

Safety Data Sheet

Argon

SECTION 1

Identification

GHS product identifier	Argon
Chemical name	argon
Other means of identification	ARGON, COMPRESSED; 50004
Product type	Gas.
Product use	Synthetic/Analytical chemistry.
Synonym	ARGON, COMPRESSED; 50004
SDS #	001004
Supplier's details	EspriGas 500 Northridge Road, Suite 200 Atlanta, GA 30350 1.800.720.1563 Inside the US: 1-800-424-9300 (Chemtrec, 24 hours) Outside the US: 1-703-527-3887 (Chemtrec, 24 hours)
24-hour telephone	EspriGas Customer Support Center: 1.800.720.1563

SECTION 2

Hazards Identification

OSHA/HCS status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	GASES UNDER PRESSURE – Compressed gas SIMPLE ASPHYXIANTS
GHS Label Elements	
Hazard pictograms	Gas cylinder
Signal word	Warning
Hazard statements	H280 – Contains gas under pressure; may explode if heated. May displace oxygen and cause rapid suffocation.

Precautionary Statements

General	Read and follow all Safety Data Sheets (SDS) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction.
Prevention	Not applicable.
Response	Not applicable.
Storage	P410 + P403 – Protect from sunlight. Store in a well-ventilated place.
Disposal	Not applicable.
Supplemental label elements	Keep container tightly closed. Use only with adequate ventilation. Do not enter storage areas and confined spaces unless adequately ventilated.
Hazards not otherwise classified	In addition to any other important health or physical hazards, this product may displace oxygen and cause rapid suffocation.
Hazards identified when used	No known significant effects or critical hazards.

SECTION 3

Composition / Information on Ingredients

Chemical name	argon
Other means of identification	ARGON, COMPRESSED; 50004
Substance/mixture	Substance
Product code	001004

Ingredient name	%	Identifiers
Argon	100	CAS: 7440-37-1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4

First Aid Measures

Description of Necessary First Aid Measures

Eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Get medical attention if adverse health effects persist or are severe.
Ingestion	As this product is a gas, refer to the inhalation section.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.
Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	No specific treatment.

Most Important Symptoms/Effects, Acute and Delayed

Inhalation	At very high concentrations, can displace the normal air and cause suffocation from lack of oxygen.
Ingestion	As this product is a gas, refer to the inhalation section.
Skin contact	Contact with rapidly expanding gas may cause burns or frostbite.
Eye contact	Contact with rapidly expanding gas may cause burns or frostbite.

Over-Exposure Signs/Symptoms

Skin contact	No specific data.
Ingestion	No specific data.
Inhalation	No specific data.
Eye contact	No specific data.

Indication of immediate medical attention and special treatment needed, if necessary – Frostbite: Try to warm up the frozen tissues and seek medical attention. See toxicological information (Section 11).

SECTION 5

Fire-Fighting Measures

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Contains gas under pressure. In a fire or if heated, a pressure increase will occur and the container may burst or explode.
Hazardous thermal decomposition products	No specific data.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact the supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
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SECTION 6

Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Put on appropriate personal protective equipment.
Environmental precautions	Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Small spill	Immediately contact emergency personnel. Stop leak if without risk.
Large spill	Immediately contact emergency personnel. Stop leak if without risk.
For non-emergency personnel – methods and materials for containment and cleaning up	Immediately contact emergency personnel. Stop leak if without risk.
For emergency responders	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in “For non-emergency personnel.”

SECTION 7

Handling and Storage

Precautions for safe handling (protective measures)	Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement. Avoid contact with eyes, skin and clothing. Empty containers retain product residue and can be hazardous.
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. See Section 10 for incompatible materials before handling or use. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52°C (125°F).

SECTION 8

Exposure Controls / Personal Protection

Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Occupational Exposure Limits

Ingredient name	Exposure limits
Argon	ACGIH TLV (United States, 1/2025): Oxygen depletion [asphyxiant].

Individual Protection Measures**Eyeface protection**

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties.

Respiratory protection

The gas can cause asphyxiation without warning by replacing the oxygen in the air. Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. If operating conditions cause high gas concentrations to be produced or any recommended or statutory exposure limit is exceeded, use an air-fed respirator or self-contained breathing apparatus. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Biological exposure indices

No exposure indices known.

SECTION 9

Physical and Chemical Properties

Physical state	Gas. [Compressed gas.]
Color	Colorless.
Odor	Odorless.
Odor threshold	Not available.
pH	Not applicable.
Melting point/freezing point	-189.2°C (-308.6°F)
Boiling point or initial boiling point and boiling range	-185.9°C (-302.6°F)
Flash point	Not available. [Product does not sustain combustion.]
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Lower and upper explosive (flammable) limits	Not available.
Vapor pressure	Not available.
Relative vapor density	1.66 [Air = 1]
Relative density	Not applicable.
Solubility in water	Not available.
Partition coefficient: n-octanol/water	0.74 [Calculated]
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Molecular weight	39.95 g/mole
Specific volume (ft³/lb)	9.7087
Gas density (lb/ft³)	0.103
Flow time (ISO 2431)	Not available.

SECTION 10

Stability and Reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid	Do not allow gas to accumulate in low or confined areas.
Incompatible materials	No specific data.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	Under normal conditions of storage and use, hazardous polymerization will not occur.

SECTION 11

Toxicological Information

Information on Toxicological Effects

Acute toxicity – conclusion/summary	Not available.
Skin corrosion/irritation – conclusion/summary	Not available.
Serious eye damage/eye irritation – conclusion/summary	Not available.
Respiratory corrosion/irritation – conclusion/summary	Not available.
Respiratory or skin sensitization – skin	Not available.
Respiratory or skin sensitization – respiratory	Not available.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics

Inhalation	At very high concentrations, can displace the normal air and cause suffocation from lack of oxygen.
Ingestion	As this product is a gas, refer to the inhalation section.
Skin contact	Contact with rapidly expanding gas may cause burns or frostbite.
Eye contact	Contact with rapidly expanding gas may cause burns or frostbite.

