

Workplace Safety: Working with Solvents

A solvent is a substance, usually a liquid, that dissolves another substance to form a solution. Solvents are used for cleaning, construction, and numerous other tasks and include chemicals like paint thinners and acetone. While solvents are common, they like many chemicals can be hazardous if not properly handled or stored.

There are six key work practices to keep in mind when working with solvents:

1. Don't eat, drink, or keep food and beverages in areas where solvents are used or stored. This increases the chances of accidentally ingesting solvents.
2. Don't wash hands with solvents. Exposing skin to solvents could result in a rash, dryness, or other skin problems. Worse, dangerous solvents may get through the skin into the bloodstream.
3. Always wear required personal protection equipment (PPE) to prevent hazardous exposures to solvents.
4. Remove PPE carefully when done working to avoid getting solvents on the skin.
5. Wash thoroughly after working with solvents—and before eating, drinking, or using the rest room. Wash before leaving your work area for other parts of the facility. Failing to do so could spread chemical contamination to other parts of the facility and put others at risk.
6. Store solvents properly to prevent fires, and dispose of waste solvents correctly according to the instructions.

Solvent hazards are more than skin irritations and ingestion risks. Many solvents evaporate quickly and their vapors can be dangerous to breathe. Once inhaled solvents can make their way into the bloodstream. Initial symptoms are usually headache or dizziness, which can be followed by nausea and vomiting if exposed to high concentrations of solvent vapors. Other potential symptoms are tiredness, sore throats, respiratory irritation, trouble breathing, blurred vision, and loss of consciousness. Most symptoms disappear relatively quickly after exposure to low-concentrations of solvent vapors and cause no permanent dam-

age. However, long-term exposure can cause serious health problems. The severity of the problems often depends on the extent of the exposure and the type of solvent but can include organ damage (usually of the throat, lungs, liver, or kidneys), central nervous system damage, and cancer.

Solvent-exposure First Aid

The following procedures are appropriate for most cases of solvent exposure; however, consult the label and SDS for specific first-aid procedures for that particular solvent.

- If symptoms associated with breathing solvent vapors (e.g., dizziness or upset stomach) develop, move away from the work area and get some fresh air. If that does not help, seek medical attention.
- If solvent splashes into the eyes, go immediately to an eyewash station, hold eyelids open, and flush the eye with water for at least 15 minutes. If the eye still burns or you have difficulty seeing, seek medical attention.
- If solvent gets on the skin, wash the area immediately with soap and water. Remove any clothing that was splashed. If skin irritation or a rash develops later, see a doctor.
- If solvents are accidentally swallowed, immediate medical attention is necessary. First aid for ingestion of solvents varies depending on the substance involved. Check the label and SDS and/or call the poison center. Even with first aid, get to a doctor right away.

What This Means for Counties

During the course of your job you may come into contact with solvents or other hazardous chemicals, so it is important that you take all safety precautions to prevent injury. For more information on workplace safety, contact CTSI Loss Prevention at 303-861-0507. 