

Jason Mechanical Corp

Tool Box Safety Talk

Storage of Hazardous Chemicals

Improperly stored hazardous chemicals at the workplace could have catastrophic results, including fire and/or explosion. Common hazardous chemicals found at the workplace include gasoline, kerosene, compressed oxygen and compressed acetylene. However, there are an infinite number of possible combinations of chemicals that need to be stored at the workplace.

Smoking will be prohibited at or in the vicinity of operations which constitute a fire hazard and a sign reading: "No Smoking or Open Flame" must be conspicuously posted.

At least one fire extinguisher having a rating of not less than 20-B units will be located not less than 25 feet, nor more than 75 feet, from any flammable liquid storage area. At least one portable fire extinguisher, having a rating of not less than 20-B units will be located outside of, but not more than 10 feet from, the door opening into any room used for storage of more than 60 gallons of flammable or combustible liquids.

Chemicals, as noted on labels and on Safety Data Sheets, often have specific storage requirements which may include such items as heat, cold, humidity, light, motion, and reactivity. The SDS, for gasoline, for example contains reactivity data which includes conditions to avoid such as high temperature and materials to avoid, such as strong oxidizers.

The fuels and flammables must be segregated from oxidizers. At the workplace, oxygen cylinders in storage must be separated from fuel gas cylinders by at least 20 feet.

Chemical containers which have been damaged present a special problem because contamination may result. The entry of a foreign substance into the original chemical can change the chemical properties and the results can be very dangerous.

Flammable or combustible toxics or oxidizing agents not compatible with water should be individually separated and certainly not be placed under the fire protection of a sprinkling system.

Class I flammable liquids can never be stored in a basement area.

Of course, only approved containers and portable tanks are allowed for the storage and handling of flammable and combustible liquids.

Flammable or combustible liquids may never be stored in areas used for exits, stairways, or areas normally used for the safe passage of people.

Up to 25 gallons of a flammable and combustible liquid may be stored in a room outside of an approved storage cabinet.

If you don't know the storage requirements of a particular chemical, ask.

