



Common Chemical Health Hazards

IRRITANT chemicals are by far the most common type of hazard at the College. These will be labeled “CAUTION, May Cause Irritation” with a mention of the Target Organ (part of the body most sensitive) such as eyes, skin, respiratory tract, and Route of Entry (How the exposure gets into the body) such as absorption or inhalation.

These chemicals produce a health affect that is only temporary in nature. This health affect may be skin inflammation or rash, watery eyes, coughing, or other noticeable reaction. These health effects are not permanent and will begin to subside when the exposure to the chemical is reduced or eliminated. It is important to read the chemical label and recognize Irritant warnings as to ensure the user is prepared to work with the material safely.

If an exposure occurs does occur, irritation can be eliminated or reduced with the following steps:

- Rinse exposed area with lots of water.
- Change or remove any affected clothing
- Discontinuing use of product or remove yourself from work zone if respiratory discomfort noticed.

CORROSIVE chemicals are a very different type of hazard. These have a health impact on the part of the body that is directly contacted and will be labeled “DANGER Corrosive” or “May cause Burns.”

These chemicals are capable of injuries that may leave permanent tissue damage. Corrosivity to both objects and to a person’s flesh is measured using the pH scale. Either extreme on the scale; low pH (0-4), which are the acids, and high pH (10-14), which are the alkalines (or caustics), are considered corrosive. They damage skin, lung tissue, and particularly eye tissue because of their ability to penetrate below the surface of the tissue. Preventing contact is the only sure method in avoiding health effects. The use of personal protective equipment, such as gloves and eye goggles, as well as work habits that keep these chemicals away from skin or eyes must be followed. Simply reading the chemical label and recognizing Corrosive warnings will ensure the user is prepared to work with the material safely.

If an exposure occurs, injury can be eliminated or reduced with the following steps followed by a medical examination:

- Flush with lots of water.
- FLUSH WITH LOTS OF WATER.
- FLUSH WITH WATER FOR AT LEAST 15 MINUTES.

GENERAL RULES FOR WORKING WITH CHEMICALS WITH A HEALTH HAZARD:

- Understand the product you are using.
- Dilute the chemical with water before use when possible. A dilute solution will reduce the hazardous properties of the product.
- Open windows and doors when using any chemical as to increase local ventilation.
- Wear safety glasses and gloves (at a minimum) when applying or wiping any chemical.
- Talk to your Manager about a potential substitute products if you are noticing undesired health affects.