

## Safety Containers to Control Flammable Liquid Vapors

### Summary

Flammable liquid safety containers come in a wide range of shapes and sizes. Their principal purpose is to isolate their contents from a fire and to prevent or retard the contents from contributing to a fire. They are specifically built to withstand moderate mechanical shock and provide other fire safety features such as: proper vapor control and venting, flame arrestor (perforated metal or wire screen), liquid-tight seams, recessed bottom and automatic closing covers. The following photos are a sample of the many types of UL-listed cans available.

Transporting flammable liquids between storage spaces or points of immediate use always presents some risk of spillage and /or flammable vapor escape. UL listed safety containers shall always be used for limited flammable liquid transports and interior storage to minimize this exposure. When selecting a container for a specific purpose, however, it is important to first examine operations and processes to make sure that unnecessary transfers or dispensing operations are avoided. Investigate factors such as the minimum quantity of solvent needed, the size of the fill opening in the receiving vessel, the dispensing speed, provisions for proper air replacement or escape for displaced air, and bonding capability for containers and equipment.



Bench, Daub & Plunger



DOT Transport



Faucet Cans



Lab Cans



Polyethylene



Metal Type I & II



Metal & HDPE cans



Special purpose butt cans



Plunger can



Bench Can



Rinse unit



Spectrum special cans

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### Description of Can Usage

- **Safety Plunger Cans** are ideal for cleaning with flammable or volatile fluids. They feature brass flame arrestor dasher screens and pump assemblies and comply with OSHA standards. When the dasher plate is pushed down, the safety can dispenses a small amount of liquid to easily moisten sponges or rags without messy or dangerous spills.

- **DOT Transport safety can** helps reduce the danger of explosion while dispensing flammable liquids through a flexible metal spout. Can has double-walled brass flame arrestors in filler opening and pour spout. Heavy-duty roll bars protect both spouts and a thumb screw mechanism assures that the filler opening stays closed while being transported. Meets DOT requirements.
- **Faucet cans** easily dispense flammable liquids into small capacity vessels using self-closing dispensing faucet. Typical use is for use workbenches or elevated shelves
- **Lab Cans** constructed of Coated Metal, Stainless, or Polyethylene Used in scientific, industrial, and hospital laboratories. Reduces the danger of explosions resulting from ignition of vapors of flammable liquids. FM approved and meets OSHA requirements. Oblong shape conserves shelf space.
- **High Density Polyethylene Type I Safety Cans** meet OSHA requirements, are Factory Mutual (FM) approved, and help reduce the danger of explosions resulting from ignition of vapors of flammable liquids. These cans are impact resistant, non-corroding, and will not rust. They are impervious to many liquid chemicals, solvents, and corrosives. Metal fittings and flame arrestor are made of stainless steel.
- **Type I Steel Safety Cans** are made completely of sturdy 24 gauge type 316 stainless steel in 2½ and 5 gallon capacities. Stainless steel flame arrestor. Electric seam weld joins top and body.
- **Type II Safety Cans** are made of Galvanized Steel and help reduce the danger of explosion while dispensing flammable liquids through a flexible 12" metal spout. Brass flame arrestors in filler opening and pour spout.
- **Metal and HDPE Disposal Safety Cans** provide an intermediate station for temporary storage of liquid wastes. Spout cap opens to a wide 80° angle and can be locked open for conveniently emptying various type containers. The can is equipped with a frame arrestor. Cap assembly opens automatically to relieve excessive internal vapor pressures.
- **Butt specialty cans** each serve a unique purpose that suits your needs.
- **Floor-standing rinse tanks** provide space where larger parts can be immersed. There is a self-closing cover is foot-treadle operated, so a worker with both hands full can open it.

**Special Cans have been developed for not only flammable but also other chemicals. Consult a distributor for the needs of your operation.**

### Related Information:

[Eagle Manufacturing Company](#)  
2400 Charles Street  
Wellsburg, West Virginia 26070

[The Protectoseal Company](#)  
225 W. Foster Ave.  
Bensenville, IL 60106  
Phone: (630) 595-0800

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[Freund Container](#)  
155 West 84th Street  
Chicago, IL 60620  
Phone: 773.224.4230

[Justrite Manufacturing Company](#)  
(847) 298-9250  
(800) 798-9250

## References

- Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062.
- UL 2080, Standard for Fire Resistant Tanks for Flammable and Combustible Liquids, 2000.
- NFPA 70, National Electrical Code®, 1999 edition.
- NFPA 88B, Standard for Service Stations and Repair Garages 1999 edition.
- NFPA 220, Standard on Types of Building Construction, 1999 edition.
- NFPA 230, Standard for the Fire Protection of Storage, 1999 edition.
- ASTM D 92, Standard Test Method for Flash and Fire Points by Cleveland Open Cup, 1998.
- ASTM D 93, Standard Test Methods for Flash Point by the Pensky-Martens Closed Tester, 1999.
- ASTM D 323, Standard Method of Test for Vapor Pressure of Petroleum Products (Reid Method), 1999.
- ASTM D 3278, Standard Method of Tests for Flash Point of Liquids by Setaflash Closed Tester, 1996.
- ASTM D 3828, Standard Test Methods for Flash Point by Small Scale Closed Tester, 1998.
- ASTM F 852, Standard for Portable Gasoline Containers for Consumer Use, 1999.

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