

Flammable Liquids: Know the Danger of Vapors

5-Minute Talk

Overview of topic

Flammable liquids give off ignitable vapors, therefore, wherever flammables are located, workers must beware of ignition sources (even static electricity can ignite a flammable vapor).

In addition, nearly all flammable liquid vapors are heavier than air and will accumulate in low areas. These vapors are dangerous when they begin to accumulate. When they accumulate sufficiently, they spread and may eventually reach an ignition source. These ignition sources might be cigarettes, a hand tool that sparks, a cutting torch, or an operating motor.

Disposal

Disposing of waste flammable liquids requires as much caution in handling as do any of the other stages of use. Oily, solvent-soaked rags can easily start a fire. A pile of solvent-soaked rags builds up heat on its own—sometimes enough heat to start a fire. To prevent this, specially designed waste cans should always be used for temporary storage. These cans have spring-loaded lids and a raised bottom with vent holes to disperse heat. At the workstation, use approved safety drain cans or disposal cans to collect waste flammable liquids.

Spill cleanup

It is the vapors, rather than the liquid itself, that burn. When the liquid is spilled, vapor release begins immediately, and continues until the liquid is removed. Cleanup of incidental spills must begin promptly.

Specially designed absorbent materials have been developed for spill cleanup. These products are offered in pillows, pads, sheets, tubes and other shapes to fit all cleanup needs. Once the absorbent material is saturated, it is placed in a large disposal drum and sealed with a drum cover. Another spill cleanup alternative involves the use of specialized pumps or vacuum equipment.

Employee training

OSHA regulations do not contain any specific training requirements for flammable/combustible liquids. However, at 29 CFR 1910.106(b)(5)(vi)(v)(3), the rule requires that “tank station operators and other employees . . . are thoroughly





informed as to the location and operation of such valves and other equipment necessary to effect these requirements.” This applies to tank storage in flood-prone areas.

Training tips

Identify what flammable liquids are present at your facility, where they are located, and what they are used for.

Review your established procedures for disposing of flammable liquids.

Discuss the availability and location of spill cleanup supplies that are available at your facility.

Where to go for more information

OSHA regulations at 29 CFR 1910.106, Flammable liquids.

