

## Safety Checklists

This list summarizes the equipment needed to safely store and handle flammable liquids in order to minimize fire hazards and assist with compliance to governing codes and regulations.

### ■ Storage – Drums

- Safety vent in each drum (vertical and horizontal stored)
- Grounding wires attached from drum to earth ground
- Bonding wires used between containers during transfer operations
- Metal-to-metal contact maintained for proper ground/bond
- Self-closing faucet on each drum being drained
- Spill tray or pallet/caddy being used to capture leaks & spills

### ■ Storage – Safety Cabinets

- Approved cabinets in use in storage and work areas
- Cabinet material construction appropriate for stored chemical
- Cabinet size appropriate for current and future storage needs
- Chemicals properly segregated and stored in correct color cabinet
- Chemicals inventoried and MSDS sheets readily available
- Bungs installed on dual vents (unless venting is required by the authority having jurisdiction)
- Antistatic wires attached from ground lug to earth source
- Cabinet anchored with seismic bracket as needed
- Cabinet contents secured with padlock on built-in handle – (drilling into cabinet walls will negate fire resistance approval)
- Cabinets fully operational: fusible links on self close doors, doors close fully and engage 3-point latching system, leak proof sills intact, shelving stable and not overloaded

### ■ Transfer – Safety Containers

- Type I safety cans in use for storing and pouring flammables
- Different colored cans being used to identify different liquids
- Type II safety cans with hoses for controlled, targeted pouring
- Bonding and grounding being followed when transferring liquids
- DOT cans in use for over-the-road transport
- Nonmetallic safety cans in use for corrosive or high purity liquids
- Faucet cans in use when dispensing from shelf or bench

### ■ Use – Specialty Containers

- Plunger cans used to moisten cleaning rags
- Bench cans in use for wetting small parts
- Wash and dip tanks in use for cleaning parts
- Floor and bench style rinse tanks being used for washing large parts
- One-handed dispensers being used to apply small liquid amounts

### ■ Disposal – Waste Containers

- Safety drum funnels in use for collection of flammable waste liquids
- Bonding and grounding practices being followed during liquid transfer
- Safety disposal cans in use to collect small amounts of waste liquids
- Disposal cans with quick disconnects in use for HPLC collection
- Oily waste cans being used for rags/wipes containing solvents
- Safety drum covers in use to collect combustible trash
- Cease-Fire® receptacles in use for paper/trash and solvent-free waste
- Safety drain cans in use to drain solvent waste from rinse tanks

### ■ Outdoor Applications

- Cigarette litter being safely collected in specially designed receptacles
- Drums of hazardous material stored in approved outdoor safety lockers

## Guidelines

Below are basic tips to remember when managing flammable liquids.

1. Know your chemical – consult the MSDS sheet
2. Remember it's not the flammable liquid itself that burns, but rather, the invisible vapor
3. Maintain adequate ventilation, avoid confined areas where vapors can accumulate
4. Eliminate potential ignition sources
5. Think "covered" or "closed" for containers
6. Properly bond and ground when transferring liquids
7. Maintain good housekeeping: keep liquids segregated, organized, and safely stored according to fire codes
8. Use approved equipment
9. Never become complacent. Flammables and the fire danger they present are very serious matters.
10. Remember the "Fire Triangle" and ensure your equipment and practices follow established regulations and procedures which reduce fire risks

