

• When returning cylinders to the supplier, properly close the cylinder valve, replace and secure any valve outlet seals, and properly install the cylinder cap.

<u>Storing Compressed Gases</u> - Take the following precautions to prevent injuries caused by asphyxiation, fire, explosion, high pressure, and improper handling of compressed gas cylinders:

NEVER

Allow storage temperature to exceed 125°F (52°C).

- Permit smoking or open flames in oxidizer or flammable gas storage areas.
- Expose cylinders to corrosive materials such as ice melting compounds.

ALWAYS

Secure cylinders when in storage, transit, or use.

whichever is higher.

• Change service of equipment from the particular gas or group of gases for which they were intended.

ALWAYS

Know and understand the gases and associated equipment you will be using. Refer to the supplier's MSDS to determine the proper PPE and any other special requirements for the gas being used.

- Use a pressure-reducing regulator or separate control valve to safely discharge gas from a cylinder.
- Use regulators approved for the specific gas.
- Leak-test lines and equipment with an inert gas before using.

• Use regulators and pressure-relief devices when connecting cylinders to piping circuits with lower pressure service ratings.

- Use check valves to prevent reverse flow into the cylinder.
- Loosen the valve outlet seal slowly when preparing to connect a cylinder.
- Open cylinder valves slowly and carefully after the cylinder has been connected to the process.
- Stand clear of the regulator and valve outlet while opening the valve.
- Prevent sparks and flames from contacting cylinders.

• Discontinue use and contact the supplier if a cylinder valve is difficult to operate. Wrenches should not be used on valves equipped with hand wheels. If the valve is faulty, tag the cylinder, identifying the problem, and notify the supplier.

• Close the cylinder valve and release all pressure from the downstream equipment connected to the cylinder anytime an extended non-use period is anticipated.

• Use oxygen-compatible threading compounds, such as Teflon® tape on systems for use in oxygen or oxidizer service.

• Remember, the cylinder label or decal is the only positive way to identify the contents of a cylinder.