

25-Jan-2017

ACCORDING TO US CFR 1910.1200

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier	
Product Name	GAS MIXTURE (HELIUM-ARGON)
Synonym(s)	HELIUM-ARGON
CAS No.	Mixture.
EC No.	Mixture.
1.2 Relevant identified uses of the	ne substance or mixture and uses advised against
Identified Use(s)	Industrial gas.
Uses Advised Against	Not known.
1.3 Details of the supplier of the	safety data sheet
Company Identification	Hudson Technologies Company
Address	PO Box 1541
	One Blue Hill Plaza
	Pearl River, New York
	USA
Postal code	10965
Telephone	+1 (800) 953 2244
Fax	+1 (845) 512 6070
E-mail	information@hudsontech.com
1.4 Emergency telephone numb	er
Company	+1 (800) 501 4376
CHEMTREC (U.S.)	+1 (800) 424 9300
INTERNATIONAL	+1 (703) 527 3887



25-Jan-2017

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture		
US CFR 1910.1200	Gases under pressure; Press. Gas; Compressed gas.	
2.2 Label elements		
Product Name	GAS MIXTURE (HELIUM-ARGON)	
Hazard Pictogram(s)		
	GHS04	
Signal Word(s)	Warning.	
Signal Word(S)	wanning.	
Hazard Statement(s)	H280: Contains gas under pressure; may explode if heated.	
	OSHA-H01: MAY DISPLACE OXYGEN AND CAUSE RAPID	
	SUFFOCATION.	
Precautionary Statement(s)	P202: Do not handle until all safety precautions have been read and	
•	understood.	
	P271+P403: Use and store only outdoors or in a well-ventilated	
	place.	
	P304, P340, P313: IF INHALED: Remove person to fresh air and	
	keep comfortable for breathing. Get medical advice/attention.	
	P410+P403: Protect from sunlight. Store in a well-ventilated place.	
2.3 Other hazards		
	May cause asphyxiation when concentrations are sufficient to	
	reduce oxygen below safe breathing levels.	
2.4 Additional Information		
	CGA-PG05: Use a back flow preventive device in the piping.	
	CGA-PG10: Use only with equipment rated for cylinder pressure.	
	CGA-PG06: Close valve after each use and when empty.	
	CGA-PG02: Protect from sunlight when ambient temperature	
	exceeds 52 °C (125 °F).	
	CGA-PG27: Read and follow the Safety Data Sheet (SDS) before	
	use. This SDS is available in languages other than English.	
	This ODO is available in languages outer utall English.	



25-Jan-2017

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS	CAS No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
INGREDIENT(S)				
Argon	7440-37-1	75	Press. Gas,	GHS04
			Compressed gas; H280	
Helium	7440-59-7	25	Press. Gas,	GHS04
			Compressed gas; H280	

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures	
Inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in
	a position comfortable for breathing. Administer oxygen if
	necessary. If breathing has stopped, apply artificial respiration.
Skin Contact	Wash skin with water.
Eye Contact	Flush eyes with water for at least 15 minutes.
Ingestion	Unlikely route of exposure.
4.2 Most important symptoms an	nd effects, both acute and delayed
	Inhalation: High concentrations: Loss of coordination,
	Unconsciousness.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. SECTION 5: FIREFIGHTING MEASURES

Non-flammable.

5.1 Extinguishing media

Suitable Extinguishing media As appropriate for surrounding fire.

Unsuitable extinguishing media None known.

5.2 Special hazards arising from the substance or mixture

Contains gas under pressure; may explode if heated.



25-Jan-2017

5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. If it is safe to do so, containers should be removed from fire area because they are likely to rupture under fire conditions. Keep containers cool by spraying with water if exposed to fire.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective	equipment and	emergency proc	edures	
Ev	acuate area. En	nsure adequate v	ventilation. Avoid breathin	g gas.

Wear suitable respiratory protection.

6.2 Environmental precautions

Do not allow to enter drains, sewers or watercourses.

