



Weekly Safety Meeting

Working Safely with Corrosives

Corrosive materials are present in almost any workplace, either by themselves or contained in other products, such as cleaning agents. Materials with corrosive properties can be either acidic (low pH) or basic (high pH). Common acid corrosives include hydrochloric acid, sulfuric acid, acetic acid, and nitric acid. Common alkaline/bases include ammonium hydroxide, potassium hydroxide, and sodium hydroxide (caustic soda). Cement contains lime, which is a base or caustic compound.

Cleaning compounds may contain acids or bases. Before using a material, always read the Safety Data Sheet (SDS) to know what is in the material and to learn how to use it safely.

Corrosive chemicals can burn, irritate, or destructively attack living tissue. When inhaled or ingested, lung and stomach tissue are affected.

The corrosiveness is defined by contact with living tissue, but acids and bases attack many other materials as well.

- Corrosive gases are readily absorbed into the body through skin contact and inhalation.
- Corrosive liquids have a high potential to cause external injury to the body.
- Corrosive solids cause delayed injury. Because corrosive solids dissolve rapidly in moisture on the skin and in the respiratory system, the effects of corrosive solids depend largely on the duration of contact.
- Corrosives may also have other hazards such as catching fire, exploding, or reacting dangerously with other substances.
- Corrosives can permanently damage nylon slings, fall protection equipment, and personal protection equipment.

Labeling:

Always check labels to determine if a substance is corrosive:

- The U.S. Department of Transportation (DOT) requires a special label on any container that's shipped and carries corrosives.
- The DOT label shows a corrosive dripping on, and eating away at, skin and metal.
- OSHA's Hazard Communication Standard requires all containers that hold hazardous substances to have labels that identify their hazards.
- A corrosive label will warn that the substance is dangerous and caution against contact with skin, eyes, or clothing, as well as breathing in mist or gases.

Safe 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.
- 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.

SAFETY IS A STATE OF MIND...ACCIDENTS ARE AN ABSENCE OF MIND!

