



# Safety Data Sheet

## Argon/Helium 25/75

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: **Argon/Helium 25/75**

**Synonyms:** A25 T

**Recommended Use:**

**Usage Restrictions:**

### Section 2: Hazards Identification



**Warning**

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 #     | Concentration |
|---------------|-----------|---------------|
| <b>Argon</b>  | 7440-37-1 | 25%           |
| <b>Helium</b> | 7440-59-7 | 75%           |

|               | Chemical Substance | Chemical Family | Trade Names   |
|---------------|--------------------|-----------------|---|
| <b>Argon</b>  | ARGON, COMPRESSED  | Inorganic gases | ARGON; UN 1006; AR  |
| <b>Helium</b> | 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               |
|---------------|--|----------------------------------|--|--|----------------------------------|
| <b>Argon</b>  | Not applicable route of exposure       | Flush eyes with plenty of water. | Not applicable route of exposure                       | 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. |
| <b>Helium</b> | 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   |
|---------------|---|------------------------|--|
| <b>Argon</b>  | Non-flammable gas   | Not applicable         | <ul style="list-style-type: none"> <li>▪ N/a</li> <li>▪ N/A</li> </ul>                     |
| <b>Helium</b> | Non-flammable. use suitable extinguishing media for surrounding fire. | Non-flammable          | <ul style="list-style-type: none"> <li>▪ Non-flammable</li> <li>▪ non-flammable</li> </ul> |

## Section 6: Accidental Release Measures

|               | Personal Precautions   | Environmental Precautions                | Methods for Containment                      |
|---------------|--|--|--|
| <b>Argon</b>  | Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas. | None known.                              | Stop leak if possible without personal risk. |
| <b>Helium</b> | Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas. | Avoid soil, waterways, drains and sewers | Stop leak if possible without personal risk. |

|               | Methods for Cleanup                                    | Other Information |
|---------------|--|-------------------|
| <b>Argon</b>  | Leaks may be detected by a soapy-water solution.       |                   |
| <b>Helium</b> | Stop leak, evacuate area. Contact emergency personnel. | None              |

## Section 7: Handling and Storage

|               | Handling   | Storage                                      |
|---------------|--|--|
| <b>Argon</b>  | 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. | Avoid using in confined spaces.              |
| <b>Helium</b> | 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                                 |
|---------------|---|
| <b>Argon</b>  | ARGON, COMPRESSED: ARGON: ACGIH (simple asphyxiant) |
| <b>Helium</b> | HELIUM: ACGIH (simple asphyxiant)                   |

### Engineering Controls

Handle only in fully enclosed systems.

|               | Eye Protection                                | Skin Protection  | Respiratory Protection |
|---------------|---|--|------------------------|
| <b>Argon</b>  | Eye protection not required, but recommended. | Protective clothing is not required. Wear appropriate chemical resistant gloves. | N/a                    |
| <b>Helium</b> | Eye protection not required, but recommended. | Protective clothing is not required. Protective gloves are not required.         | Non-flammable          |

## 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     |
|---------------|----------------|------------|-----------|----------------------|---------------|----------|
| <b>Argon</b>  | Gas            | Colorless  | Colorless | N/A                  | Gas           | Odorless |
| <b>Helium</b> | Gas            | Colorless  | Colorless | N/A                  | Gas           | Odorless |

|               | Taste     | Flash Point   | Flammability  | Partition Coefficient | Autoignition Temperature | Upper Explosive Limits |
|---------------|-----------|---------------|---------------|-----------------------|--------------------------|------------------------|
| <b>Argon</b>  | Tasteless | Not flammable |               |                       | Nonflammable             | Nonflammable           |
| <b>Helium</b> | Tasteless | Not flammable | Not available | Not available         | Nonflammable             | Nonflammable           |

|               | Lower Explosive Limits | Boiling Point   | Freezing Point           | Vapor Pressure     | Vapor Density | Specific Gravity |
|---------------|------------------------|-----------------|--------------------------|--------------------|---------------|------------------|
| <b>Argon</b>  | Nonflammable           | -303 F (-186 C) | -308 F (-189 C)          | 500 mmHg @ -190 C  | 1.38 (Air=1)  | Not applicable   |
| <b>Helium</b> | Nonflammable           | -452 F (-269 C) | -458 F (-272 C) @ 26 atm | 1719 mmHg @ -268 C | 0.138 (Air=1) | Not applicable   |

