

Gas Cylinder Safety



When Cylinders are Received

- ◆ Check that the name of the gas is clearly labeled on the cylinder.
- ◆ Check that the appropriate hazard warnings are clearly labeled on the cylinder.
- ◆ Check that the hydrostatic test date is within the last 5 years.
- ◆ Check that the valve cap is in place and can be easily removed.
- ◆ Get a material safety data sheet (MSDS) for the gas and keep it in the lab.

Cylinder Storage

- ◆ Cylinders must be individually strapped or secured to prevent falling or rolling.
- ◆ Keep valve caps in place when not in use.
- ◆ Keep valves closed when not in use. Do not leave any pressure on the gauge.
- ◆ Store cylinders with other compatible gases.
- ◆ Do not store flammable gases near oxidizers or combustible materials.

Cylinder Use

- ◆ Use a 2 stage regulator made for that gas.
- ◆ Do not alter, adapt or use teflon tape on regulators (teflon tape can only be used on threaded connections).
- ◆ Leak test fittings, piping and connections before work begins.
- ◆ Leave 25 psi in cylinder. Do not empty cylinder completely to prevent backflow of contaminants or air.
- ◆ Mark cylinders "MT" or "EMPTY" and store separately from full cylinders.

Emergencies

- ◆ Rooms containing compressed gases must have a sign outside the room stating COMPRESSED GAS, the name of the gas and hazard class.
- ◆ If TOXIC or FLAMMABLE gases are leaking, immediately evacuate area.
- ◆ Call University Police at 911 or 632-3333 and ask for the HAZMAT Team.

Disposal of Used Gas Cylinders

- ◆ Close and tighten valves and replace safety caps on cylinders.
- ◆ CORROSIVE and TOXIC cylinders must be disposed of within 3 years. All cylinders must be disposed of within 10 years.
- ◆ Contact supplier/vendor to obtain guidelines for the shipment of cylinders to be returned.
- ◆ Valves will be removed from empty nontoxic gas cylinders before disposal as metal scrap.
- ◆ Contact the Department of Environmental Health and Safety for removal of cylinders that cannot be returned to the supplier/vendor or for disposal of orphaned cylinders.

Flammable, Asphyxiant, Toxic, Corrosive, Oxidizer, Pyrophoric and Cryogenic gases require additional safety measures. Contact Environmental Health and Safety for training and information. Check the EH&S web site (<http://www.stonybrook.edu/ehs/lab/cgs.shtml>) or Scott Specialty Gases Tech & Safety Data (<http://www.scottecatalog.com/ScottTec.nsf/All?ReadForm>) for additional safety information.