



# Material Safety Data Sheet

## 1. Product and Company Identification

Product name : **Helium, refrigerated liquid**

Chemical formula : He

Synonyms : Helium

Company : Specialty Gases of America, Inc  
6055 Brent Dr.  
Toledo, OH 43611

Telephone : 419-729-7732

Emergency : 800-424-9300

## 2. Composition/Information on Ingredients

Components	CAS Number	% Volume
Helium, refrigerated liquid	7440-59-7	100%

## 3. Hazards Identification

### Emergency Overview

Containers may rupture or explode if exposed to heat.

### Potential Health Effects

Inhalation : Changes in body temperature, nausea, vomiting, difficulty breathing, irregular heartbeat, headache, fatigue, dizziness, disorientation, emotional disturbances, tingling sensation, loss of coordination, suffocation, convulsions, unconsciousness, coma.

Eye contact : Frostbite, blurred vision.

Skin contact : Blisters, frostbite.

Ingestion : Ingestion of harmful amounts is unlikely.

Chronic Health Hazard : None.

## 4. First Aid Measures

General advice : None.

Eye contact : Contact with liquid: immediately flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

Skin contact : If frostbite or freezing occur, immediately flush with plenty of lukewarm water (105-115°F; 41-46°C). DO NOT USE HOT WATER. If warm water is not available, gently wrap affected parts in blankets. Get immediate medical attention.

Ingestion : If a large amount is swallowed, get medical attention.

Inhalation : If adverse effects occur, remove to uncontaminated area. Get immediate medical attention.

## 5. Fire-Fighting Measures

- Suitable extinguishing media : Use extinguishing agents appropriate for surrounding fire.
- Specific hazards : Negligible fire hazard. Containers may rupture or explode if exposed to heat.
- Fire fighting : Move container from fire area if it can be done without risk. Cool containers with water spray until well after fire is out. Stay away from the ends of tanks. For tanks, rail car or tank truck, evacuation radius: 800 meters (1/2 mile). Use extinguishing agents appropriate for surrounding fire. Cool containers with water spray until well after the fire is out. Do not get water directly on material. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

## 6. Accidental Release Measures

- Personal precautions : None.
- Environmental precautions : None.
- Methods for cleaning up : No not touch spilled material. Stop leak if possible without personal risk. Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering.
- Additional advice : None.

## 7. Handling and Storage

### Handling

Secure cylinder when using to protect from falling. Use suitable hand truck to move cylinders.

### Storage

Store in accordance with all current regulations and standards. Avoid direct sunlight. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. Keep separated from incompatible substances.

## 8. Exposure Controls / Personal Protection

### Exposure limits

ACGIH, OSHA and NIOSH have not developed exposure limits for any of this product's components.

### Engineering measures

Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

### Personal protective equipment

- Respiratory protection : Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.  
For unknown concentrations or immediately dangerous to life or health – Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode. Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.
- Hand protection : Wear appropriate chemical resistant gloves.
- Eye protection : Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.
- Skin and body protection : Wear appropriate chemical resistant clothing.

## 9. Physical and Chemical Properties

Form	: Liquid.
Color	: Colorless.
Odor	: Odorless.
Molecular weight	: 4.0026
Vapor pressure	: Not available.
Vapor density	: 0.14 (air = 1)
Specific gravity	: Not applicable.
Boiling point	: -452°F (-269 C)
Freezing point	: -465.5°F (-271.3°C)
Water solubility	: Very slightly soluble.
Evaporation rate	: Typical cryogenic container rate.

## 10. Stability and Reactivity

Stability	: Stable at normal temperature and pressure.
Conditions to avoid	: Protect from physical damage and heat. Containers may rupture or explode if exposed to heat. Avoid contact with water or moisture.
Materials to avoid	: No data available.
Hazardous decomposition products	: Miscellaneous decomposition products.

## 11. Toxicological Information

### Acute Health Hazard

Ingestion	: Not available.
Inhalation	: Highly toxic.
Skin	: Not available.

## 12. Ecological Information

Not available.

## 13. Disposal Considerations

Waste from residues / unused products	: Dispose in accordance with all applicable regulations.
Contaminated packaging	: Return cylinder to supplier.

## 14. Transport Information

### DOT (US only)

Proper shipping name	: Helium, refrigerated liquid
Class	: 2.2
UN/ID No.	: UN1963
Labeling	: Non-flammable Gas

### Further information

Cylinders should be transported in a secure upright position in a well ventilated truck.

## 15. Regulatory Information

### U.S. Federal Regulations

None of these product components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

### SARA 311/312

Acute: Yes  
Chronic: No  
Fire: No  
Reactive: No  
Pressure: Yes

### U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
HELIUM, LIQUID	7440-59-7	No	Yes	Yes	Yes	Yes	Yes

Not regulated under California Proposition 65

## 16. Other Information

Prepared by : Specialty Gases of America, Inc.

For additional information, please visit our website at [www.americangasgroup.com](http://www.americangasgroup.com).