

RISK SERVICES

EMPLOYEE SAFETY UPDATE

Winter safety

Winter storms and cold temperatures can be dangerous. Stay safe by planning ahead and using the following winter safety tips.

Outdoors

- Wear layers of warm clothing, a wind-resistant coat, waterproof shoes, a hat, gloves and a scarf.
- Sprinkle sand on icy patches of your porch, driveway or sidewalk.
- Work slowly when engaged in outdoor tasks, such as shoveling your driveway or removing snow from your car.

Vehicle

- Check your tires and replace with all-weather or snow tires, if necessary.
- Keep the gas tank full to avoid ice in the tank and fuel lines.
- Make an emergency kit to keep in your car that includes water, snacks, a first-aid kit, blankets, a flashlight, extra batteries, a portable cellphone charger and emergency flares.

Home

- Install weather stripping, insulation and storm windows.
- Have your heating system serviced professionally to make sure it's clean, working properly and ventilated to the outside.
- Install a battery-operated or battery backup carbon monoxide (CO) detector.

Emergencies

- Keep an emergency kit in your home that includes flashlights, extra batteries, a first-aid kit and extra medicine.
- Stock food that needs no cooking or refrigeration and keep water stored in clean containers.





SOLDERING IRON SAFETY

Soldering irons are commonly used to join components together with metal filler called solder. Soldering irons are useful for performing precise work on small surfaces and, unlike welding, the process doesn't involve melting the work pieces.

However, working with a soldering iron exposes you to burn hazards, fire hazards and dangerous fumes. To prevent injuries and other incidents from occurring when using a soldering iron, always follow the manufacturer's instructions and use the following safe work practices.

To avoid burns

- Pick up and handle a soldering iron by the insulated handle. Never touch the metal parts, especially the tip. The tip gets extremely hot — to melt solder, it can reach up to 800 degrees Fahrenheit.
- Always return the iron to its stand when not in use. If you lay the soldering iron on your workstation, you may accidentally make contact with the tip or the tip may melt objects on the workstation.
- Different types of solder have different melting points. Always set the soldering iron to the lowest temperature that melts the solder you're working with.
- Keep your fingers out of the way. If possible, use tweezers, pliers or clamps to hold the soldering wire and other components.

- Solder can "spit" — wear appropriate eye protection, long sleeves and long pants.
- Allow joints some time to cool before touching.

If your skin does make contact with the hot tip, immediately cool the affected area by running it under cold water for 15 minutes. If necessary, seek medical attention.

To avoid chemical exposure

- Read and understand the safety data sheets (SDSs) for all materials before beginning work.
- Only perform soldering in a well-ventilated area. Soldering generates fumes and smoke from the melting metal as well as the flux, a chemical agent that helps the metals join properly. Flux can irritate the eyes and respiratory system and worsen asthma symptoms.
- It's recommended that a fume extractor be used at your workstation. If it has a flexible hose, position it so it can effectively remove the fumes.
- Ensure all chemical containers used near your workstation are properly labeled.
- To avoid ingestion, never eat or drink in the work area. Always wash your hands after soldering and before eating, drinking and smoking.
- Solder is commonly an alloy of tin and lead. Lead exposure can result in chronic health effects. If possible, use lead-free solder.

To avoid fires

- Always plug the soldering iron into a grounded outlet.
- Turn off or unplug the soldering iron when not in use.
- Prevent damage to cords by ensuring the soldering iron tip never touches them. If you observe any damage to the cords or unit for whatever reason, remove the damaged item from operation.
- Perform soldering iron work on a bench with a nonflammable surface.
- Don't mix and match components. Always use the tips manufactured by the same brand as the soldering iron.
- Know the location of the fire extinguisher and how to use it.



GREEN RESOLUTIONS FOR THE NEW YEAR

When setting your goals for 2024, try including some eco-friendly and sustainable practices to make a positive impact on the environment. Here are some eco-friendly and sustainable resolutions you can make in the new year:

Do a waste audit

The next time you go to empty your trash bin, take a look inside. Are there any plastic disposables in there? If so, consider replacing them with a reusable alternative. Some examples are zero-waste razors, produce bags, straws and sandwich bags.

