

Staying on the Safe Side of Corrosives

Corrosives are substances that can burn or destroy on contact. There are two types of corrosives: acids and bases (or alkalis). The warning label on all corrosives tells you how to protect yourself.

DANGER! Causes severe burns to skin and eye.

Corrosives react with other substances to eat away or chemically burn whatever they touch. They can burn skin, irritating or even blistering it and can severely damage eyesight. The extent of a corrosive burn depends on the concentration of the corrosive and how long it stays on your skin. This is why you should treat a corrosive spill as a chemical burn emergency: Immediately flush the affected area with water for 20 minutes, and get medical attention.

Do not get in eye, on skin, on clothing.

The right protective equipment is your guarantee against skin or eye contact with a corrosive. Workers who deal with corrosives need to wear goggles or safety glasses and, in many cases, a face shield for full protection against splashes. Wear clothing and gloves made of neoprene or other chemical-resistant material. Work with some corrosives requires you to wear a fully encapsulated suit and chemical-resistant boots. Check your protective clothing each time you put it on for rips or worn areas.

Avoid breathing any mist or gas from this material.

Wear an approved respirator equipped with the right cartridge or canister for the corrosive you are using. Inhaled corrosive gases can cause irritation of the mouth and respiratory passages, coughing, difficulty breathing or respiratory failure. If you inhale corrosive gas, move into fresh air immediately and get medical attention to make sure there is no internal damage.

Keep this container closed when not in use.

This warning points to the dangers of corrosives in the environment. Some corrosives produce toxic or explosive gases. Acids and bases react violently with water

and with each other; they are flammable or contribute to the fire hazard of other substances. Make sure all containers, including temporary containers that others may use, are clearly labeled and in good condition, with no cracks, leaks or dents. Store containers according to approved guidelines; keep acids, bases and corrosives separate from one another or other substances. When mixing a corrosive with water, always add the corrosive to the water; adding water to concentrated acid may produce a violent reaction. Avoid pouring corrosives into the drain; dispose of them according to company policy. Clean up small spills immediately, but if there is a large spill, evacuate the area at once and report the spill. Leave cleanup to a trained and equipped cleanup crew.



Make sure there is adequate ventilation.

When acids react with metal, they produce explosive hydrogen gas. Some corrosives release oxygen, which poses a fire hazard. And many corrosives are flammable in themselves. Safe handling, along with adequate ventilation, minimizes the risk of an accident involving fire, as well as accidental inhalation.

Always wash after handling this material.

Being a safety-conscious worker, you didn't spill any of the chemical on your clothes or in your work area. But can you be sure? A spill on gloves or equipment may not be noticed until later, when you accidentally touch the contaminated material. Washing is your guarantee against contamination. Begin by thoroughly washing your gloves. (If a corrosive splashes on your protective clothing, carefully follow company policy for removing the contaminated clothing.) Keep your street clothing separate from your work clothes. Make sure you leave your work area and equipment clean.

Because corrosives are used in many industrial applications, you may find that you work with several of them. Read the MSDS accompanying each one, to learn what special dangers it poses in addition to being corrosive. Then take steps to protect yourself and your environment from those dangers.