Delayed and Immediate Effects and Also Chronic Effects from Short and Long Term Exposure

Short term exposure – potential immediate effects	Not available.
Short term exposure – potential delayed effects	Not available.
Long term exposure – potential immediate effects	Not available.

Long term exposure – potential delayed effects	Not available.
Potential chronic health effects – general	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Reproductive toxicity	No known significant effects or critical hazards.
Germ cell mutagenicity – conclusion/summary	Not available.
Carcinogenicity – conclusion/summary	Not available.
Reproductive toxicity – conclusion/summary	Not available.
Specific target organ toxicity (single exposure)	Not available.
Specific target organ toxicity (repeated exposure)	Not available.
Aspiration hazard	Not available.
Information on the likely routes of exposure	Not available.
Numerical measures of toxicity – acute toxicity estimates	N/A

SECTION 12

Ecological Information

Toxicity	No known significant effects or critical hazards.
Persistence and degradability	Not available.

Product/ingredient name	LogPow	BCF	Bioaccumulative potential
Argon	0.74	–	Low

Mobility in soil – soil/water partition coefficient	Not available.
Mobility in soil – conclusion/summary	Not available.
Other adverse effects	No known significant effects or critical hazards.

SECTION 13

Disposal Considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty pressure vessels should be returned to the supplier. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

SECTION 14

Transport Information

Regulatory Info	UN Number	Proper Shipping Name	Class	Packing Group
DOT	UN1006	Argon, compressed	2.2	–
IMDG	UN1006	ARGON, COMPRESSED	2.2	–
IATA	UN1006	Argon, compressed	2.2	–
TDG	UN1006	ARGON, COMPRESSED	2.2	–
Mexico	UN1006	ARGÓN COMPRIMIDO	2.2	–

DOT – limited quantity

Yes.

DOT – packaging instruction

Exceptions: 306, 307. Non-bulk: 302. Bulk: 314, 315.

DOT – quantity limitation

Passenger aircraft/rail: 75 kg. Cargo aircraft: 150 kg.

DOT – special provisions

378, 392

DOT – emergency schedules

F-C, S-V

IATA – quantity limitation

Passenger and Cargo Aircraft: 75 kg. Packaging instructions: 200. Cargo Aircraft Only: 150 kg. Packaging instructions: 200. Limited Quantities – Passenger Aircraft: Forbidden. Packaging instructions: Forbidden.

IATA – special provisions

A69, A202

TDG – classification

Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13–2.17 (Class 2).

TDG – explosive limit and limited quantity index

0.125

TDG – passenger carrying road or rail index

75

TDG – special provisions	148
Environmental hazards	Not available.
Special precautions for user	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
Transport in bulk according to IMO instruments	Not applicable.

"Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."

SECTION 15

Regulatory Information

United States – Federal Regulations

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Not listed
Clean Air Act Section 602 Class I Substances	Not listed
Clean Air Act Section 602 Class II Substances	Not listed
TSCA 12(b) – chemical export notification	Not applicable.
TSCA 8(a) CDR exempt/partial exemption	This material is listed or exempted.
DEA List I Chemicals (Precursor Chemicals)	Not listed
DEA List II Chemicals (Essential Chemicals)	Not listed
SARA 302/304 – RQ	Not applicable.
SARA 302/304 – composition/information on ingredients	No products were found.
SARA 311/312 classification	Refer to Section 2: Hazards Identification of this SDS for classification of substance.

State Regulations

California Prop. 65	This material is listed. This product does not require a Safe Harbor warning under California Prop. 65.
Massachusetts	This material is listed.
New York	This material is not listed.
New Jersey	This material is listed.

Pennsylvania This material is listed.

International Regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.

Montreal Protocol Not listed.

Stockholm Convention on Persistent Organic Pollutants Not listed.

Rotterdam Convention on Prior Informed Consent (PIC) Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals Not listed.

Inventory List

Australia This material is listed or exempted.

Canada This material is listed or exempted.

Japan Japan inventory (CSCL): Not determined. Japan inventory (ISHL): Not determined.

Republic of Korea This material is listed or exempted.

New Zealand This material is listed or exempted.

Philippines This material is listed or exempted.

Taiwan This material is listed or exempted.

Turkey Not determined.

United States This material is active or exempted.

Thailand This material is listed or exempted.

Viet Nam This material is listed or exempted.

Eurasian Economic Union Russian Federation inventory: This material is listed or exempted.

Chile Not determined.

Colombia Not determined.

China This material is listed or exempted.

SECTION 16

Other Information

Date of issue/date of revision 5/20/2026

Date of previous issue 4/20/2026

Version 9.01

Hazard and Instability Classification Ratings

System	Health	Flammability	Physical Hazards / Instability	Special
HMIS® (U.S.A.)	0	0	3	–
NFPA 704 (U.S.A.)	0	0	0	SA

Caution: HMIS® ratings are based on a 0–4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc. The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

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Procedure Used to Derive the Classification

Classification	Justification
GASES UNDER PRESSURE – Compressed gas	Expert judgment
SIMPLE ASPHYXIANTS	Expert judgment

Key to Abbreviations

ATE = Acute Toxicity Estimate; BCF = Bioconcentration Factor; GHS = Globally Harmonized System of Classification and Labelling of Chemicals; IATA = International Air Transport Association; IBC = Intermediate Bulk Container; IMDG = International Maritime Dangerous Goods; LogPow = logarithm of the octanol/water partition coefficient; MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978; UN = United Nations.

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