



# Weekly Safety Meeting

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## Safety Cans

Are you using a red plastic gas can? If so, you may be living with a ticking time bomb. Deadly explosions causing catastrophic burn injuries and deaths are occurring across America due to the absence of a flame arrester in the canister.

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 of storage and transfer.

OSHA states "Only approved containers and portable tanks shall be used for storage and handling of flammable and combustible liquids. Approved safety cans or Department of Transportation (DOT) approved containers shall be used for the handling and use of flammable liquids in quantities of 5 gallons or less."

ANYTIME THE WORD 'SHALL' IS USED IN A REGULATION, IT MEANS THAT THIS RULE IS MANDATORY AND MUST BE FOLLOWED.

### Approved Safety Cans:

A safety can is an approved, closed container, of not more than 5 gallons capacity, having a flash arresting screen, spring closing lid, and spout cover; and is so designed that it will safely relieve internal pressure when subjected to fire exposure.

Approval is given by a nationally recognized testing laboratory, for example, Underwriters' Laboratory, Inc (UL).

UL approved safety cans should be used to carry, dispense, and store gasoline in quantities up to five gallons.

Gas cans can only display DOT approval markings when they meet stringent Department of Transportation requirements.

Here is where it gets confusing: Inexpensive plastic gas cans may meet EPA (Environmental Protection Agency) requirements, but they do NOT meet DOT rules.

Some gas cans may say they meet California Air Resources Board (CARB) or Air Quality Management (AQMD) spill-proof regulations in certain states.

But this doesn't help when trying to comply with OSHA. None of these other regulatory agencies are the same as DOT. They are not interchangeable.

### Approved Safety Cans Have Several Basic Design Qualities:

- 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.
- 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.
- 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 in the trunk of a vehicle, even in a safety can. If the trunk heats up from the sun, the contents of the can will expand and pressure will raise the spring cap. This permits vapors to accumulate in the trunk. 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 the can will provide the safety you expect.

***ACCIDENTS BRING TEARS, FIRE SAFETY BRING CHEERS!!***

