

# WORKING WITH CORROSIVES

## *Recognizing and Preventing Hazards*

Even if you've worked with corrosives for a long time, you may not be aware of the different dangers they may pose. Corrosives are harsh substances, usually acid or base, which are found in such processes as dry cleaning, oil refining, and metal plating among others.

### **The Hazards Of Corrosives**

Whether they are acids such as sulfuric, or bases such as lye, corrosives can be hazardous when mishandled. They are usually toxic (poisonous) to the human body, destroying skin, eyes, and other organs on contact. Corrosive vapors can harm internal organs if you inhale or swallow them. If corrosives are combined or stored with the wrong chemicals, there may be an explosion, fire, or release of dangerous vapors.

### **Exposure To Corrosives**

Contact with a corrosive can cause different amounts of damage, depending on how the corrosive enters the body (for example, through the skin or through breathing), the quantity of the corrosive, its strength (concentration), and other qualities of the chemical. Permissible Exposure Limits (PELs) for many corrosives have been set by the Occupational Safety and Health Administration and are listed on the Material Safety Data Sheets (MSDSs).

### **Eye Exposure**

If a corrosive mist or other small amount gets in your eyes, symptoms can include burning, watering, irritation, or inflammation. If a corrosive splashes in your eyes, the results can include cloudy vision,

scarring, or even blindness, so you should seek emergency medical treatment immediately.

### **Breathing And Swallowing**

If you breathe in a small amount of corrosive mist, symptoms can include nose, mouth, and throat irritation. If you breathe in more highly concentrated or a greater quantity of corrosive mist, you may have a heavy sensation in your chest and a hacking cough (a sign of inflamed lung membranes, or bronchitis). You may have chest pain and difficulty breathing (a sign of too much fluid in the lungs, or pulmonary edema). If you swallow even a small amount of a corrosive, you may experience severe abdominal pain. Get medical help immediately.

### **Skin Exposure**

Skin exposed to small amounts or low concentrations of corrosives can become irritated, itchy or sore—signs of contact dermatitis. If your skin is splashed by a corrosive, it can burn your skin, causing blisters, or may penetrate through the skin itself.

### **Your Best Protection**

Your best protection is your common sense. Take the time to do the job right and think through all procedures carefully. Follow your company's Hazard Communication program carefully, and always use the appropriate personal protective equipment recommended for the corrosives you are handling.

Corrosives can be dangerous, but they needn't be harmful when they are handled, stored, and disposed of safely.

