



# Hazardous Communication Solvents

Safety and Environmental Management System

SEMS 6-5

## **SOLVENTS**

A solvent in a simple language is a liquid that dissolves another substance. In construction, we most often see them as cleaners, degreasers, thinners, fuels and glues. Solvents are lumped into three main types or classes. Those containing water (aqueous solutions) like liquid forms of acids, alkalis and detergents and those containing carbon (organic solvents) like acetone, toluene and gasoline. The third group contains chlorine in their chemical makeup and is called chlorinated solvents like methylene-chloride and trichloroethylene.

Solvents can enter into your body in two ways, breathing or contact with your skin. Any solvent you breathe (inhalation) can cause dizziness or headache as it affects your central nervous system. If you continue to breathe the vapors of a solvent, you could develop nose, eye and lung irritation and even damage the liver, blood, kidneys, and digestive system. Solvents on your skin can be absorbed into the body. Because solvents dissolve oil and greases, contact with your skin can dry it out producing irritation, cracking and skin rashes. Once a solvent penetrates through the skin, it enters into the bloodstream and can attack the central nervous system and body organs. Like all chemicals the effect upon you will depend on a number of factors, how toxic was it, how long were you exposed, your own body's sensitivity and how concentrated or strong the solvent was.

More information on the chemicals you work with is available from your supervisor. You can protect yourself from solvent hazards by following a few simple rules:

1. Know the chemicals you are working with.
2. Use protective equipment like gloves, safety glasses, and proper respirators recommended for that chemical.
3. Make sure your work area has plenty of fresh air.
4. Avoid skin contact with solvents.
5. Wash with plenty of soap and water if contact is made with your skin.
6. If a solvent splashes into your eye, flush with running water for a minimum of 15 minutes and get medical help.