



Weekly Safety Meeting

Corrosive Safety

In the workplace it is possible that you may have an opportunity to work with corrosive substances. You may work with products such as cleaning materials that could be corrosives, like hydrochloric acid, sulfuric acid, acetic acid, or nitric acid. Many common products contain alkaline/bases, such as ammonium hydroxide, potassium hydroxide, or sodium hydroxide (caustic soda). In construction a common material is cement, which contains lime. Lime is a caustic material or base.

How Exposure to Corrosive Substances Can Occur

- Corrosives can produce a local effect, or damage that occurs at the point of contact, causing a burn, irritation, or destruction of living tissue.
- Corrosives can be inhaled or even ingested. As a result, the lungs and stomach tissues can be affected.
- Examples of corrosives include sulfuric acid and sodium hydroxide.
- Some corrosives are also systemic toxins, which show effects away from the point of contact. The delayed injury may result in internal injury to the body.
- Examples can include hydrocyanic acid, or hydrogen cyanide when in water.
- Corrosives can be liquids and solids in form. Liquid corrosives are extremely destructive to external contact to the body. Solid corrosive can cause a delayed injury as they dissolve rapidly in the moisture presented in the skin and in the respiratory system. The effects will depend on the duration of contact to these areas.
- Some corrosives may cause other hazards such as fire, exploding, or reacting vigorously with other substances.
- Corrosives are dangerous because they can also permanently damage equipment such as nylon slings, personal fall protection, and other personal protective equipment.

Corrosive Containers

- Always look for the labels to help with determining if a substance is a corrosive.
- Containers should be labeled with the special United Nations Globally Harmonized System (GHS) of Classification and Labeling of Chemicals. These labels contain six elements on them that will help to provide consistent hazard and precautionary information to protect workers. You should receive training on GHS during Hazard Communication Training, explaining in depth about the six elements of the labels and much more.
- This GHS label should have a “Hazard Statement” a phrase describing the nature of the product’s hazards, like “Causes serious eye damage”.

- This GHS label will have a “Precautionary Statement” that describes recommended measures to minimize or prevent adverse effect resulting from exposure.
- Containers should also have special labels on them if they are transported. The United States Department of Transportation (DOT) requires such labels.
- The DOT labels will show a picture (pictogram) of a corrosive effect of metal on skin.

Recommended Work Practices:

- Obtain and read the SDS for all of the materials you work with;
- Be aware of all of the hazards (fire, health, reactivity) of the materials you work with;
- Know which of the materials you work with are corrosives;
- Wear the proper personal protective equipment when working with corrosive materials;
- Store corrosives in suitable containers away from incompatible materials;
- Store, handle, and use corrosives in well-ventilated areas;
- Handle containers safely to avoid damaging them;
- Dispense corrosives carefully and keep containers closed when not in use;
- Stir corrosives slowly and carefully into cold water when the job requires mixing corrosives and water;
- Rule to remember: AAA - Always Add Acids to water - this also applies to bases.
- Handle and dispose of corrosive wastes safely;
- Practice good housekeeping, personal cleanliness, and equipment maintenance;
- Know how to handle emergencies (spills, fires, injuries) involving corrosive materials;
- Always follow the health and safety rules that apply to your job; and
- If you should get corrosive material on you, remove any contaminated clothing, rinse yourself off immediately, and seek medical attention.

OSHA requires that whenever the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body for at least 15 minutes shall be provided within the work area for immediate emergency use.

DON'T TAKE A RISK...CORROSIVES ARE DANGEROUS!

