

Safety Data Sheet

Helium Central McGowan 123 Roosevelt Road, St. Cloud, MN, 56301 800-569-1322

Section 1: Product and Company Identification

Central McGowan 123 Roosevelt Road, St. Cloud, MN, 56301

Product Code: Helium Synonyms: HEL E, HEL K, HEL Q, HEL T, HEL V Recommended Use: Usage Restrictions:

Section 2: Hazards Identification



Hazard Classification: Hazard Statements: Precautionary Statements Storage: Gases Under Pressure Contains gas under pressure; may explode if heated

Protect from sunlight. Store in well-ventilated place.

Section 3: Composition/Information on Ingredients

CAS # 7440-59-7

| Chemical Substance | Chemical Family | Trade Names |
|--------------------|-----------------|---|
| HELIUM | Inorganic gases | HELIUM GAS; HELIUM COMPRESSED; HELIUM-4; ATOMIC HELIUM; UN 1046; He |

Section 4: First Aid Measures

| Skin Contact | Eye Contact | Ingestion | Inhalation | Note to Physicians |
|--|--|--|---|--|
| Wash exposed skin with soap and water. | Flush eyes with plenty of water. | If a large amount is swallowed, get medical attention. | If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention. | For inhalation, consider oxygen. |

Section 5: Fire Fighting Measures

| Suitable Extinguishing Media | Products of Combustion | Protection of Firefighters |
|---|------------------------|----------------------------|
| Non-flammable. use suitable extinguishing media for surrounding fire. | Non-flammable | Non-flammable |
| | | non-flammable |

Section 6: Accidental Release Measures

| Personal Precautions | Environmental Precautions | Methods for Containment |
|--|-------------------------------|-------------------------------|
| Keep unnecessary people away, isolate hazard area and deny entry. Stay | Avoid soil, waterways, drains | Stop leak if possible without |
| upwind and keep out of low areas. | and sewers | personal risk. |

| Methods for Cleanup | Other Information |
|--|-------------------|
| Stop leak, evacuate area. Contact emergency personnel. | None |

Section 7: Handling and Storage

| Handling | Storage |
|---|--|
| Store and handle in accordance with all current regulations and standards. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. | Keep separated from incompatible substances. |

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

HELIUM: ACGIH (simple asphyxiant)

Engineering Controls

Handle only in fully enclosed systems.

| Eye Protection | Skin Protection | Respiratory Protection |
|---|--------------------------------------|------------------------|
| Eye protection not required, but recommended. | Protective clothing is not required. | Non-flammable |
| | Protective gloves are not required. | |

General Hygiene considerations

Avoid breathing vapor or mist

Avoid contact with eyes and skin

Wash thoroughly after handling and before eating or drinking

Section 9: Physical and Chemical Properties

| Physical State | Appearance | Color | Change in Appearance | Physical Form | Odor |
|----------------|------------|-----------|-------------------------|---------------|----------|
| Gas | Colorless | Colorless | N/A | Gas | Odorless |

| Taste | Flash Point | Flammability | Partition Coefficient | Autoignition Temperature | Upper Explosive Limits |
|---------------------------|-----------------|-----------------------------|-----------------------|-----------------------------|---------------------------|
| Tasteless | Not flammable | Not available | Not available | Nonflammable | Nonflammable |
| | | | | | |
| Lower Explosive Limits | Boiling Point | Freezing Point | Vapor Pressure | Vapor Density | Specific Gravity |
| Nonflammable | -452 F (-269 C) | -458 F (-272 C) @ 26 atm | 1719 mmHg @ -268 C | 0.138 (Air=1) | Not applicable |
| | | | | | |
| Water Solubility | рН | Odor Threshold | Evaporation Rate | Viscosity | Molecular Weight |
| 0.94% @ 0 C | Not applicable | Not available | Not applicable | 0.02012 cP @ 26.8 C | 4.0026 |

| Molecular Formula | Density | Weight per Gallon | Volatility by Volume | Volatility | Solvent Solubility |
|-------------------|------------------|-------------------|----------------------|----------------|--------------------|
| He | 0.1785 g/L @ 0 C | Not available | 100% | Not applicable | Insoluble : Not |
| | _ | | | | available |

