

<b>University of Pittsburgh Safety Manual</b>	EH&S Guideline Number: 04-035	
Subject: <b>Helium Compressed Gas Cylinder</b>	Effective Date 5/11//2021	Page 1 of 1

## GUIDELINES FOR THE SAFE USE OF HELIUM

Helium is an inert, colorless, odorless, and nonflammable gas. The vapor density of helium is lighter than air which means that it will rise upon release. Helium is an asphyxiant gas, but has no warning properties since the gas is odorless, colorless, tasteless, and nonirritating. Helium cannot be detected by sight or smell.

### 1. Health Hazards

- 1.1 Large quantities of helium can displace oxygen, and excessive inhalation of helium can cause dizziness, nausea, vomiting, loss of consciousness, and even death.

### 2. Safety Precautions

- 2.1 All individuals handling cylinders containing helium should complete the University's compressed gas safety training prior to working with helium.  
<https://www.ehs.pitt.edu/training/overview/compressed-gas-safety>.
- 2.2 Prior to work with helium, also review **University Guideline #03-012 Compressed Gas Cylinders**,  
<https://www.ehs.pitt.edu/sites/default/files/docs/03-012CompressedGas.pdf>
- 2.3 A Safety Data Sheet (SDS) should be available in the immediate work area where helium is used. The SDS, along with this Guideline, can be used for additional hazard communication training for employees.
- 2.4 Do not deliberately inhale helium – although not poisonous, it can result in health effects and/or suffocation.
- 2.5 Compressed gas cylinders of helium must be stored in a well-ventilated area and secured in an upright position using an approved chain, strap, or floor device to prevent falling. Approved chains or straps should be secured around the top 1/3 of the cylinder and should never be located around the neck, regulator, or bottom 1/3 of the cylinder.
- 2.6 Always move compressed gas cylinders with a cart designed to secure cylinders. Never drag a cylinder by valves or caps, or roll a cylinder in the horizontal position. Compressed gas cylinders should be transported with the cylinder cap securely fastened.
- 2.7 In the event of a leak, open doors, and windows. Contact Pitt Police at 412-624-2121 for emergency assistance.

Contact EH&S at 412-624-9505 with any questions regarding the safe use of helium.