

# TOOL BOX TALKS

## Flammable and Combustible Liquids

Commercial fires in industrial settings can be particularly catastrophic due to the use of chemicals, flammable finishes, wood and plastics in building and manufacturing processes. Commercial fires have the potential for fast spread, intense fire, hazardous runoff and smoke. Loss of life in commercial fires is a distinct possibility. All commercial property is vulnerable to fire. Review these safety tips with employees who work with flammable and combustible liquids!

### WORKSAFE TIPS

#### THE DIFFERENCE

- **FLAMMABLE** liquids have a flash point lower than 100 degrees Fahrenheit.
- **COMBUSTIBLE** liquids have a flash point above 100 degrees Fahrenheit.
- Refer to the MSDS for the particular liquid to determine flash point.
- Flash point refers to the temperature in which a liquid will form an ignitable mixture in the air.
- Gasoline has a flash point of -40 degrees F.
- Diesel fuel has a flash point of 143 degrees F.
- Acetone has a flash point of -4 degrees F.
- Paint thinner has a flash point of 70 degrees F.

#### STORAGE CABINETS

- Even though storage levels may not dictate the use of flammables storage cabinets, it is a good, safe practice for any organization.
- An MSDS (Material Safety Data Sheet) must be on site for each flammable or combustible liquid used.
- Store no more than 60 gallons of Class I or Class II liquids in flammables storage cabinets.
- This includes aerosol cans.
- Store no more than 120 gallons of Class III liquids in storage cabinets.
- If more than 3 cabinets are required, groups of 3 cabinets may be separated by 100 feet of space.
- Close cabinet doors shall be closed at all times.
- Do not stack items / store items on cabinets.
- Damaged flammable liquid storage cabinets shall be removed from service and replaced.
- Do not store combustibles inside flammable liquid storage cabinets, including boxes, tools or bags.

#### SMALL QUANTITIES

- Incidental use quantities are small quantities of flammable or combustible liquids used in maintenance shops, repair areas or work areas.
- Do not store more than a 1 day supply of flammable/combustible liquids within a room.
- Do not store more than a single day supply of flammable or combustible liquids outside of an approved flammable liquid storage cabinet.
- Return small containers to the flammable liquid storage cabinet after use.
- Containers of flammable or combustible liquids must be labeled.
- Smoking is not allowed in areas where flammable or combustible liquids are used.
- Containers must be closed or capped after use.

#### SAFE USE

- Do not intermingle / intermix containers. (i.e. use an acetone container to store gasoline)
- Do not use flammable or combustible liquids during hot work operations or near heat sources.
- Provide a small spill cleanup kit in areas where small quantities of flammable liquid are used.
- Provide portable fire extinguishers where flammable and combustible liquids are stored.
- Flammable and combustible liquid containers shall be closed when not in use.
- Do not use a rag in place of a lost container cap.
- Store liquids in their original container, unless transferred to an approved safety can / dispenser.
- Do not allow open flame, sparks, heat-producing devices or smoking in liquid use or storage areas.
- Clear storage and use areas of excess waste buildup that could lead to fire.
- Do not use gasoline, in a can, as a parts wash.
- Discard old, excess or unused flammable or combustible liquids.



**Smart, Accident-Free Environments**

*These advisory materials have been developed from national standards and sources believed to be reliable, however, no guarantee is made as to the sufficiency of the information contained in the material and Missouri Employers Mutual Insurance Company assumes no liability for its use. Advice about specific situations should be obtained from a safety professional.*

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