

Alert 14-17: Considerations for Storing Flammable and Combustible Liquids

Recently, the storage of combustible and flammable liquids in industrial occupancies has gained increased attention. This is due to a number of large fires caused or complicated by the storage of flammable and combustible liquids in inappropriate packaging types.

Among the most reliable and safest storage containers for all classes of flammable and combustible liquids are “relieving-style” steel drums. Relieving-style steel drums are equipped with plastic plugs. When fire-exposed, these fittings can melt, allowing the pressure within the drum to vent in a safer manner. The Industrial Steel Drum Institute (ISDI) has led the way in ensuring that this container type provides exceptional protection against fires and other hazards. In fact, extensive fire testing at the Southwest Research Institute in San Antonio, Texas has shown that, when protected by an adequate fire sprinkler system, relieving-style 55-gallon steel drums are much safer than other, less fire-resistant packaging when filled with flammable liquids, reducing risks especially for first responders.

Additionally, steel drums retain their structural integrity when exposed to flame, making packaging failure unlikely and reducing the risk of a large volume chemical spill.

The National Fire Protection Association (NFPA) has been especially vigilant in setting out guidelines regarding the proper storage of combustible and flammable liquids. Its code, NFPA 30, details the types of containers suitable for storing these liquids and the rules that must be followed for those that are used. When choosing the appropriate packaging, it is important to follow NFPA 30 and select a product that will provide protection from a catastrophe.

In an educational effort, NFPA recently released a press kit describing the proper use of intermediate bulk containers (IBCs) for storage of combustible and flammable liquids. This important NFPA release was followed by an article in *Sprinkler Age* magazine. Links to both resources can be found below.

Links for More Information

- Read a [recent article](#) in *Sprinkler Age* magazine, written by Mike Snyder of Dow Corning Corporation and David Nugent of Global Risk Consultants, on the risks associated with unlisted composite IBCs.
- Download the [NFPA's tool kit](#) on IBC fire risk.
- Read [ISDI's Alert 14-08](#) for more information about choosing the most appropriate packing type for your product.

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