HOW TO RECYCLE EMPTY BALLOON TIME® HELIUM TANKS ON CAMPUS
BALLOON TIME® HELIUM TANKS
THE DISPOSAL OF A COMPRESSED GAS TANK/CYLINDER AT THE UNIVERSITY AT ALBANY IS REGULATED BY FEDERAL, STATE AND LOCAL REGULATIONS.

THE FOLLOWING GUIDELINES WILL HELP ESTABLISH THE PROPER PROTOCOL ON HOW TO SAFELY RECYCLE EMPTY BALLOON TIME® HELIUM TANKS.

TO RECYCLE ALL OTHER TYPES OF COMPRESSED GAS TANKS/CYLINDERS, PLEASE CONTACT THE OFFICE OF ENVIRONMENTAL HEALTH & SAFETY AT (518) 442-3495.
HOW TO DISPOSE OF YOUR BALLOON
TIME HELIUM BALLOON KIT VIDEO

WARNINGS & PRECAUTIONS

- Before using the Balloon Time® Helium Balloon Kits, please familiar yourself with the following warnings. These warnings can also be found on the product carton.

- Keep out of the reach of children.
- Balloons represent a possible choking hazard. Children under eight years can choke or suffocate on uninflated or broken balloons. Adult supervision is required. Keep uninflated balloons away from children. Discard broken balloons immediately.
- Do not place nozzle in mouth or nose for any reason. Doing so can damage lungs and other body parts, which can result in serious personal injury or death. The cylinder contains compressed helium under pressure.
- Do not inhale helium. Use only in a well ventilated area. **Never use in closed spaces.** Helium reduces and can eliminate oxygen available for breathing. Inhaling helium can result in serious personal injury or death.

- **Do not refill with any material.** This is a non-refillable cylinder. This could result in violent bursting of the cylinder resulting in serious personal injury or death.

- **Do not store in damp areas.** This can cause the cylinder to rust. Rusting of the cylinder can result in a violent bursting of the cylinder resulting in serious personal injury or death.

- **Never expose the cylinder to direct heat or fire.** Exposure to those conditions could result in the operation of the pressure relief device, which will result in a sudden discharge of pressure from the cylinder, resulting in serious personal injury or death.
• Do not mistreat the tank by dropping on sharp or pointed surfaces. This could puncture the tank causing a sudden release of the contents resulting in serious injury or death.

• For more information on helium gas, refer to the Balloon Time Helium Material Safety Data Sheet
**WARNING:** Failure to follow these instructions for safe disposal of the non-refillable Balloon Time® tank can result in an immediate release of gaseous helium resulting in personal injury, property damage or both.

- Balloon Time is a non-refillable tank. Please do not refill it with any substance. Read all tank warnings for more information.
1. Only attempt disposal of the Balloon Time® tank when it is empty.

2. Take the tank to a well-ventilated area. Fully open the valve handle by turning it counter-clockwise. Press and hold down on the tilt-nozzle (see photo 2) until the tank is empty. Listen and feel for pressure discharging from the tilt-nozzle. The tank is empty when no sound is heard or pressure is felt.

3. Unscrew and remove the tilt-nozzle (see photo 3) either by hand or with the help of a ¾ inch wrench.
4. Take the tank to a steel recycling center or place with curbside recycling pickup. However, please note that recycling programs for this product may not exist in your area.

If your local steel recycling center or curbside recycling will not accept the empty Balloon Time® tank, please continue with these additional instructions.

5. Place the tip of a flat-head screwdriver on the inside serration of the rupture disc located on the shoulder of the tank (see photo 5).

6. With a hammer or mallet, LIGHTLY tap the handle of the screwdriver to pierce the rupture disc open (see photo 6).
7. Carefully, completely open the rupture disc. With a permanent magic marker, draw a large circle around the open rupture disc and write the word “EMPTY” on the tank (see photo 7).

