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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 (ARGON-OXYGEN)

Synonym(s) ARGON-OXYGEN

CAS No. Mixture. EC No. Mixture.

1.2 Relevant identified uses of the 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 <u>information@hudsontech.com</u>

1.4 Emergency telephone number

Company +1 (800) 501 4376 CHEMTREC (U.S.) +1 (800) 424 9300 INTERNATIONAL +1 (703) 527 3887



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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 (ARGON-OXYGEN)

Hazard Pictogram(s)



GHS04

Signal Word(s) Warning.

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.



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3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS	CAS No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
INGREDIENT(S)				
Argon	7440-37-1	98	Press. Gas,	GHS04
			Compressed gas; H280	
Oxygen	7782-44-7	2	Press. Gas,	GHS04
			Compressed gas; H280,	
			Ox. Gas 1; H270	GHS03

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 and 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.



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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 procedures

Evacuate area. Ensure adequate ventilation. Avoid breathing gas. Wear suitable respiratory protection.

wear suitable respiratory pro

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



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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

Protect from sunlight. Store in a well-ventilated place.

Storage temperature < 122 °F (50 °C)

Storage life Stable under normal conditions.

Incompatible materials 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

Appearance Gas.



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Color: Colorless.

Not available.

Odor Odorless.

Odor threshold Not established.

pH Not applicable.

Melting point/freezing point Not available.

Initial boiling point and boiling

range

Not available.

Flash Point Not available.

Evaporation rate Not applicable.
Flammability (solid, gas) Non-flammable.

Upper/lower flammability or Not applicable.

explosive limits

Critical Temperature

Vapor pressure Not applicable.

Vapor density 1.4 (calculated) @ 59 °F

Relative density

Solubility(ies)

Partition coefficient: n
Not available.

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

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 reactions

No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

Keep away from heat and direct sunlight.



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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

Lactation

STOT - single exposure

STOT - repeated exposure

Aspiration hazard

Not classified.

None anticipated.

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

No adverse ecological effects are expected.

12.3 Bioaccumulative potential

No adverse ecological effects are expected.



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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



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ADR HIN 20
ADR Transport Category 3

ADR Transport Category 3
Tunnel Restriction Code E

Emergency Action Code 2TE

Advice on Additional Personal Not

Not applicable.

Protection (APP)

14.4 Packing group

Packing group Not applicable.

Labels 2.2



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

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 TA4 TT9

Vehicle for Tank Carriage AT

Special Provisions for Carriage - Not applicable.

Packages



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Special Provisions for Carriage - Not applicable.

Bulk

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.

Oxygen (CAS No. 7782-44-7)

Listed in: New Jersey, Pennsylvania, Rhode Island, Minnesota.

Proposition 65 (California)

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

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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): 6830006561603

Specification Reference:

Disclaimers Information contained in this publication or as otherwise supplied to

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