive internal vapor pressure inside the can. This automatically vents off vapors at approximately five psi internal pressure, to prevent the can from rupturing or exploding if it is exposed to excessive outside heat.
3. The spout is also equipped with a flame arrester screen designed to prevent outside fire from reaching the gasoline inside the can. This is the same type of screen that is found in marine gasoline engine carburetors. With the screen in place, if the can is involved in a fire, the vapors will burn around the spout, but will not permit an internal fire or explosion. This screen must not be removed or damaged. Sometimes safety cans are also used to hold thick liquids such as lubrication oil, which is not recommended. Since the heavy liquid will not pass through the screen, the screen is often removed, defeating an important safety feature of the container.

Finally, it is extremely dangerous to carry gasoline--even in a safety can--in the trunk of a vehicle. If the trunk heats up from the sun, the contents of the can will expand and pressure will raise the spring-activated cap. This permits vapors to accumulate in the trunk, and an explosion may result.

Do your part to prevent fires that can lead to serious burns, loss of life and significant property damage. Whether it is required or just good sense, always use *approved* safety cans when handling gasoline or other flammable liquids. Periodically inspect the cap, spring and flame arrester screen as well, to be sure it will provide the safety you expect.

Users of this tailgate talk are advised to determine the suitability of the information as it applies to local situations and work practices and its conformance with applicable laws and regulations.