6.3 Methods and material for containment and cleaning up

Stop leak if safe to do so. Allow small spillages to evaporate provided there is adequate ventilation. Ventilate area.

6.4 Reference to other sections

See Also Section 8, 13.

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Provide adequate ventilation. Avoid breathing gas. Wear suitable respiratory protection. Do not drag, roll, slide or drop cylinders. Use a suitable hand truck design for cylinder movement. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. Never insert an object into valve cap openings. Doing so may damage valve causing a leak to occur. Secure cylinders in an upright position at all times, close all valves when



25-Jan-2017

not in use. Keep closed even when empty. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature

Incompatible materials

Storage life

Protect from sunlight. Store in a well-ventilated place.
< 125 °F (52 °C)
Stable under normal conditions.
None.

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters		
Occupational Exposure Limits	None assigned.	
8.2 Exposure controls		
Appropriate engineering controls	Ensure adequate ventilation.	
Personal protection equipment		
	Wear suitable eye/face protection.	
Eye Protection		
	Wear suitable gloves.	
Skin protection		
	Wear suitable respiratory protective equipment if exposure to high	
	levels of material is likely.	
Respiratory protection		
Thermal hazards	Not applicable.	
9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES		

9.1 Information on basic physical and chemical properties

Gas.

Appearance



SAFETY DATA SHEET 25-Jan-2017

	Color: Colorless.
Odor	Odorless.
Odor threshold	Not established.
рН	Not applicable.
Melting point/freezing point	Not available.
Initial boiling point and boiling	Not available.
range	
Critical Temperature	Not available.
Flash Point	Not available.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or	Not applicable.
explosive limits	
Vapor pressure	Not applicable.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Not available.
Partition coefficient: n-	Not applicable.
octanol/water	
Auto-ignition temperature	Not available.
Decomposition Temperature (°C)	Not available.
Viscosity	Not applicable.
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
9.2 Other information	
	Notknown

Not known.

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	
	Stable under normal conditions.
10.2 Chemical Stability	
	Stable under normal conditions.
10.3 Possibility of hazardous read	ctions
	No hazardous reactions known if used for its intended purpose.
10.4 Conditions to avoid	
	Keep away from heat and direct sunlight.



25-Jan-2017

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition product(s)

No hazardous decomposition products known.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological	effects
Acute toxicity - Ingestion	Low acute toxicity.
Acute toxicity - Skin Contact	Low acute toxicity.
Acute toxicity - Inhalation	Low acute toxicity.
Skin corrosion/irritation	Non-irritant.
Serious eye damage/irritation	Non-irritant.
Skin sensitization data	Not classified.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	There is no evidence of mutagenic potential.
Carcinogenicity	No evidence of carcinogenicity.
Reproductive toxicity	Not classified.
Lactation	Not classified.
STOT - single exposure	None anticipated.
STOT - repeated exposure	None anticipated.
Aspiration hazard	Not classified.
11.2 Other information	

Not known.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	
Toxicity - Aquatic invertebrates	Low toxicity to invertebrates.
Toxicity - Fish	Low toxicity to fish.
Toxicity - Algae	Low toxicity to algae.
Toxicity - Sediment	Not classified.
Compartment	
Toxicity - Terrestrial	Not classified.
Compartment	
12.2 Persistence and Degradation	n
	Argon and Helium are inert gases. No adverse ecological effects are
	expected.

12.3 Bioaccumulative potential



25-Jan-2017

Argon and Helium are inert gases. No adverse ecological effects are expected.

12.4 Mobility in soil

Not applicable.

12.5 Other adverse effects

None anticipated.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Containers must not be punctured or destroyed by burning, even when empty. Refer to manufacturer/supplier for information on recovery/recycling.