8. Once the rupture disc is open, the tank can be recycled with other steel recyclables at your local recycling center or Solid Waste Authority (SWA). The phone number for your local SWA can be found in the blue government section of your white pages.

If your local SWA will not accept the punctured tank, dispose of the punctured tank in your trash.

To recycle tanks at the University at Albany, once you have completed Step #7, bring the empty tank to the Social Sciences loading dock and place the tank in the scrap metal dumpster.
PRAXAIR MSDS (SDS)

1. Chemical Product and Company Identification

Product Name: Helium, Compressed
Trade Name: Helium, LaserStar
Chemical Name: Helium
Synonym: Helium-4, refrigerant gas, R-724

Product Grades: Industrial, UltraTech 5.0 research, chromatographic, 5.5 LC gas, trace analytical, 5.0 UHP, 4.7, 5.0, 5.5 LaserStar 4.6 ppm, oxygen-free, 5.0 microelectronic RD gas, 4.5, 5.0, 5.6, 6.0 semiconductor process gas

Company Name: Praxair, Inc.
Address: 28 Old Ridgebury Road, Danbury, CT 06810-5513

2. Hazards Identification

Emergency Overview

CAUTION! High-pressure gas.
Can cause rapid suffocation.
May cause dizziness and drowsiness.
Self-contained breathing apparatus may be required by rescue workers.

OSHA REGULATORY STATUS: This material is considered hazardous by the OSHA Hazard Communications Standard (29 CFR 1910.1200).

POTENTIAL HEALTH EFFECTS:
Effects of a Single (Acute) Overexposure

Inhalation: Asphyxiant. Effects are due to lack of oxygen. Moderate concentrations may cause headache, dizziness, dizziness, excitement, excess salivation, vomiting, and unconsciousness. Lack of oxygen can kill.

Skin Contact: No harm expected.

Eyes Contact: No harm expected.

Skin and Eye Contact: No harm expected.

Other Effects of Overexposure: Helium is an asphyxiant. Lack of oxygen can kill.

NOTES TO PHYSICIAN: There is no specific antidote. This product is inert. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

3. Composition/Information on Ingredients

Component: He
CAS Number: 7439-99-7
Concentration: 100% (balance)

4. First Aid Measures

INHALATION: Immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, qualified personnel may give oxygen. Call a physician.

SKIN CONTACT: An unlikely route of exposure. This product is a gas at normal temperature and pressure.

SWALLOWING: An unlikely route of exposure. This product is a gas at normal temperature and pressure.

EYE CONTACT: An unlikely route of exposure. This product is a gas at normal temperature and pressure.

NOTES TO PHYSICIAN: There is no specific antidote. This product is inert. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire Fighting Measures

FLAMMABLE PROPERTIES: Nonflammable.

SUITABLE EXTINGUISHING MEDIA: Helium cannot catch fire. Use media appropriate for surrounding fire.

PRODUCTS OF COMBUSTION: Not applicable.

PROTECTION OF FIREFIGHTERS: CAUTION! High-pressure gas. Evacuate all personnel from danger area. Immediately deplete cylinders with water from maximum distance until cool, then move them away from fire area if without risk. Self-contained breathing apparatus may be required by rescue workers.開始 fire brigades must comply with OSHA 29 CFR 1910.158.

Specific Physical and Chemical Hazards. Heat of fire can build pressure in cylinder and cause it to rupture. No part of cylinder should be subjected to a temperature higher than 125°F (52°C). Helium cylinders are equipped with a pressure relief device. (Exceptions may exist when authorized by DOT.)


4/19/2016
6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

CAUTION: High-pressure gas.

Personal Precautions: Helmet is an asphyxiant. Lack of oxygen can kill. Evacuate all personnel from danger area. Use self-contained breathing apparatus where needed. Shut off leak if at all practicable. Shut off all ventilation; never start or operate ventilation equipment. Ventilate area of leak or move cylinder to a well-ventilated area.

