

## Safe Work Practice

# **Compressed Gas Cylinders**

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### **Personal Protective Equipment:**

Clean gloves, protective footwear

#### Introduction:

Compressed gas cylinders present three main safety hazards:

- 1. A falling cylinder may cause injury.
- 2. Because the contents are under pressure if a valve is broken off it may make the cylinder become a projectile due to the sudden release of pressure.
- 3. Damaged or faulty valves may allow release of toxic, flammable or poisonous gases.

#### **General Requirements:**

All cylinders must display a Workplace Hazardous Material Information System (WHMIS) supplier label identifying the contents of the cylinder.

Material Safety Data Sheets must be readily available for every type of gas stored or in use.

Cylinders must be stored and used in a vertical position and secured in the upright position at all times.

Cylinders must be stored in a safe area protected from vehicular traffic, heat sources and potential ignition sources.

Storage areas must be cool, dry and well ventilated.

Cylinder storage areas must be prominently posted with the gas cylinders stored there and "No Smoking" signs must be prominently displayed.

Full and empty cylinders must be stored in separate areas.

All cylinders of compressed gas must be equipped with a regulator, approved for that particular gas, attached to the cylinder valve to reduce the pressure when in use.

Regulators and pressure gauges must be used for the gas for which they were intended.

All hoses and fittings must be CGA or CSA approved.

Whenever a cylinder is not in use the regulator must be removed and the valve cap replaced.

Oil and grease must be kept away from oxygen cylinders and all oxygen fittings. Do not wear greasy or oily gloves when working with oxygen.

#### **Transportation of Cylinders:**

Valve protector caps must be in place when cylinders are transported.

Compressed gas cylinders must not be moved by slinging. If a cylinder must be moved by a crane or mobile equipment to a lower or higher elevation, a suitable cradle or platform must be used.

Cylinder being moved short distances should be rolled on their bottom edge, not picked up and carried.

When cylinders are moved by mobile equipment they must be secured.

Cylinders must be secured in an upright position when being transported.

#### **Storage of Compressed Gas Cylinders:**

Cylinders must be kept away from heat sources.

Cylinder storage must be away from vehicular traffic and other potential sources of impact.

Valve protection caps must be kept in place during storage.

Empty cylinders must be stored separate from full cylinders, with the valve closed.

Empty cylinders must be marked "MT".

Oxygen cylinders must be stored at least 6.1 meters (20 feet) away from any oil or grease or other fuel gas cylinders or be separated by a noncombustible barrier at least 1.5 meters (5 feet).