

## **SOLVENTS**

Industrial solvents are powerful substances. No matter what kind of solvent you use, whether on a daily or infrequent basis, be sure you know the chemical properties, understand the health hazards, and follow the correct handling procedures before you use it.

There are some simple steps you can take to protect yourself and your coworkers from the harmful effects of solvents. Be an informed user of solvents. Use appropriate ventilation equipment. Wear personal protective equipment (PPE). Handle solvents with care. And, always clean up and dispose of solvents and solvent residue in a safe and responsible manner.

### **What is a solvent?**

A solvent is any substance that dissolves something else. A very simple example of a solvent is water. Many common household products contain solvents: charcoal lighter fluid, windshield washer fluid, paint, or household cleaners.

Industrial solvents are used for:

- Cleaning.
- Degreasing.
- Removing paint, ink, or other coatings.
- Producing adhesives, paints, inks, coatings, varnishes, and other sealers

### **Recognize the health hazards**

Use the product's material safety data sheet (MSDS) to help you understand a solvent's health hazards. There may be serious health hazards associated with overexposure to some solvents.

Typical routes of entry for solvent overexposures include breathing the solvent's vapors or direct contact with the solvent.

Most solvents are irritants and many are central nervous system depressants. Short-term, acute, effects can include dizziness and nausea. Skin contact can cause irritation, dryness, itching, or dermatitis. Long-term overexposure to some solvents can lead to chronic diseases, even cancer.

### **Know the physical hazards**

The physical hazards of the solvents used in your workplace are explained in the product's MSDS. Many solvents are combustible or flammable liquids. This means that they can easily ignite and burn. Acetone and methanol are examples

of flammable solvents. Many types of petroleum distillates have a higher flash point and are considered to be combustible liquids.

### **Use solvents safely**

Before you use any product that contains a solvent, read its MSDS and the container's label.

The MSDS will tell you what is in the product. It will also tell you the product's health hazards and physical hazards. The MSDS will outline recommendations for safe handling procedures, personal protective equipment, first aid procedures, and other important information. The label will identify the solvent in the container. If you transfer a solvent into another container, make sure the new container is also properly labeled.

In addition to using the MSDS and label information, always follow your employer's instructions for the job.

Content Source: National Institute for Occupational Safety and Health (NIOSH). (Users of Safety Talk are advised to determine the suitability of the information as it applies to local situations and work practices and its conformance with applicable laws and regulations).