Environmental Precautions: Prevent waste from contaminating the surrounding environment. Keep personnel away. Discard any product, residue, or disposable container, or linings in an environmentally acceptable manner. In full compliance with federal, state, or provincial regulations. If necessary, call your local supplier for assistance.

7. Handling and Storage

PRECAUTION TO BE TAKEN IN HANDLING: Protect cylinders from damage. Use a suitable hand truck to move cylinders. Do not drag, roll, slide, or drop. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. Never insert an object (e.g., wrench, screwdriver, pry bar) into cap openings; doing so may damage the valve and cause a leak. Use an adjustable wrench to remove overtight or rusted caps. Open valve slowly. If valve is hard to open, discontinue use and contact your supplier. Close valve after each use, keep closed even when empty. Never apply flame or localized heat directly to any part of the cylinder. High temperatures may damage the cylinder and could cause the pressure relief device to fail prematurely, venting the cylinder contents. For other precautions in using helium, see section 16.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store only where temperature will not exceed 125°F (52°C). Firmly secure cylinders upright to keep them from falling or being knocked over. Screw valve protection cap every day. Store full and empty cylinders separately. Use a first-in, first-out inventory system to prevent storing full cylinders for long periods.

RECOMMENDED PUBLICATIONS: For further information on storage, handling, and use, see Praxair publication P-14-153. Guidelines for Handling Gas Cylinders and Containers. Obtain from your local supplier.

9. Physical and Chemical Properties

APPEARANCE: Colorless gas

ODOR: None

ODOR THRESHOLD: Not applicable

PHYSICAL STATE: Gas at normal temperature and pressure

pH: Not applicable

BOILING POINT at 1 atm: 455.5°F (237°C)

FLASH POINT (closed cup): Not applicable

EVAPORATION RATE (Butyl Acetate): Not applicable

FLAMMABILITY: Nonflammable

FLAMMABLE LIMITS IN AIR: % by volume: LOWER: Not applicable. UPPER: Not applicable

VAPOR PRESSURE at 85°F (29°C): Not applicable

VAPOR DENSITY at 70°F (21.1°C) and 1 atm: 0.0104 less than air = 0.690 kg/m³

LIQUID DENSITY at boiling point and 1 atm: 7.522 lb/ft³ (124.0 kg/m³)

SPECIFIC GRAVITY (Air = 1) at 70°F (21.1°C) and 1 atm: 0.133

SOLUBILITY IN WATER: Not applicable

PARTITION COEFFICIENT: n-octanol/water: Not applicable
10. Stability and Reactivity

CHEMICAL STABILITY:  □ Unstable  □ Stable

CONDITIONS TO AVOID: None known.

INCOMPATIBLE MATERIALS: None known. Helium is chemically inert.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

POSSIBILITY OF HAZARDOUS REACTIONS: □ May Occur  □ Will Not Occur

11. Toxicological Information

ACUTE TOXICITY: Helium is a simple asphyxiant.

STUDY RESULTS: None known.

12. Ecological Information

ECOTOXICITY: No known effects.

OTHER ADVERSE EFFECTS: Helium does not contain any Class I or Class II ozone-depleting chemicals.

13. Disposal Considerations

WASTE DISPOSAL METHOD: Do not attempt to dispose of residual or unused quantities. Return cylinder to supplier.

14. Transport Information

DOT/RH/Shipping Name: Helium, compressed

HAZARD CLASS: 2.2

PACKING GROUP/Zone: N/A

IDENTIFICATION NUMBER: UN1045

PRODUCT: None

RQ: None

FLAMMABLE (when required): NONFLAMMABLE GAS

"N/A" Not applicable

SPECIAL SHIPPING INFORMATION: Cylinders should be transported in a secure position, in a well-ventilated vehicle. Cylinders transported in an enclosed, nonventilated compartment of a vehicle can present serious safety hazards.

Shipment of compressed gas cylinders that have been filled without the owner's consent is a violation of federal law (49 CFR 173.301(a)).

MARINE POLUTANTS: Helium is listed as a marine pollutant by DOT.