

General Hazards

- Electrocution
- Eye damage
- Burns
- Toxic fumes from welding metals
- Fires and explosions

Wear the Correct Personal Protective Equipment (PPE)

- Clothing
 - Leather, steel-toed boots with high tops.
 - Long pants and long-sleeve shirts.
 - Only wear natural fibers like cotton or wool; DO NOT wear polyester or other flammable materials.
 - Heavy-duty welding gloves.
- Eye and face protection

Electric Arc Welding

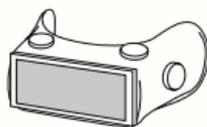
Use appropriate shaded lens, #10, #12, #14.
(Check with your supervisor for proper shade.)

Gas Metal Arc Welding

Use appropriate shaded lens, #11, #12, #14.
(Check with your supervisor for proper shade.)

Oxy-acetylene Use

Use #5 shaded lens.



Protecting Against Electrocution

- Never become electricity's easiest path to ground.
- Make sure all tools and equipment are grounded.
- Check that the electrode holders and welding cables are well-insulated.
- Avoid electric arc welding in damp or wet environments. If necessary, use welding mats for extra insulation.
- Never weld while standing in water.

Respiratory Hazard Protection

- Always make sure the work area is well-ventilated.
- If necessary, use respiratory protection.
- Always check with your supervisor before using a respirator.

Fire Protection

- Keep work area clean and free of combustible materials like paper, trash, grease and oily rags.
- Keep at least one Class A-B-C fire extinguisher nearby.
- Check with your supervisor about fire watch responsibilities.

Preventing Explosions

- Minimize the potential for gas build-up by having good ventilation.
- Inspect all cylinders, valves, hoses and torches before using them.
- Make sure torch or regulator is equipped with a flash-back arrestor.
- Only use friction lighters to light a torch.
- Handle gas cylinders properly:
 - Always store, transport and use gas cylinders secured in an upright position.
 - Keep cylinders clear of ignition sources like sparks and flames.
 - Store oxygen and other fuel gas cylinders separately (at least 20 feet apart or separated by a ½-hour rated, noncombustible barrier).
 - Don't store or use cylinders in heat above 125° F.
 - Never take cylinders into confined spaces.
 - Leave the wrenches on the stems so cylinders can be quickly turned off.
 - When finished with a cylinder, turn off the gas, bleed the lines, remove the regulator and replace the cylinder cap.