Corrosive Compressed Gases

Corrosive gases will attack and damage human tissue. They will also damage metal and other building materials.

Toxic corrosive gases (i.e. ammonia, chlorine, hydrogen chloride/bromide, nitrogen dioxide etc.) must never be stored longer than six months, since cylinders can degrade over time.

Storage areas should be as dry as possible. If the gas inside is also flammable, the cylinder must be grounded.

Examples are hydrogen chloride, hydrogen fluoride, and ammonia.

Safety and You

- Consult with OH&S before purchasing corrosive gases.
- Develop and make available Standard Operating Procedures (SOPs) for corrosive gases. These SOPs must include emergency response, and training for all involved employees
- Train employees to work with corrosive gases and allow only those trained to work with them.
- Provide, train, and practice an emergency response procedure for everyone working in the area.
- Training must include compressed gas hands-on training showing different types of regulators, changing regulators, performing leak tests, etc.
- Have documented training on all lab personnel who will be working with toxic gases.
- Intermittent emergency drills are required and must include all of those working in the area whether working with toxic gases or not.
- Review the Safety Data Sheets (SDS) often to remember and observe all safety use guidelines.
- Wear PPE at all times while working with corrosive gases.
- Work/store in well-ventilated areas
- Follow the “buddy system” (two people rule)

Consult OH&S for alarms and monitoring.