

- (2) 120 gallons of Class IB, IC, II or III liquids in containers
- (3) 660 gallons of Class IB, IC, II or III liquids in a single portable tank

■ OSHA 29 CFR 1910.106(d)(3)(i&ii): Design, construction, and capacity of storage cabinets - (i) Maximum capacity.

Not more than 60 gallons of Class I or Class II liquids, nor more than 120 gallons of Class III liquids may be stored in a storage cabinet.

(ii)(a) Fire resistance. Storage cabinets shall be designed and constructed to limit the internal temperature to not more than 325°F. when subjected to a 10-minute fire test using the standard time-temperature curve as set forth in Standard Methods of Fire Tests of Building Construction and Materials, NFPA 251-1969. All joints and seams shall remain tight and the door shall remain securely closed during the fire test. Cabinets shall be labeled in conspicuous lettering, "Flammable – Keep Fire Away."

(a) Metal cabinets constructed in the following manner shall be deemed to be in compliance. The bottom, top, door, and sides of cabinet shall be at least No. 18 gauge sheet iron and double walled with 1 1/2" air space. Joints shall be riveted, welded, or made tight by some equally effective means. The door shall be provided with a three-point lock, and the door sill shall be raised at least 2" above the bottom of the cabinet.

(ii)(b) Wooden cabinets constructed in the following manner shall be deemed in compliance. The bottom, sides, and top shall be constructed of an approved grade of plywood at least 1 inch in thickness, which shall not break down or delaminate under fire conditions. All joints shall be rabbeted and shall be fastened in two directions with flathead woodscrews. When more than one door is used, there shall be a rabbeted overlap of not less than 1 inch. Hinges shall be mounted in such a manner as not to lose their holding capacity due to loosening or burning out of the screws when subjected to the fire test.

■ International Fire Code[^]: 3404.3.2 Liquid storage cabinets.

Where other sections of this code require that liquid containers be stored in storage cabinets, such cabinets and storage shall be in accordance with Sections 3404.3.2.1 through 3404.3.2.3.

3404.3.2.1.1 Materials. Cabinets shall be listed in accordance with UL 1275, or constructed of approved wood or metal in accordance with the following:

1. Unlisted metal cabinets shall be constructed of steel having a thickness of not less than 0.044 inch (1.12 mm) (18 gage). The cabinet, including the door, shall be double walled with 1-1/2 inch (38 mm) airspace between the walls. Joints shall be riveted or welded and shall be tight fitting.

3404.3.2.1.2 Labeling. Cabinets shall be provided with a conspicuous label in red letters on contrasting background which reads: **FLAMMABLE—KEEP FIRE AWAY.**

3404.3.2.1.3 Doors. Doors shall be well fitted, self-closing and equipped with a three-point latch.

3404.3.2.1.4 Bottom. The bottom of the cabinet shall be liquid tight to a height of at least 2 inches (51 mm).

■ NFPA 1 The Uniform Fire Code – 2006 Edition^{}:**

60.1.2.23 Hazardous Materials Storage Cabinets.

(d.) Doors shall be well fitted, self-closing, and equipped with a self-latching device.

[^], ^{*}, ^{**} See page 39.

■ NFPA Code 30 – 2008 Edition*:

9.5.1 The volume of Class I, Class II, and Class IIIA liquids stored in an individual storage cabinet shall not exceed 120 gal (460 L).

9.5.2 The total aggregate volume of Class I, Class II, and Class IIIA liquids in a group of storage cabinets shall not exceed the maximum allowable quantity of flammable and combustible liquids per control area based on the occupancy where the cabinets are located.

9.5.4 Storage cabinets shall not be required by this code to be ventilated for fire protection purposes.

9.5.4.1 If not ventilated, storage cabinet vent openings shall be sealed with the bungs supplied with the cabinet or with bungs specified by the cabinet manufacturer.

9.5.4.2 If ventilated for any reason, the storage cabinet vent openings shall be ducted directly to outdoors in such a manner that will not compromise the specified performance of the cabinet and in a manner that is acceptable to the authority having jurisdiction.

The National Fire Code of Canada (NFC) 1995 Edition, section 4.2.10.5 references storage Cabinets must conform to ULC-C1275.

■ ULC/ORD-C1275-84

1.1 These requirements cover storage cabinets for flammable liquid containers which are intended for the storage of flammable liquid and permitted by the relevant sections of the National Fire Code of Canada.