|               | Water Solubility | pH             | Odor Threshold | Evaporation Rate | Viscosity           | Molecular Weight |
|---------------|------------------|----------------|----------------|------------------|---------------------|------------------|
| <b>Argon</b>  | 3.36% @ 20 C     | Not applicable | Not available  | Not applicable   | 0.0225 cP @ 25 C    | 39.948           |
| <b>Helium</b> | 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         |
|---------------|-------------------|------------------|-------------------|----------------------|----------------|----------------------------|
| <b>Argon</b>  | AR                | 1.784 g/L @ 0 C  | Not available     | 100%                 | Not applicable | Soluble : Organic solvents |
| <b>Helium</b> | 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 |
|---------------|---|--|------------------------|
| <b>Argon</b>  | Stable at normal temperatures and pressure. | Protect from physical damage and heat. Containers may rupture or explode if exposed to heat.   | No data available.     |
| <b>Helium</b> | 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 |
|---------------|--------------------------------------|------------------------------------|
| <b>Argon</b>  | No data available.                   | Will not polymerize.               |
| <b>Helium</b> | Miscellaneous decomposition products | Will not polymerize.               |

## Section 11: Toxicology Information

### Acute Effects

|               | Oral LD50       | Dermal LD50     | Inhalation   |
|---------------|-----------------|-----------------|--|
| <b>Argon</b>  | Not established | Not established | Nausea, vomiting, difficulty breathing, irregular heartbeat, headache, dizziness, disorientation, mood swings, tingling sensation, loss of coordination, suffocation, convulsions, unconsciousness, coma                     |
| <b>Helium</b> | 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        |
|---------------|---|---|----------------------|
| <b>Argon</b>  | No information on significant adverse effects | No information on significant adverse effects |                      |
| <b>Helium</b> | Liquid: frostbite, blurred vision             | Liquid: frostbite                             | Difficulty breathing |

### Chronic Effects

|               | Carcinogenicity | Mutagenicity    | Reproductive Effects | Developmental Effects |
|---------------|-----------------|-----------------|----------------------|-----------------------|
| <b>Argon</b>  | Not established | Not established | Not established      | No data               |
| <b>Helium</b> | Not available   | Not available   | Not available        | No data               |

## Section 12: Ecological Information

### Fate and Transport

|               | Eco toxicity  | Persistence / Degradability | Bioaccumulation / Accumulation | Mobility in Environment |
|---------------|---|-----------------------------|--------------------------------|-------------------------|
| <b>Argon</b>  | Fish toxicity: Not available<br>Invertebrate toxicity: Not available<br>Algal toxicity: Not available<br>Phyto toxicity: Not available<br>Other toxicity: Not available | Not available               | Not available                  | Not available           |
| <b>Helium</b> | Fish toxicity: Not available<br>Invertebrate toxicity: Not available<br>Algal toxicity: Not available<br>Phyto toxicity: Not available<br>Other toxicity: Not available | Not available               | Not available                  | Not available           |

## Section 13: Disposal Considerations

|               |  |
|---------------|--|
| <b>Argon</b>  | Dispose in accordance with all applicable regulations. |
| <b>Helium</b> | Dispose in accordance with all applicable regulations. |

## Section 14: Transportation Information

### U.S. DOT 49 CFR 172.101

#### DOT Information For This Mixture

|                           |   |
|---------------------------|---|
| <b>Shipping Name</b>      | Compressed gas, n.o.s.<br>(Argon, Helium) |
| <b>UN Number</b>          | UN1956                                    |
| <b>Hazard Class</b>       | 2.2                                       |
| <b>Hazard Information</b> | NonFlammable Gas                          |

#### Individual Component Information

|        | 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 |
|--------|----------------------|-----------|--------------------------|----------------|-----------------------|--|--|---------------------------------|
| Argon  | Argon, compressed    | UN1006    | 2.2                      | Not applicable | 2.2                   | 75 kg or L   | 150 kg                                   | N/A                             |
| Helium | 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 |
|--------|--------------------|-----------|-------|----------------------------|
| Argon  | Argon, compressed  | UN1006    | 2.2   | Not applicable             |
| Helium | Helium, compressed | UN1046    | 2.2   | Not applicable             |

## Section 15: Regulatory Information

### U.S. Regulations

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

### SARA 370.21

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

### SARA 372.65

|        |                |
|--------|----------------|
| Argon  | Not regulated. |
| Helium | Not regulated. |

### OSHA Process Safety

|        |                |
|--------|----------------|
| Argon  | Not regulated. |
| Helium | Not regulated. |

### State Regulations

|        | CA Proposition 65 |
|--------|-------------------|
| Argon  | Not regulated.    |
| Helium | Not regulated.    |

### Canadian Regulations

|        | WHMIS Classification |
|--------|----------------------|
| Argon  | A                    |
| Helium | A                    |

### National Inventory Status

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

## Section 16: Other Information

|        | NFPA Rating                             |
|--------|---|
| Argon  | HEALTH=0 FIRE=0 REACTIVITY=0 SPECIAL=SA |
| Helium | HEALTH=0 FIRE=0 REACTIVITY=0 SPECIAL=SA |

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