

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

Product Identifier:

Identification as on the label/Trade name: Argon, Enriched Argon.

Molecular weight: 39.95

Chemical formula: Ar

Synonyms: Argon, Enriched Argon.

Details of the supplier of the Safety Data Sheet:

Neonest AB
Storgatan 70C, Solna
SE-17152
Sweden

Contact details:

+46-76-219-9731

24-hour Emergency Contact:

Swedish Poisons Centre
Phone: 112 - Ask for Poisons Information, 112 – begär Giftinformation.

Other International Contacts:

CHEMTREC 24-hour: +1-703-741-5500 (US + Worldwide)
NHS: 111 (UK)
Charite: +49 30 450 531 000 (Netherlands)
INTCF: +34 917689800 (Spain)
CapTv: +33 1 40 05 48 48 (France)

Section 2: Hazards Identification

Classification of the substances or mixture:

The mixture is classified according to: Regulation EC 1272/2008 [EU-GHS/CLP]

Hazard classes/Hazard categories:

Pressurized Gas

Hazard statement:

H280

Label elements:

Hazard pictograms:



Signal Words: Warning.

Hazard Statements:

H280 Contains gas under pressure; may explode if heated.

Precautionary Statements: None.

Other hazards: None known.

Section 3: Composition/Information on Ingredients

Substance/Mixture: Substance.

Ingredients:

Substance name (IUPAC/EC)	CAS-No.	Molecular weight	Concentration % by weight	Classification
	EC-No.			EC1272/2008
Argon	7440-37-1	39.95	>99%	Press. Gas (Comp.) H280
	231-147-0			

For explanation of abbreviations see Section 16.

Section 4: First-Aid Measures

Description of first aid measures:

In case of inhalation: PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE. RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SELF-CONTAINED BREATHING APPARATUS. Victims should be assisted to an uncontaminated area and inhale fresh air. Quick removal from the contaminated area is most important. Unconscious persons should be moved to an uncontaminated area, and if breathing has stopped, administer artificial resuscitation and supplemental oxygen.

In case of skin contact: Not an established exposure route.

In case of eye contact: Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

In case of ingestion: Not an established exposure route.

Most important symptoms and effects, both acute and delayed:

Inhalation: Non-toxic, simple asphyxiant. Effects of oxygen deficiency resulting from simple asphyxiants may include dizziness, drowsiness, rapid breathing, diminished mental alertness, impaired muscular coordination, faulty judgement, and depression of all sensations. As asphyxiation progresses, nausea, vomiting, prostration and loss of consciousness may result, eventually leading to convulsions, coma, and death.

Eyes: None known.

Skin contact: None known.

Ingestion: None known.

Indication of any immediate medical attention and special treatment needed: Treat symptomatically. Show this safety data sheet to a physician or emergency room.

Section 5: Fire-Fighting Measures

Extinguisher media:

Suitable extinguisher media: None required. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: None known.

Special hazards arising from the mixture: None known.

Advice for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.

Further information: Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Personal precautions: Evacuate all personnel from the affected area. Use appropriate equipment. Ensure adequate ventilation. Monitor oxygen level.

Environmental precautions: Prevent spreading of vapours through sewers, ventilation systems, and confined areas.

Methods for containment and cleaning up:

Stop the flow of gas or remove cylinder to outdoor location if this can be done without risk. If the leak is in the container or container valve, contact the appropriate emergency telephone number listed in Section 1.

Reference to other sections:

Treat recovered material as described in the section "Disposal considerations".

Section 7: Handling and Storage

Precautions for safe handling:

Advice on safe handling: Use only in well-ventilated areas. Protect cylinders from physical damage. Do not drag, roll, or drop cylinders. Check for leaks using soapy water, do not use a flame. Never attempt to lift a cylinder by the cap. Never insert an object (e.g. screwdriver) into cap openings, as this may damage the valve and cause a leak. Open valve slowly. If the valve is hard to open, discontinue use and contact your supplier.

Hygiene measures: Do not eat, drink or smoke when using this product.