Donate or upcycle

If you're cleaning out your home and are considering throwing away items, try donating them or giving them a new purpose instead. Recycling an item can be practical and useful for others or it can be repurposed into a craft project.

Reduce paper towel usage

According to the Environmental Protection Agency (EPA), paper is the material that most frequently goes into landfills. A transition away from using paper towels might be difficult, but you can start by setting a goal to use smaller sheets of paper towel. You can also invest in cloth napkins and then wash them with the rest of your laundry.

Use less water

Using less water is another way you can conserve resources and consume less. Turn off the water when you are scrubbing dishes or brushing your teeth. Try taking shorter showers and avoid unnecessary baths.

Use eco-friendly cleaning products

To make it easier on the environment and the atmosphere, try buying eco-friendly cleaning supplies, which are labeled as nontoxic. From biodegradable degreasers to natural dish detergent, there are plenty of options, and popular demand has made them more affordable. These alternatives are also safer for household use.

Reduce light usage

Remembering to turn off the lights (or any appliances) when you aren't using them is an easy way to conserve energy. You can also buy energy-efficient lightbulbs, such as LEDs and appliances.

Employee safety update

COROSIVES: SAFETY PRACTICES

When working with corrosives, make sure to read the chemical label — which includes a signal word, a pictogram, a hazard statement and precautionary statements. Always check the safety data sheet (SDS) so you can recognize the hazards of the chemical you're using.

You can ensure the safety of your workspace if you:

- Store acids and bases in separate areas.
- Make sure to use corrosives that are clearly labeled and store them properly, usually in rooms with trapped floor drains.
- Check to see that there's adequate ventilation.
- Tell your supervisor if the mechanical exhaust systems aren't working.
- Check that the tools and equipment you select are made for use with corrosive materials.

When dealing with containers of corrosives, remember to:

- Keep containers closed when not in use.
- Check containers to be sure there are no leaks.
- Be cautious when you move or open containers.
- Be especially careful when you remove corrosives from containers.
- Keep cigarettes, food and drinks out of the work area.
- Wash thoroughly after using corrosives.

Use the correct personal protective equipment (PPE), including:

- Chemical-resistant safety goggles and full-face shields.
- Rubber gloves, aprons and safety shoes. You may also need a full bodysuit.
- Supplied-air respirator or self-contained breathing apparatus (SCBA) for protection, if necessary.

Be sure to inspect all PPE before you use it and remember to clean or dispose of it properly when you finish using it.



Credit: Panchenko Vladimir / Shutterstock.com



Chemical spotlight

Glycolonitrile

Glycolonitrile is an odorless, colorless, oily liquid. It's used as a solvent, a barrier resin additive and an organic intermediate in the synthesis of bactericides, fungicides and in pharmaceutical production.

Glycolonitrile isn't compatible with oxidizing agents, strong acids and acid salts. Store glycolonitrile in tightly closed containers in a cool, well-ventilated area away from heat. Glycolonitrile may react violently with alkalis by polymerizing. Sources of ignition are prohibited where the chemical is used, handled or stored.

If glycolonitrile is spilled or leaked, avoid breathing vapors, mist or gas, and ensure adequate ventilation. Remove all sources of ignition and evacuate personnel to safe areas. Use personal protective

equipment (PPE), including goggles or safety glasses, gloves, flame-retardant protective clothing and respiratory protection.

Prevent further leakage or spillage if it is safe to do so and don't let the product enter drains, sewers, underground spaces, confined spaces, groundwater, waterways or discharge into the environment.

Absorb liquids in vermiculite, dry sand, earth or a similar material, and deposit in sealed containers. Ventilate and wash the area after cleanup is complete. It may be necessary to contain and dispose of glycolonitrile as a hazardous waste.

Contact the federal Environmental Protection Agency (EPA) and local environmental regulatory agency for specific recommendations.