

The 101 DAYS OF SUMMER



Toolbox Talk Lesson Plan

Safety Cans for Fuel Transport and Storage

Gasoline is a fuel for internal combustion engines. Its vapors can be easily ignited by a spark, flame or hot objects. When mixed with air in the right proportions, the vapor of one cup of gasoline has the explosive power of about five pounds of dynamite; enough destructive force to destroy vehicles or buildings. A safety can is designed to specifically eliminate one or more of the elements needed for a fire or explosion to occur.

Milk jugs, glass containers and many so called 'gas cans' are not suitable for storing gasoline. Plastics may become brittle when exposed to gasoline or are not strong enough to withstand the pressures of expansion caused by temperature changes. In addition, some containers sold as gas cans cannot be sealed sufficiently to prevent spilling. A safety can helps control flammable vapors and stores up to 5 gallons of flammable liquid. PEOSH does not accept plastic cans greater than one gallon.

What makes a can a "Safety Can"?

- Rugged 24-gauge coated steel construction that is chemically resistant to gasoline, diesel fuel, or kerosene. It will be tested and approved by UL or FM
- A spring loaded, self-closing lid with a gasket to keep it airtight & leak tight.
- Positive pressure relief that prevents rupture (or explosion) in the event of an external fire.
- Internal dual-density flame arrester within the fill/pour spout that dissipates heat to prevent flashback ignition and explosion. The flash arrester dissipates heat generated by a flame. It insures that the vapors on the inside of the flash arrester do not reach their ignition temperature.



Carry fuel only in UL or FM approved containers clearly labeled and painted to identify the type of fuel as follows: Yellow for the storage of gasoline and Diesel, blue for the storage of Kerosene, and green for the storage of combustible liquids, such as oils.

A **Type I** safety can has a single spout from which you both fill and pour.

A **Type II** safety can has two openings at the top, one with a flexible metal hose for smooth, accurate pouring into small apertures. The hose also provides a bonding path to a receiving vessel. The second opening behind the handle is used for filling.

Hauling gasoline can be dangerous. Avoid carrying gasoline in vehicles unless absolutely necessary. If you must carry gas, secure the can so that it will not slide around or tip over if you must make sudden stops or turns. Remove the container as soon as you get where you are going.

Storing gasoline and other flammable liquids at home is also dangerous, if not done properly. The best way to store gasoline is in a safety can, in a well ventilated area - separate from the house. Never smoke when handling gasoline and never refuel a hot or running engine.

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