1.2 The cabinets are tested to determine their ability to withstand a standard fire exposure for a period of 10 minutes without developing an internal temperature rise in excess of 139°C above ambient.

■ OSHA 29 CFR 1910.1200(g)(8):

The employer shall maintain in the workplace copies of the required material safety data sheets for each hazardous chemical, and shall ensure that they are readily accessible during each work shift to employees when they are in their work area(s). (Electronic access, microfiche, and other alternatives to maintaining paper copies of the material safety data sheets are permitted as long as no barriers to immediate employee access in each workplace are created by such options.)

■ OSHA 29 CFR 1910.106(a)(29):

Safety Can shall mean an approved container, of not more than 5 gallons capacity, having a spring-closing lid and spout cover and so designed that it will safely relieve internal pressure when subjected to fire exposure.

■ 1910.106 (d)(2)(iii)(b)

Table H-12 – Maximum Allowable Size of Containers and Portable Tanks

Container Type	Flammable Liquids		Combustible Liquids		
	Class IA	Class IB	Class IC	Class II	Class III
Glass or approved plastic	1pt	1qt	1 gal	1 gal	1 gal
Metal (other than DOT drums)	1 gal	5 gal	5 gal	5 gal	5 gal
Safety cans	2 gal	5 gal	5 gal	5 gal	5 gal
Metal drums (DOT specs)	60 gal	60 gal	60 gal	60 gal	60 gal
Approved portable tanks	660 gal	660 gal	660 gal	660 gal	660 gal

Note: Container exemptions: (a) Medicines, beverages, foodstuffs, cosmetics, and other common consumer items, when packaged according to commonly accepted practices, shall be exempt from the requirement of 29 CFR 1910.106(d)(2)(i) and (ii).

California Air Resources Board (CARB) Title 13 of the California Code of Regulations:

2467.2 Performance Standards for Portable Fuel Containers and Spill-Proof Spout

(2) Automatically closes and seals when removed from the target fuel tank and remains completely closed when not dispensing fuel.

2467.3 Exemptions

(c) This Article does not apply to safety cans meeting the requirements of Chapter 17, Title 29, Subpart F, of the Code of Federal Regulations.

■ DOT 49 CFR Parts 100 to 177:

All Justrite DOT Cans carry UN designation-1A1/Y1.2/100

■ OSHA 29 CFR 1910.106(e)(2)(ii): Incidental storage or use of flammable and combustible liquids:

Containers. Flammable or combustible liquids shall be stored in tanks or closed containers.

■ OSHA 29 CFR 1910.106(a)(9):

Closed container shall mean a container as herein defined, so sealed by means of a lid or other device that neither liquid nor vapor will escape from it at ordinary temperatures.

■ OSHA 29 CFR 1910.106 (e)(2)(iv)(a):

Flammable liquids shall be kept in covered containers when not actually in use.

■ OSHA 29 CFR 1926.252(e):

(e) All solvent waste, oily rags, and flammable liquids shall be kept in fire resistant covered containers until removed from worksite.

■ OSHA 29 CFR 1910.125(e)(4)(ii&iii):

Rags and other material contaminated with liquids from dipping or coating operations are placed in approved waste cans immediately after use; and waste can contents are properly disposed of at the end of each shift.

■ OSHA 29 CFR 1910.106(e)(9)(iii):

Waste and residue. Combustible waste material and residues in a building or unit operating area shall be kept to a minimum, stored in covered metal receptacles and disposed of daily.

■ OSHA 29 CFR 1910.144: Safety Color Code for Marking Physical Hazards

(a)Color identification – (1) Red. Red shall be the basic color for the identification of ... (ii) Danger. Safety cans or other portable containers of flammable liquids having a flash point at or below 80°F, table containers of flammable liquids (open cup tester), excluding shipping containers, shall be painted red with some additional clearly visible identification either in the form of a yellow band around the can or the name of the contents conspicuously stenciled or painted on the can in yellow.

■ OSHA 29 CFR 1910.123(d):

Dip tank means a container holding a liquid other than water and that is used for dipping or coating. An object may be immersed (or partially immersed) in a dip tank or it may be suspended in a vapor coming from the tank.

■ OSHA 29 CFR 1910.125(f)(3)(i):

You may substitute a cover that is closed by an approved automatic device for the automatic fire-extinguishing system if the cover can also be activated manually.