Section 10: Stability and Reactivity

| Stability | Conditions to Avoid | Incompatible Materials |
|---|---|------------------------|
| Stable at normal temperatures and pressure. | Protect from physical damage and heat. Containers may rupture or explode if exposed to heat. Keep liquid helium from contact with air. | No data available. |

| Hazardous Decomposition Products | Possibility of Hazardous Reactions |
|--------------------------------------|------------------------------------|
| Miscellaneous decomposition products | Will not polymerize. |

Section 11: Toxicology Information

Acute Effects

| Oral LD50 | Dermal LD50 | Inhalation |
|---------------|---------------|--|
| Not available | Not available | Nausea, vomiting, difficulty breathing, irregular heartbeat, headache, fatigue, dizziness, disorientation, emotional disturbances, tingling sensation, loss of coordination, suffocation, convulsions, unconsciousness, coma |

| Eye Irritation | Skin Irritation | Sensitization |
|-----------------------------------|-------------------|----------------------|
| Liquid: frostbite, blurred vision | Liquid: frostbite | Difficulty breathing |

Chronic Effects

| Carcinogenicity | Mutagenicity | Reproductive Effects | Developmental Effects |
|-----------------|---------------|----------------------|-----------------------|
| Not available | Not available | Not available | No data |

Section 12: Ecological Information

Fate and Transport

| Eco toxicity | Persistence / Degradability | Bioaccumulation / Accumulation | Mobility in Environment |
|--------------------------------------|-----------------------------|---------------------------------------|-------------------------|
| Fish toxicity: Not available | Not available | Not available | Not available |
| Invertibrate toxicity: Not available | | | |
| Algal toxicity: Not available | | | |
| Phyto toxicity: Not available | | | |
| Other toxicity: Not available | | | |

Section 13: Disposal Considerations

Dispose in accordance with all applicable regulations.

Section 14: Transportation Information

U.S. DOT 49 CFR 172.101

| Proper Shipping Name | ID Number | Hazard Class or Division | Packing Group | Labeling Requirements | Passenger Aircraft or Railcar Quantity Limitations | Cargo Aircraft Only Quantity Limitations | Additional Shipping Description |
|----------------------------|--------------|--------------------------------|-------------------|--------------------------|--|--|---------------------------------------|
| Helium, compressed | UN1046 | 2.2 | Not applicable | 2.2 | 75 kg or L | 150 kg | N/A |

Canadian Transportation of Dangerous Goods

| Shipping Name | UN Number | Class | Packing Group / Risk Group |
|--------------------|-----------|-------|----------------------------|
| Helium, compressed | UN1046 | 2.2 | Not applicable |

Section 15: Regulatory Information

U.S. Regulations

| CERCLA Sections | SARA 355.30 | SARA 355.40 |
|-----------------|----------------|----------------|
| Not regulated. | Not regulated. | Not regulated. |

SARA 370.21

| Acute | Chronic | Fire | Reactive | Sudden Release |
|-------|---------|------|----------|----------------|
| Yes | No | No | No | Yes |

SARA 372.65

Not regulated.

OSHA Process Safety

Not regulated.

State Regulations

CA Proposition 65

Not regulated.

Canadian Regulations

WHMIS Classification

А

National Inventory Status

| US Inventory (TSCA) | TSCA 12b Export Notification | Canada Inventory (DSL/NDSL) |
|----------------------|------------------------------|-----------------------------|
| Listed on inventory. | Not listed. | Not determined. |

Section 16: Other Information

NFPA Rating

HEALTH=0 FIRE=0 REACTIVITY=0 SPECIAL=SA

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard