

SOLVENTS—FIRE AND SPILL PREVENTION



This talk informs employees about how to prevent fires and spills of solvents in their workplace.

Materials to have on hand:

- The solvents used at your facility, such as acetones, methylene chloride, toluene, Trichloroethylene, and isobutyl alcohol
- A safety data sheet for each solvent you use
- A list of those solvents with a flash point that renders them flammable

Items for attendees to consider during the talk:

- Are you aware of how to determine whether a solvent is likely to cause a fire?
- Do you know how to prevent spills?
- Are you familiar with how to safely dispose of solvents?

TALK

[Present the toolbox talk “Solvents—Safe Handling and Storage” in addition to this toolbox talk.]

Today, we’re going to talk about how to prevent the fires and spills of solvents that can result when solvents are not managed properly.

Fire prevention

Flash point. Whether a solvent is likely to cause a fire depends on the solvent’s flash point. Here’s what you need to know:

- The flash point is the lowest temperature at which a liquid will give off enough vapors, in a high enough concentration, so that the vapors can be ignited.
- A low flash point indicates a more flammable solvent. For example, acetone has a flash point of 50 degrees Fahrenheit, which means that the solvent vapors could easily ignite and burn at room temperature. A solvent with a high flash point—say, 300 degrees Fahrenheit—would have to be heated before it would give off enough vapors to be ignited.
- Solvents are considered flammable when they have a flash point of less than 100 degrees Fahrenheit.
- Nonflammable solvents, with flash points above 100 degrees Fahrenheit, are still dangerous. Although they often do not give off enough vapors to be ignited under normal conditions, they will burn easily and readily when heated and ignited.

Be sure to review the safety data sheet, or SDS, for each solvent to understand the flash point of the solvent and the fire, explosion, and reactivity hazards. If you’re aware of which solvents in our workplace are flammable and could easily start a fire, you will handle them with extra care.

Continued on page 2

Talk Date: _____

Attendees: _____

Location: _____

**Supervisor/
Presenter:** _____

Comments: _____

SOLVENTS—FIRE AND SPILL PREVENTION

Fire prevention tips. To prevent fires when using solvents, follow these important steps:

- Use solvents only in well-ventilated areas to prevent the buildup of vapors.
- Keep solvents away from ignition sources, such as flames, sparking tools, hot equipment, exposed electrical wires, and so forth.
- Never smoke when using or dispensing solvents—or anywhere near areas where solvents are stored.
- Keep solvent containers tightly closed when not in use to prevent the buildup of vapors in the area and to protect the solvent from any sparks or other ignition sources.
- Be careful with empty solvent containers. Although empty, they're still hazardous because they contain air that is saturated with solvent vapors, which means the vapors are concentrated and can burn easily. Never weld on an empty solvent drum. And before reusing a container that once held solvents, be sure it is thoroughly cleaned and ventilated.

Spill prevention

Because a sizable spill of some of the more hazardous solvents could be detrimental to your health, start

a fire, or contaminate the environment, we must take proper precautions to prevent spills. So:

- Keep solvent containers closed when not in use.
- Inspect containers regularly for corrosion, dents, and other damage, as well as for small leaks.
- Clean up small solvent spills quickly and thoroughly. Large spills should be handled by the emergency response team.
- Be sure all containers—including waste containers—are properly labeled.

Solvent waste disposal

Waste solvents and materials, such as rags contaminated with solvents, must be disposed of properly. Waste solvents should only be put into designated containers for recycling or disposal. Never empty them into storm drains, in sanitary sewers, down sink drains, or in the trash. Soaked rags and other cleanup materials should be put in designated closed containers to prevent fires.

If you follow safe practices for storing, handling, and working with solvents, as well as dispose of waste solvents properly, you'll help prevent dangerous spills and fires.