Conditions for safe storage, including incompatibilities:

Requirements for storage areas and containers: Store in a cool, dry, well-ventilated area of non-combustible construction, away from heavily trafficked areas and emergency exits. Firmly secure cylinders upright to keep them from falling or being knocked over. Screw valve protection cap firmly in place. Store in temperatures not exceeding 52°C.

Section 8: Exposure Controls/Personal Protection

Control parameters:

Occupational exposure limits: Contains no substances with occupational exposure limit values.

Exposure controls:

Appropriate engineering controls: Local exhaust to prevent accumulation of high concentrations that would reduce the oxygen level in the air to less than 19.5%.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include: Butyl rubber, Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, polyvinyl alcohol, Polyvinyl chloride.

Body protection: Not necessary under normal conditions of use.

Respiratory protection: Not necessary under normal conditions of use.

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance (form): Gas.

Colour: Colourless.

Odour: Odourless.

Odour threshold: No data available.

Molecular Weight: 39.95

pH (concentration): No data available.

Melting point/range (°C): No data available.

Boiling point/range (°C): -185.9 °C

Freezing point (°C): -189.4 °C

Flash point (°C): No data available.

Evaporation rate: No data available.

Flammability (solid, gas): No data available.

Ignition temperature (°C): No data available.

Upper/lower flammability/explosive limits: No data available.

Vapour pressure (20 °C): No data available.

Vapour density: 1.38

Relative density (25 °C): No data available.

Water solubility (g/L) at 20 °C: Slight.

n-Octanol/Water partition coefficient: No data available.

Auto-ignition temperature: No data available.

Decomposition temperature: No data available.

Viscosity, dynamic (mPa s): No data available.

Explosive properties: The substance or mixture is not classified as explosive.

Oxidising properties: The substance or mixture is not classified as oxidizing.

Section 10: Stability and Reactivity

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: No decomposition if stored and applied as directed.

Section 11: Toxicological Information

Information on toxicological effects:

Not classified based on available information.

Classification according to GHS (1272/2008/EG, CLP)

Skin corrosion/irritation:

Not classified based on available information.

Serious eye damage/eye irritation:

Not classified based on available information.

Respiratory or skin sensitisation:

Not classified based on available information.

Germ cell mutagenicity:

Not classified based on available information.

Carcinogenicity:

Not classified based on available information.

Reproductive toxicity:

Not classified based on available information.

Specific target organ toxicity – single exposure (STOT):

Not classified based on available information.

Specific target organ toxicity (STOT) – repeated exposure:

Not classified based on available information.

Aspiration toxicity:

Not classified based on available information.

Section 12: Ecological Information

Toxicity: No data available.

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Results of PBT& vPvB assessment: Not relevant.

Other adverse effects: No data available.

Section 13: Disposal Considerations

Waste treatment methods: Contact a licenced professional waste disposal service to dispose of this material. Observe all local and national environmental regulations. Return in the shipping container properly labelled, with any valve outlet plugs or caps secured and valve protection caps in place.

Section 14: Transport Information

DOT:

Proper Shipping Name: ARGON, COMPRESSED.

Hazard Class: 2.2

UN Number: 1006

Packing Group: III

Hazard Label:



IATA:

Proper Shipping Name: ARGON, COMPRESSED.
Hazard Class: 2.2
UN Number: 1006
Packing Group: III
Maximum quantity for passenger: 200
Maximum quantity for cargo: 200

TDG:

Proper Shipping Name: ARGON, COMPRESSED.
Hazard Class: 2.2
UN Number: 1006

MEX:

Proper Shipping Name: ARGON, COMPRESSED.
Hazard Class: 2.2
UN Number: 1006

IMDG/IMO:

Proper Shipping Name: ARGON, COMPRESSED.
Hazard Class: 2.2
UN Number: 1006
EmS Number: F-C, S-V

ADR:

Proper Shipping Name: ARGON, COMPRESSED.
Hazard Class: 2.2
UN Number: 1006
Classification Code: 1A
Tunnel Restriction: Passage forbidden through tunnels of category E.

