Chemical safety is a survival skill



Knowing how to safely handle and store chemicals is a survival skill in just about any workplace today — and off the job as well.

When misused, chemicals can cause serious injury or death. In some cases, the damage is immediate, but in other cases it causes problems years later. Certain chemicals are toxic or poisonous. Some chemicals are corrosive and can cause burning or irritation to the skin and eyes. Other chemicals are flammable. There are reactive chemicals which can explode if they are shaken or mixed with the wrong substance — and that wrong substance can even be plain water.

With these very serious hazards in mind, it is important to know how to work safely with chemicals. The following are some general guidelines for chemical safety. They are not intended to replace company training and procedures in handling and atoring chemicals.

- Know the chemicals with which you work, and any chemicals in your work area. Make sure you understand their hazards and know the specific techniques required for safe handling and storage.
- Make sure chemicals are properly labeled. Never use an unlabeled substance.
- Know where to find the Material Safety Data Sheet (MSDS) for any chemical in your work area.
- Keep all sources of ignition away from chemicals which might be flammable or explosive. This means no smoking, of course.
- Separate chemicals which might react to one another. For instance, keep oxidizers away from fuels.
- Know how to safely dispose of unused chemicals, and how to deal with

spills. Never discard chemicals down the sink.

- Be alert to any changes in the strength or composition of a chemical. Characteristics such as odor, color, thickness and crystallization might indicate changes or deterioration. Such factors as age, evaporation, temperature changes and contamination might cause changes in chemicals. These changes could cause the chemical to react in an unexpected way.
- Follow all instructions exactly. Do not mix any chemicals unless you are authorized and qualified to do so.
- Assume that any unfamiliar chemical is hazardous.
- Be aware of what the chemical is supposed to do. If the chemical is not doing what is expected, halt the process.
- Familiarize yourself with the location and use of emergency equipment including safety showers, eyewashes and fire extinguishers.
- Understand your part in emergency procedures how to call for help, how you should evacuate the premises and if you should take any active part in containing a spill or fighting a fire.
- Wear the correct Personal Protective Equipment (PPE) for protection against the specific chemical to which you will be exposed. Safety eye wear, gloves and footwear made of certain materials, and a lab coat may be among the PPE required.
- Never eat, drink or smoke around chemicals. You risk ingesting the chemicals if you do so.

These are just a few guidelines for handling and storing chemicals. Make sure you have adequate training and supervision before attempting to work with any chemicals. And remember to safely handle and store any chemicals off the job too.