



FIRE MARSHAL'S OFFICE

Flammable and Combustible Liquids

Hazardous chemicals (Flammable and Combustible Liquids) are defined as those that pose an unreasonable risk to the health and safety of operating or emergency personnel, the public and the environment if not properly controlled during handling, storage, manufacture, processing, packaging, use, disposal or transportation.

The danger associated with flammable and combustible liquids is that the vapors from these liquids, when combined with air, will burn or explode at temperatures near our normal living and working environment. In general, flammable and combustible liquids will usually float on water, the vapors will usually hug the ground and ignitable vapor-air mixtures will be confined to a range between 6 and 15 percent in air. Thus, smothering is difficult and ignition sources near the ground are more likely to pose a hazard.

Definitions

CODE WHITE - Hazardous substance spill of such volume or hazard that it cannot be handled safely by an employee or unit responding to the spill and beyond the internal resources of the affected Unit/Department to respond. See "Major Spill", below.

COMBUSTIBLE LIQUID - A liquid having a flash point at or above 100°F

FLAMMABLE LIQUID - A liquid having a flash point below 100°F

HAZARDOUS MATERIALS - Those chemicals or substances which are physical hazards or health hazards as defined and classified in the fire code, whether the materials are in usable or waste condition.

MAJOR SPILL - A spill of such volume or hazard that cannot be handled safely by an employee or unit responding to the spill. A 911 call is required. Major spills include:

1. Any spill of flammable liquids in a situation where a fire or explosion may result.
2. Any spill that creates an immediate risk to life or health.
3. Any release the users cannot clean up due to quantity, lack of equipment, or training.
4. Any release that cannot be identified and must be treated as an unknown

STORAGE, HAZARDOUS MATERIALS - The keeping, retention or leaving of hazardous materials in closed containers, tanks, cylinders, or similar vessels; or vessels supplying operations through closed connections to the vessel.



Emergency/Spill

In the event of a major spill or emergency call 911.

Spills and Emergencies shall follow UCDMC Policy and Procedure 1725, *Response to Hazardous Substance Spills*. For more information contact Environmental Health and Safety (EH&S) at (916) 734-2740, or UCDH Fire Marshal's Office at (916) 734-3036.

General Requirements

- Report the amounts of flammable and combustible liquids in your area, department or building in use, storage and waste to EH&S.
- Provide Fire Extinguishers in all areas where flammable or combustible liquids are stored and used.
- Label all flammable and combustible liquid containers, cabinets and rooms or areas.
- Label all piping that contains flammable and combustible liquids.
- Protect pipes, tanks, cabinets, valves, etc. with flammable and combustible liquids from vehicle impact.
- Flammable and combustible liquids shall not be stored near or impede exit routes.
- Empty containers of flammable and combustible liquids shall be stored as required for filled containers.

Hazardous Conditions Permit

Prevention, control and mitigation of dangerous conditions related to storage, use, dispensing, mixing and handling of flammable and combustible liquids shall be evaluated on a case by case basis and may require a Hazardous Conditions Permit before any activity involving flammable and combustible liquids is started.

To assist in determining if a permit is required, please contact the UCDH Fire Marshal's Office at (916) 743-3036.



Storage Cabinets

Storage cabinets shall be designed, installed and constructed in accordance with the California Building Code, California Fire Code, and NFPA 30. Storage cabinets shall be listed in accordance with UL 1275.

Storage Containers

Storage containers shall comply with the California Fire Code and NFPA 30. Only approved containers shall be used to store flammable and combustible liquids.



Storage Refrigerators

Flammable and combustible liquids should not be stored in refrigerators unless approved by UCDH EH&S. Refrigerators must be approved and designed for the use and storage of flammable and combustible liquids.



References

California Fire Code

NFPA 30, *Flammable and Combustible Liquid Code*

UCD Med Center Policy and Procedure 1725, *Response to Hazardous Substance Spills*.

UCD Campus Policy and Procedure 290-56, *Chemical Safety*

**For more information or questions on flammable and combustible materials please
contact the
Fire Marshal's Office at (916) 734-3036**