FLAMMABLE AND COMBUSTIBLE LIQUID STORAGE CHECKLIST

California Fire Code Chapter 34

Scope

An operational permit is required for storage, handling or use of Class I liquids in excess of 5 gallons inside a building or in excess of 10 gallons outside of a building. Storage, handling or use of Class II or IIIA liquids in excess of 25 gallons inside a building or in excess of 60 gallons outside of a building. Storage, handling or use of Class IIIB liquids in tanks.

Conditions:

Storage

☐ Material Safety Data Sheets (MSDS) are readily available on site.
☐ Flammable and combustible liquids are not discharged onto the ground, into the atmosphere or into sewers, storm drains, etc.
☐ Hazard identification (i.e. NFPA 704 placard) is provided on containers, tanks and building entrances.
☐ Flammable and combustible liquid containers and tanks are labeled with their contents (i.e. chemical name and hazard class).
☐ "No Smoking" and "No Open Flame" signage is posted.
☐ Open flame and high temperature devices are not present.
☐ Flammable and combustible liquid storage and use does not exceed maximum allowable quantities and/or number of control area(s).
☐ Flammable and combustible liquid containers, portable tanks, tanks, piping, valves and appurtenances are Underwriter’s Laboratory (UL) listed and approved.
☐ Class I, Division 1 electrical is provided where applicable.
☐ Fire suppression, detection and alarm systems are tested and maintained.
☐ 4A:80B:C rated fire extinguisher(s) is provided and travel distance does not exceed 50-feet.
☐ Spill control and secondary containment is provided for areas having individual vessels of more than 55 gallons or aggregate vessel capacity of more than 1,000 gallons.

☐ Flammable and combustible liquid container, tank, piping, valves and fittings are protected against vehicle impact and physical damage.

☐ Explosion control is provided and maintained at Class IA and IB flammable liquid storage and use areas exceeding maximum allowable quantities.

☐ Incompatible materials in containers exceeding 5 pounds or 0.5 gallons are separated by minimum 20 feet, non-combustible barrier, storage cabinet or gas cabinet.

☐ Flammable and combustible liquid tank venting is provided, maintained and free from obstructions.

☐ Flammable and combustible liquid outdoor, aboveground tank minimum separations are provided and maintained.

☐ 5 gallon spill container is provided for each protected aboveground flammable and combustible liquid tank fill connection.

☐ Flammable and combustible liquid tank, connected piping and ancillary equipment are maintained.

☐ Flammable and combustible liquid cabinets are UL listed, labeled and equipped with self-closing, three point latch door.

☐ Flammable and combustible liquid container storage in liquid storage cabinets does not exceed 120 gallons.

☐ Flammable and combustible liquid storage is not near exit(s) and does not obstruct egress route.

☐ Empty flammable and combustible liquid containers and portable tanks are stored as required for full containers and portable tanks.

☐ Shelving used for flammable and combustible liquid storage is of substantial construction, braced, anchored and provided with a lip or guard.

☐ 4-foot aisles at flammable and combustible liquid rack storage are provided.

☐ Flammable and combustible liquid solid pile and palletized storage aisles and separation are provided and maintained.

☐ Flammable and combustible liquid storage and ordinary combustible storage is separated by 8 feet or more and is not located in the same pile or rack.

☐ Class I or II flammable and combustible liquid containers less than 30 gallons are stacked no more than 3 feet or 2 containers high, unless on fixed shelf.

☐ Class I or II flammable and combustible liquid containers 30 gallons or more are stacked no more 1 container high.

☐ Flammable and combustible liquid container and portable tank storage is 3 feet or more from beams, chords, girders and sprinkler defectors.
In wholesale and retail occupancies Class I liquid containers are metal and contain no more than 5 gallons.

Flammable and combustible liquid maximum storage height is maintained in wholesale and retail occupancies.

Flammable and combustible liquid storage room spill control, secondary containment, ventilation, storage arrangement, supports and fire protection is provided and maintained.

Flammable and combustible liquid warehouse spill control, secondary containment, ventilation, storage arrangement, supports and fire protection is provided and maintained.

Outdoor flammable and combustible liquid storage tanks are protected against tampering and vehicle impact.

Outdoor flammable and combustible liquid container and portable tanks are located more than 15 feet from weeds, debris and other combustible material.

Dispensing, Mixing, Use and Handling

Flammable and combustible liquids heated to their flash point are transferred from safety cans, through a closed system, through approved pump from top of tank, by gravity with self-closing valve or by engineered transfer system.

Nozzles for manual flammable and combustible liquid container filling are electrically interconnected to container.

Flammable and combustible liquid blending vessels are bonded and provided non-combustible, self-closing lids.

Heating, lighting or cooking appliances using Class I liquids are not used inside building.

Flammable and combustible liquid processing vessel minimum separations are provided and maintained.

Cleaning with Class IA liquids is not conducted and cleaning with Class IB, IC or II liquids is conducted in fire rated, fire sprinklered room or cleaning machine.

Cleaning machines are UL listed and approved, do not exceed maximum solvent quantities, are ventilated and separated from other machines by minimum 30-feet or 1-hour barrier.

Flammable and combustible liquid use, dispensing or mixing exceeding maximum allowable quantities is in fire rated, fire sprinklered building or room.

Ventilation, explosion control, spill control and secondary containment is provided and maintained at flammable and combustible liquid use, dispensing or mixing in open and closed systems.
☐ Outside flammable and combustible liquid use, dispensing and handling spill control, drainage control and minimum separations are provided and maintained.

☐ Solvent distillation unit is UL listed, labeled, provided 40B:C rated fire extinguisher within 10-30 feet and is located and separated in accordance with listing.

☐ Class I or II flammable and combustible liquid, alcohol-based hand rub dispenser maximum capacities, separation, mounting location and minimum corridor width is maintained.

Additional Requirements may apply.