
1. BI Substance Policy – Compressed Gases

- a. This policy covers compressed gases: any product, material or substance contained under pressure, including dissolved gases.
- b. For gases liquefied by compression or refrigeration, such as liquid nitrogen, refer to the BI Cryogenics and Liquid Nitrogen Policy.
- c. Refer to RMM #504: Compressed and Liquefied Gases Safety Program for McMaster training requirements, and handling and storage protocols.

1.1.1. Training

- a. As stated in RMM #504, prior to working with or around compressed and liquefied gases, McMaster Gas Cylinder training should be completed.
- b. Refer to the SDS prior to handling/using compressed gases.
- c. Even with McMaster Gas Cylinder training, BI users are NOT authorized to handle gas or liquid nitrogen cylinders in BI laboratories, and must request assistance from qualified BI staff.

1.1.2. Labeling

- a. Compressed and liquefied gases will be labeled according to WHMIS standards.
- b. Empty gas cylinders or tanks should be labeled as such.

1.1.3. Storage

- a. In BI laboratories, gas cylinders will be properly secured at all times.
- b. Reactive compressed gases will be kept away from sparks and flames.
- c. When not in use, or connected to a regulator, the gas cylinder valve protection cap will be secured.
- d. Gas cylinders will not be stored for extended periods.

1.1.4. Handling

- a. BI users are NOT authorized to handle gas cylinders in BI laboratories, and must request assistance from qualified BI staff.
- b. For staff handling compressed gases, the appropriate PPE will be worn. Refer to the BI PPE Policy.
- c. When in use, the appropriate regulator will be used for the type of gas and cylinder.

1.1.5. Transporting

- a. Before transportation, the gas cylinder valve will be closed and the valve protection cap secured. Some positive pressure will be left in the cylinder.
- b. When transporting gas cylinders, they will be properly secured to a suitable cart.
- c. Transportation carts will be inspected routinely and prior to tank transportation to ensure straps are in working condition and wheels have tightened screws and bolts. Broken or compromised carts will not be used.