DEPARTMENT OF
ENVIRONMENTAL HEALTH AND SAFETY

EHS Fact Sheet
Compressed Gas Cylinders

Introduction
Compressed gas cylinders can present a number of unique hazards due to the unusual properties of gases. These hazards can be chemical or physical. By knowing the proper handling, use and storage, these hazards can be mitigated.

Handling and Usage
- Ensure that cylinders in use are situated away from heat sources & major traffic flow.
- Keep open flame from ever coming into contact with compressed gas cylinders.
- Keep cylinder valves closed when not in use.
- Only use fittings and valves designated by the manufacturer for the cylinder being used.
- Ensure proper ventilation when compressed gas cylinders are in use.
- Wear eye protection when working with tubing or other parts under pressure.
- Ensure that cylinders are clearly identified.
- Do not repaint cylinders or use the cylinder color to define the contents.
- Leave valve protection caps in place unless in use.
- Transfer of gases from one cylinder to another should only be performed by the gas supplier.

Storage
- Cylinders should be stored in areas that are dry, ventilated and fire resistant.
- Storage areas should protect cylinders from damage.
- Keep cylinders secured, with chains, clamps or straps.
- Store cylinders at a safe distance from welding or cutting operations.
- Do not take or store cylinders in confined spaces.
- Store flammable gases away from other gases.
- If not needed for immediate use, separate oxygen and flammable gas cylinders by a fire rated barrier.

Disposal
Whenever possible, compressed gases should be purchased from a supplier willing to take the spent cylinder back. This means avoiding the use of lecture bottles.

Do not store corrosive gases for an extended period of time. Commercial waste disposal companies are not willing to remove a gas cylinder with a corroded or inoperative valve.

If your work requires chemicals available only in non-returnable cylinders, these cylinders must be completely and safely emptied in the laboratory by the user. The content of the cylinder must be treated appropriately as any hazardous waste giving consideration to the type of chemical substance(s) present.

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Revision Date: September 2025