



Working Safely with Flammable Liquids

Introduction:

Flammable and combustible liquids can be hazardous if improperly handled or stored, and anyone who works with these materials needs to know how to do so safely. This guideline will help you better understand the essentials of dealing safely with these materials in your workplace.

Purpose and Objective:

This guideline clearly explains procedures for safely handling and storing flammable liquids and for properly responding to flammable liquid related emergencies or spills.

In order to maintain a safe work environment that involves the storage and handling of flammable

liquids, there are several key areas of understanding that you will need to focus on.

Understanding Flammable Liquids

- Each liquid has a flash point, the temperature at which a liquid releases enough vapor to be ignited. When the right mix of air and vapor is present in the proximity of an ignition source, these vapors can be ignited.
- It is important to be aware of specific examples of flammable and combustible liquids that exist in your workplace and the potential hazards if improperly stored or handled.

Using the Proper Containers

- There are several different types of proper flammable liquid storage containers that can be used in the workplace. One of the most common is the safety can.
- It is important that you ensure that each safety

can performs its designed function by making sure the spout cover closes tightly when not in use; by checking to ensure that the can's wire safety screen is in place and working properly; and by watching for rust or corrosion to determine if the container needs replacing.

Handling Flammable Liquids in a Cautious Manner

- If a flammable liquid needs to be moved, you should use equipment that is suited to the container's size and type.
- When filling containers, they should be properly grounded and never completely filled, to allow room for vapor expansion.
- If the drum is to be used for dispensing, it should have a bung vent to control vapor release and a self-closing faucet to prevent accidental spills.
- Dispensing should be done in properly ventilated

areas, not in confined spaces, and with a bond between the dispensing and the receiving container, in order to prevent static discharge that could lead to vapor ignition.

Properly Storing Flammable Liquids

- A facility's storage areas should be designed to house flammable liquids, but precautions and certain actions are also necessary to ensure workplace safety. Precautions include never blocking doorways, exits or aisles (as this may hinder evacuations during an emergency); keeping ventilation grills clear (so the ventilation system can exhaust the vapors); and never store more liquid than permitted in an area.

Controlling Ignition Sources

- Extra precautions are necessary to control ignition sources in the workplace such as properly maintained electrical wiring, portable tools, and fixed equipment; never performing hot work (such as cutting or welding) in an area where flammable liquids are stored or dispensed unless a special permit has been issued; ensuring

that flammable liquids are not stored near open flames, hot surfaces, radiant heaters, ovens furnaces, and any other direct heat sources; and never smoke around flammable liquids.

Responding to an Emergency

- You should be aware of our safety procedures.
- In the event of a small spill, you should stop the flow of liquid immediately, dam the spill with an absorbent medium, and dispose of the medium according to proper procedures.
- In the event of a large spill or a fire, you should immediately sound the fire alarm and follow emergency procedures.
- Everyone should know the location of the nearest exit and their specific responsibilities during an emergency.
- No one should attempt to fight a fire, unless they have been specifically trained to do so.