NAME: _____ DATE: _____

LOCATION: _____ YOUR SAFETY CONCERNS: _____

DISCUSSION LEADER: _____ _____

Today's Topic: Plastic Gas Cans

Gasoline is commonly used in construction for fueling portable power equipment, ranging from lawn mowers and trimmers to concrete saws and generators. The types of containers used for gas storage are as varied as the types of equipment that gasoline powers. Due to the extreme flammability of gasoline, special precautions must be taken when storing it.

Did you know OSHA does not allow plastic gas on the jobsite?

Do you know why? Here we discuss the risks and what you can do to protect yourself and your co-workers!

The Risks: Why Plastic Gas Cans are Dangerous

The explosive force of a ruptured gasoline container can kill. Statistics reveal nearly a dozen deaths and 1,200 injuries due to gas can explosions have occurred over the past 15 years. The risk is often greatest when fueling equipment; vehicle fires can occur when filling metal portable gasoline cans while placed on the back of pickup trucks with plastic bed liners. Approved metal cans have built-in safety features that are designed to control the flammable vapors of gasoline and to provide a safe and convenient means for storage and transfer. Only Underwriters Laboratories (UL)-approved safety cans should only be used. Be sure to verify UL "approval", as you will see the following words on the product: "UL Listed". If your can has a UL Classified marking, this is not the same as UL Listed (approved).

Solution: Using only "Approved" Metal Safety Cans

According to OSHA, 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 designed to safely relieve internal pressure when subjected to fire exposure. Most plastic cans often lack one or more of these required elements and are therefore unapproved.

Approved safety cans are designed so that:

- 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 5 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. 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.

What does a “flame arrestor” do?

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Can gasoline be stored in plastic gas cans as long as they are labeled and kept tightly closed?

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What are the features of an approved safety gas can?

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