

Solvents and Flammables


CODE of PRACTICE


Cleaning solvents are used in day to day work to clean tools and equipment.

You must protect yourself and your coworkers from hazards, which may be created from the use of these liquids.

Wherever possible, use solvents that are nonflammable and nontoxic.



Pause for Safety

- Hazards**
- Explosion and ignition hazard
 - Injury to skin and eyes
 - Toxic inhalant
 - Respiratory impairment

PPE



Additional PPE



- Controls**
- Non-hazardous solvent substitution
 - SDS data awareness
 - PPE
 - Ventilation
 - Proper disposal regimen



Strategies and Procedures

Personal Protective Equipment

- Use goggles or face shields to protect your face and eyes from splashes or sprays;
- Use rubber gloves to protect your hands when using a substance that can damage the skin
 - Check SDS.
- Wear protective clothing to protect your skin and prevent contamination of your clothes; and
- When breathing hazards exist, use the appropriate respiratory protection.
 - Check SDS.

If your clothing is contaminated with a flammable or combustible liquid, you must:

- Avoid any activity where a spark or open flame may be created or exists,
- Remove the clothing at the earliest possible time, and
- Ensure that the clothing is decontaminated before it is used again. If a worker's skin is contaminated with a flammable or combustible liquid, the worker must wash the skin at the earliest possible time.



When solvents/flammables are used:

- Use nonflammable solvents for general cleaning;
- When flammable liquids are used, make sure that no hot work is permitted in the area;
- Store flammables and solvents in special separate storage areas away from ignition sources;
- Check toxic hazards of all solvents before use (SDS);
- Provide adequate ventilation where all solvents and flammables are being used and that they are not stored in the immediate vicinity of the air intake of:
 - a ventilation supply system
 - an internal combustion engine
 - the fire box of a fired heater or furnace;
- Never leave solvents in open tubs or vats.
 - Return them to storage drums or tanks;
- Ensure that proper containers are used for transportation, storage, and field use of solvents/flammables;
- Where solvents are controlled products, ensure all workers using or in the vicinity of use or storage are trained and certified in the Workers Hazardous Materials Information System.
 - Ensure that all WHMIS requirements are met;
- Ensure that, if applicable, that they are not stored within 30 meters of an underground shaft;
- Ensure that flammable and combustible substances are stored separately from substances they might react with;
- Ensure a Class B (or ABC) fire extinguisher is readily available while working with or near flammable and combustible liquids; and

- Ensure that conductive containers are electrically bonded to each other or electrically grounded during transfer of contents.

Exposure Limits

Under normal operating conditions, you usually do not have to concern yourself with LEL (Lower Explosion Limit). However, there are conditions when this is a concern. As such:

- You must not enter or work at a work site if more than 10% of the LEL (Lower Explosive Limit) of a flammable or explosive substance is present in the atmosphere.
- Atmospheric testing results should be assessed before anyone is exposed.

Waste

- Ensure that contaminated or used waste materials are contained in closed receptacles and disposed of according to appropriate proper procedures.
 - This includes rags, paper towels, sponges, etc. used in cleaning.

