

Job Hazard Analysis

Task/Equipment:	Compressed Gas
Department:	Biology, Chemistry
Approved By:	Justine Becker
Date:	2/10/2021

Personal Protective Equipment:

N/A

Trainings Required*/Recommended:

General Lab Safety Training

Equipment/Tools/Chemicals Required for the Job:

Wall attachment sites

Bench attachment sites

Hand trucks

Tasks/Steps	Hazards Present	Safety Measures and Controls
Store the cylinder properly	Gas leak Bodily harm Death	<ol style="list-style-type: none"> 1. Cylinders must be kept upright and secured by wall attachments 2. Keep the cylinder stored in a well-ventilated and dry area, out of direct sunlight 3. Keep cylinders away from flames, boilers, and other hot surfaces 4. Do not store cylinders with different gases in the same location 5. Keep cylinders at least 40 feet from flammable or combustible chemicals and materials 6. Lab containing cylinders must indicate so at the entrance 7. The cylinder valves must remain closed when not actively being used (this includes during transit and when the cylinder is empty) 8. If the cylinder leaks it shall be moved to an isolated location outdoors. Open the valve slightly to allow gas to escape. Keep away from people and flammable materials. Inform public safety and Cryogenic Gases. Label the cylinder as defective. 9. If the cylinder must be moved, carefully use a hand truck
Receiving a new cylinder from Cryogenic Gases	Gas leak Bodily harm Death	<ol style="list-style-type: none"> 1. Make sure the wall attachment is in good, stable condition 2. Do not accept the delivery if the cylinder is not properly labeled 3. Verify that no odor is coming from the cylinder, and that it is not making a hissing sound and that there is no rust or damage to the valves and fixtures 4. Check that the cylinder has been check within the recommended time frame
Using a gas cylinder	Gas leak Bodily harm Death	<ol style="list-style-type: none"> 1. Follow all recommended procedures. Check that connections are clean and that there are no leaks. Wipe away any dust, grit, oil or dirt, which may cause a gas leak 2. Do not apply compounds, sealant, tape or lubricant unless specifically approved by the vendor 3. Use only the recommended key to open valves 4. Connect the gas cylinder to a regular designed for the specific gas 5. Never open a damaged valve 6. Open and close valves slowly and do not use force when opening or closing valves. Do not turn more than three quarters, when possible. 7. Close cylinder valves unless the cylinder is actively being used (Regulators can develop leaks) 9. Close the cylinder valve before the closing the regulator 10. Do not tamper with the cylinders in any way

Additional Information:

Cryogenic Gases phone number: (313) 835-5513

