



# Safety Data Sheet

## 75% HELIUM, 25% ARGON, CERTIFIED

### Section 1: Product and Company Identification

**Purity Cylinder Gases, Inc.**

2580 28th St SW  
Wyoming, MI 49519  
P: (616)532-2375  
www.puritygas.com

Product Code: 75% HELIUM, 25% ARGON, CERTIFIED

Part Number: SP 75H/25A

**Synonyms:**

**Recommended Use:**

**Usage Restrictions:**

### Section 2: Hazards Identification



**Warning**

**Hazard Classification:**

Gases Under Pressure

**Hazard Statements:**

Contains gas under pressure; may explode if heated

**Precautionary Statements**

**Storage:**

Protect from sunlight.  
Store in well-ventilated place.

### Section 3: Composition/Information on Ingredients

	CAS #	Concentration
Helium	7440-59-7	75
Argon	7440-37-1	25

	Chemical Substance	Chemical Family	Trade Names
Helium	HELIUM	Inorganic gases	HELIUM GAS; HELIUM COMPRESSED; HELIUM-4; ATOMIC HELIUM; UN 1046; He
Argon	ARGON, COMPRESSED	Inorganic gases	ARGON; UN 1006; AR

## Section 4: First Aid Measures

	Skin Contact	Eye Contact	Ingestion	Inhalation	Note to Physicians
Helium	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.
Argon	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.

## Section 5: Fire Fighting Measures

	Suitable Extinguishing Media	Products of Combustion	Protection of Firefighters
Helium	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>
Argon	Non-flammable gas	Not applicable	<ul style="list-style-type: none"> <li>▪ N/A</li> <li>▪ N/A</li> </ul>

## Section 6: Accidental Release Measures

	Personal Precautions	Environmental Precautions	Methods for Containment
Helium	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.
Argon	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.

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

## Section 7: Handling and Storage

	Handling	Storage
Helium	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.
Argon	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.

## Section 8: Exposure Controls/Personal Protection

	Exposure Guidelines
Helium	HELIUM: ACGIH (simple asphyxiant)
Argon	ARGON, COMPRESSED: ARGON: ACGIH (simple asphyxiant)

## Engineering Controls

Handle only in fully enclosed systems.

	Eye Protection	Skin Protection	Respiratory Protection
Helium	Eye protection not required, but recommended.	Protective clothing is not required.	Non-flammable
Argon	Eye protection not required, but recommended.	Protective clothing is not required.	N/A

## 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	Taste
Helium	Gas	Colorless	Colorless	N/A	Gas	Odorless	Tasteless
Argon	Gas	Colorless	Colorless	N/A	Gas	Odorless	Tasteless

	Flash Point	Flammability	Partition Coefficient	Autoignition Temperature	Upper Explosive Limits	Lower Explosive Limits
Helium	Not flammable	Not available	Not available	Nonflammable	Nonflammable	Nonflammable
Argon	Not flammable			Nonflammable	Nonflammable	Nonflammable

	Boiling Point	Freezing Point	Vapor Pressure	Vapor Density	Specific Gravity	Water Solubility	pH	Odor Threshold	Evaporation Rate	Viscosity
Helium	-452 F (-269 C)	-458 F (-272 C) at 26 atm	1719 mmHg at -268 C	0.138 (Air=1)	Not applicable	0.94% at 0 C	Not applicable	Not available	Not applicable	0.02012 cP at 26.8 C
Argon	-303 F (-186 C)	-308 F (-189 C)	500 mmHg @ -190 C	1.38 (Air=1)	Not applicable	3.36% @ 20 C	Not applicable	Not available	Not applicable	0.0225 cP @ 25 C

	Molecular Weight	Molecular Formula	Density	Weight per Gallon	Volatility by Volume	Volatility	Solvent Solubility
Helium	4.0026	He	0.1785 g/L at 0 C	Not available	100%	Not applicable	Insoluble: Not available
Argon	39.948	AR	1.784 g/L @ 0 C	Not available	100%	Not applicable	Soluble: Organic solvents

## Section 10: Stability and Reactivity

	Stability	Conditions to Avoid	Incompatible Materials
Helium	Stable at normal temperatures and pressure.	Stable at normal temperatures and pressure.	No data available.
Argon	Stable at normal temperatures and pressure.	Stable at normal temperatures and pressure.	No data available.

	Hazardous Decomposition Products	Possibility of Hazardous Reactions
Helium	Miscellaneous decomposition products	Will not polymerize.
Argon	No data available.	Will not polymerize.

## Section 11: Toxicology Information

### Acute Effects

	Oral LD50	Dermal LD50	Inhalation
Helium	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

	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

	Eye Irritation	Skin Irritation	Sensitization
<b>Helium</b>	Liquid: frostbite, blurred vision	Liquid: frostbite	Difficulty breathing
<b>Argon</b>	No information on significant adverse effects	No information on significant adverse effects	

### Chronic Effects

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

## Section 12: Ecological Information

### Fate and Transport

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

## Section 13: Disposal Considerations

<b>Helium</b>	Dispose in accordance with all applicable regulations.
<b>Argon</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. (Helium, Argon)
<b>UN Number</b>	UN1956
<b>Hazard Class</b>	2.2
<b>Hazard Information</b>	Non-Flammable 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
<b>Helium</b>	Helium, compressed	UN1046	2.2	Not applicable	2.2	75 kg or L	150 kg	N/A
<b>Argon</b>	Argon, compressed	UN1006	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
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<b>Helium</b>	Helium, compressed	UN1046	2.2	Not applicable
<b>Argon</b>	Argon, compressed	UN1006	2.2	Not applicable

## Section 15: Regulatory Information

### U.S. Regulations

	CERCLA Sections	SARA 355.30	SARA 355.40
<b>Helium</b>	Not regulated.	Not regulated.	Not regulated.
<b>Argon</b>	Not regulated.	Not regulated.	Not regulated.

### SARA 370.21

	Acute	Chronic	Fire	Reactive	Sudden Release
<b>Helium</b>	Yes	No	No	No	Yes
<b>Argon</b>	Yes	No	No	No	Yes

### SARA 372.65

<b>Helium</b>	Not regulated.
<b>Argon</b>	Not regulated.

### OSHA Process Safety

<b>Helium</b>	Not regulated.
<b>Argon</b>	Not regulated.

### State Regulations

	CA Proposition 65
<b>Helium</b>	Not regulated.
<b>Argon</b>	Not regulated.

### Canadian Regulations

	WHMIS Classification
<b>Helium</b>	A
<b>Argon</b>	A

### National Inventory Status

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

## Section 16: Other Information

	NFPA Rating
<b>Helium</b>	HEALTH=0 FIRE=0 REACTIVITY=0 SPECIAL=SA
<b>Argon</b>	HEALTH=0 FIRE=0 REACTIVITY=0 SPECIAL=SA

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