13.2 Additional Information Disposal should be in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

14.1 UN number	
UN No.	1956
14.2 UN proper shipping name	
UN proper shipping name	COMPRESSED GAS, N.O.S.
14.3 Transport hazard class(es)	
ADR/RID Class	2.2
IMDG Class	2.2
IMDG EMS	Not available.
ICAO/IATA	
Excepted Quantities	E1
Passenger and Cargo Aircraft	
Limited Quantities Packing	
Instructions	
Cargo Aircraft Limited Quantities	
Max net Qty	
Special Provisions	Not applicable.
Emergency Response	2L
Guidebook (ERG) Code	
ADR Classification Code	1A



25-Jan-2017

ADR HIN	20
ADR Transport Category	3
Tunnel Restriction Code	E
Emergency Action Code	2TE
Advice on Additional Personal	Not applicable.
Protection (APP)	
14.4 Packing group	
Packing group	Not applicable.
Labels	2.2
	NON-FLAMMABLE CAS
Special Provisions	274 655
Limited Quantities	120 m
Excepted Quantities	E1
Mixed Packing Instructions for	P200
Packages	
Special Packing Provisions for	Not applicable.
Packages	
Mixed Packing Instructions for	MP9
Packages	
14.5 Environmental hazards	
Environmental hazards	Not classified as a Marine Pollutant.
14.6 Special precautions for user	r
Special precautions for user	Not known.
14.7 Transport in bulk according	to Annex II of MARPOL 73/78 and the IBC Code
Packing Instructions for Portable	(M)
Tanks	
Special Provisions for Portable	Not applicable.
Tanks	
Tank Code for Tanks	CxBN(M)
Special Provisions for Tanks	ТА4 ТТ9
Vehicle for Tank Carriage	AT
	Not applicable.



25-Jan-2017

Special Provisions for Carriage - Bulk	Not applicable.		
Special Provisions for Carriage -	CV9 CV10 CV36		
Loading, Unloading and Handling			
Special Provisions for Carriage -	Not applicable.		
Operation			
15. SECTION 15: REGULATORY	INFORMATION		
15.1 Federal			
Toxic and hazardous substances	All chemicals are not listed.		
(29 CFR 1910; Subpart Z)			
National emission standards for	All chemicals are not listed.		
hazardous air pollutants (40 CFR			
61.01)			
Title III Consolidated List of Lists	All chemicals are not listed.		
TSCA (Toxic Substance Control	All chemicals listed.		
Act)			
CAA 602 - Ozone Depleting	All chemicals are not listed.		
Substances (ODS)			
15.2 State			
State Right to Know Lists	Argon (CAS No.: 7440-37-1)		
	Listed in: New Jersey, Pennsylvania, Rhode Island, Minnesota.		
	Helium (CAS No.: 7440-59-7)		
	Listed in: New Jersey, Pennsylvania, Rhode Island, Minnesota.		
, ,	All chemicals are not listed.		
15.3 Other			
OSPAR List of Chemicals for	All chemicals are not listed.		
Priority Action			
NTP (National Toxicology	All chemicals are not listed.		
Program)			
OSHA	All chemicals are not listed.		
(List of Highly Hazardous			
Chemicals, Toxics and			



25-Jan-2017

Reactives)

IARC (International Agency for All chemicals are not listed.

Research on Cancer)

16. SECTION 16: OTHER INFORMATION

The following sections contain 1-16. revisions or new statements:

NFPA		HMIS	
Health	0	Health	0
Fire	0	Flammability	0
Instability	0	Physical hazards	3

LEGEND:

Hazard Pictogram(s)



GHS04

Hazard Statement(s)H280: Contains gas under pressure; may explode if heated.Precautionary Statement(s)P410+P403: Protect from sunlight. Store in a well-ventilated place.

Additional Information required by Federal Standard 313 Rev. E:

Contract or Solicitation Number:	SPE4A6-16-D-0226
Prime Contractor:	Hudson Technologies, Inc.
Prime Contractor CAGE:	7DSQ0
National Stock Number (NSN): Specification Reference:	6830009387819
Disclaimers	Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is



25-Jan-2017

for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Hudson Technologies Company gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Hudson Technologies Company accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.