COMPRESSED GAS CYLINDER SAFETY

Potential Gas Cylinder Hazards
- Displacement of oxygen
- Flammable
- Toxic
- Corrosive
- Oxidizing
- Explosive
- Physical Hazards due to its heavy weight, large size, and high pressure

Accidents can occur due to:
- Improper storage
- Unexpected release or leak
- Incorrect installation
- Damage to tools and/or cylinder
- Poor inspection and maintenance
- Insufficient training

Personal Protective Equipment (PPE)
- Safety glasses or goggles
- Face shield for liquified gases and cryogenic liquids
- Lab coat
- Gloves as determined by hazard assessment
- Hard-toed shoes when moving or transporting cylinders

General Safety Guidelines
- Complete ISU Laboratory Safety: Compressed Gas Cylinders training, along with any site-specific training for your laboratory. Consult the ISU Gas Cylinder Safety Guidelines as needed.
- Read the safety data sheet to understand the chemical and physical properties of the gas.
- Ensure gas regulators are properly installed and tightened. Use appropriate regulators – consult the cylinder supplier for more information if needed.
- Transport cylinders capped and secured to an appropriate cart.
- Secure cylinders to the wall with a chain or appropriate belt above the midpoint but below the shoulder (~2/3 height).
- Close valves and cap cylinders when not in use.
- Store in an upright position within a well-ventilated area, segregated by compatibility.

NEVER
- Store in exits or egress routes, damp areas, near salt/corrosives, or with incompatible chemicals.
- Store longer than one year without use.
- Transport cylinders in your personal vehicle.
- Ride in an elevator with a compressed gas cylinder.
- Use Teflon tape on cylinders or tube fitting connections.
- Attempt to open a corroded valve.
- Use cylinder gas as compressed air source.

Compressed Gas Cylinder Guidelines: https://go.iastate.edu/MWURYY

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