

Safety Note #136

PORTABLE FUEL STORAGE CONTAINERS



Gasoline and diesel are flammable and combustible liquids, respectively, that are frequently used in agricultural operations. It is important to carefully handle and store these flammable and combustible liquids when used in small quantities of typically five gallons or less. Storing gasoline or diesel in plastic food or drink containers is not allowed because they are not capable of withstanding the pressures of fuel expansion and contraction caused by temperature changes and some plastics become brittle with age, fail, and cause fuel spills. In addition, using food or drink containers for storing hazardous materials could cause confusion over their contents, increasing the chance of accidental exposure. Some common containers sold as gas cans do not meet workplace safety standards and are not approved by the Department of Transportation (DOT) for use as gas cans because they cannot be sealed adequately to prevent spilling and fires.

The regulatory definitions of flammable and combustible liquids are as follows:

- **Flammable liquid** means any liquid that has a flashpoint below 100°F (37.8°C).
- **Combustible liquid** means any liquid having a flashpoint at or above 100°F (37.8°C).

A safety can made of a heavy-gauge metal and having a cap that automatically closes to prevent a spill if the can is dropped or tipped over is required, under California Code of Regulations Title 8, Section 3319, for storing **flammable liquids** like gasoline. The squat shape makes a safety can difficult to tip and a pressure-relief valve opens when vapor pressure inside the can reaches three to five pounds per square inch. A flash-arresting screen in the filler opening and pouring spout will reduce the possibility of a spark which could cause a fire or explosion.

Since diesel fuel is a **combustible liquid** it should be stored in a DOT approved fuel container and then properly labeled for its contents.

Additional Information About Portable Fuel Storage Containers:

- Always label fuel containers according to their contents. Do not risk confusing diesel and gasoline. Paint gasoline cans red and diesel cans green. Store cans in a cool, well-ventilated place, away from living quarters and ignition sources.
- When transferring fuels, bond the containers to each other and ground the one being dispensed to prevent sparks from static electricity. Clean up spills right away and put fuel-soaked rags in a tightly covered metal container. Change your clothes immediately if gasoline or diesel is spilled on them.
- Vapors might still be present in empty containers that held flammable or combustible liquids. Store these containers in well-ventilated areas away from heat and sparks or other ignition sources.
- Keep all equipment used for gasoline and diesel storage and handling in good condition. Watch for leaks, deterioration, or damage. Make needed repairs or replace faulty components immediately. Keep cap vents clean and free and pressure-relief valves functional.
- Old or unrepairable fuel storage containers should be vented for at least three days before disposal in the garbage. Contact your local fire department for additional information about fuel storage container disposal.



Additional information about fuel safety is provided in Safety Notes [#25-Safe Fueling Practices](#), [#49-Propane Tank Safety](#) and video E-020 available from the ANR Environmental Health and Safety Library at <http://safety.ucanr.edu>