



Safety Alert - Compressed Gas Cylinders

Compressed gas cylinders, while an important part of many operations at UMBC, can pose serious physical hazards to persons and property if improperly handled or stored.

Examples of Hazards:

- Damage to the cylinder or valve can lead to catastrophic loss of pressure, causing the cylinder to launch like a missile and strike a person or an object at very high speeds.
- Damaged or faulty cylinders or valves can cause the contents of the cylinder to leak and can cause suffocation, skin burns, respiratory irritation, fires, even explosions.

Here are some helpful reminders and tips about working safely with compressed gases at UMBC.

Safe Operating Practices

- Ensure you are aware of the hazards of the gases you are working with prior to use. Refer to labels/warnings and Safety Data Sheets.
- Regularly inspect cylinders for leaks or damage. Report any damage or leaks immediately to your supervisor.
- Use only the appropriately-fitting regulator for the cylinder being put into use. Do not force an incompatible regulator to fit.
- Open cylinder valves slowly. Do not force valves that are stuck or difficult to open. Additionally, do not try to pry open or force a valve cap that is stuck. Contact ESH at 5-2918 for assistance.

Storage:

- All cylinders must be secured with chains, straps or clamps to prevent tip over, regardless of cylinder size.
- Ensure valves are closed and caps are secured. Do not store a cylinder without its protective cap securely in place.
- Store cylinders in a cool, dry place that is well-ventilated and protected from accidental damage such as striking or falling objects.
- Stored cylinders should be separated by EMPTY and FULL (use signs, labels or tags).
- Cylinders connected to regulators must also be segregated and secured separately from unconnected cylinders.

Handling and Transporting

- Remove the cylinder's regulator and secure the valve cap prior to transport.
- Use a cylinder transport cart, do not transport by hand – cylinders are very heavy and run the risk of being dropped.
- Do not roll, slide, or drag cylinders.

If you have any additional questions or concerns, contact ESH at 5-2918 or email esh@umbc.edu.