Section 15: Regulatory Information**EU regulations:**

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended
Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations:

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use:

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use

Not regulated.

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not regulated.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding.

Not regulated.

Other EU regulations:

Directive 2012/18/EU on major accident hazards involving dangerous substances

Not listed.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Always applicable.

Directive 94/33/EC on the protection of young people at work

Not listed.

Other regulations: The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

U.S. Federal Regulations:

SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and *Title 40 of the Code of Federal Regulations, Part 372.*

SARA 311/312:

Chronic Health Hazard - No

Fire Hazard - No

Sudden Release of Pressure - Yes

Reactive Hazard - No

Clean Water Act: This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (*40 CFR 122.21 and CFR 122.42*).

Risk and Process Safety Management Programs: This material, as supplied, does not contain any regulated substances with specified thresholds under 40 CFR Part 68. This product does not contain any substances regulated as Highly Hazardous Chemicals pursuant to the 29 CFR Part 1910.110.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61): This product does not contain any substances regulated as hazardous air pollutants (HAPs) under Section 112 of the Clean Air Act Amendments of 1990.

CERCLA/SARA: This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional or state level pertaining to releases of this material.

U.S. State Regulations:

California Proposition 65: This product does not contain any Proposition 65 chemicals.

Connecticut Carcinogen Reporting: This material is not listed.

Connecticut Hazardous Material Survey: This material is not listed.

Florida substances: This material is not listed.

Illinois Chemical Safety Act: This material is not listed.

Illinois Toxic Substances Disclosure to Employee Act: This material is not listed.

Louisiana Reporting: This material is not listed.

Louisiana Spill: This material is not listed.

Massachusetts Spill: This material is not listed.

Massachusetts Substances: This material is listed.

Michigan Critical Material: This material is not listed.

Minnesota Hazardous Substances: This material is not listed.

New Jersey Hazardous Substances: This material is listed.

New Jersey Spill: This material is not listed.

New Jersey Toxic Catastrophe Prevention Act: This material is not listed.

New York Acutely Hazardous Substances: This material is not listed.

New York Toxic Chemical Release Reporting: This material is not listed.

Pennsylvania RTK Hazardous Substances: This material is listed.

Rhode Island Hazardous Substances: This material is not listed.

International Regulations:

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR.

National regulations: Follow national regulation for work with chemical agents.

Chemical safety assessment: No Chemical Safety Assessment has been carried out.

Section 16: Other Information

List of abbreviations:

ACGIH American Conference of Governmental Industrial Hygienists

ADR European Agreement Concerning the International Carriage of Dangerous Goods by Road

ALARA As Low As Is Reasonably Achievable

AMU Atomic Mass Unit

ANSI American National Standards Institute

BLS Basic Life Support

CAM Continuous Air Monitor

CAS Chemical Abstracts Service (division of the American Chemical Society)

CEN European Committee for Standardization

CERCLA Comprehensive Environmental Response Compensation and Liability Act

CLP Classification, Labelling and Packaging (European Union)
CPR Controlled Products Regulations (Canada)
CWA Clean Water Act (USA)
DAC Derived Air Concentration (USA)
DOE United States Department of Energy (USA)
DOT United States Department of Transportation (USA)
DSL Domestic Substances List (Canada)
EC50 Half Maximal Effective Concentration
EINECS European Inventory of Existing Commercial Chemical Substances
EHS Environmentally Hazardous Substance
ELINCS European List of Notified Chemical Substances
EMS Emergency Response Procedures for Ships Carrying Dangerous Goods
EPA Environmental Protection Agency (USA)
EPCRA Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986
GHS Globally Harmonized System
HMIS Hazardous Materials Identification System (USA)
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC Intermediate Bulk Containers
ICAO International Civil Aviation Organization
IDLH Immediately Dangerous to Life or Health
IMDG International Maritime Code for Dangerous Goods
LC50 Lethal concentration, 50 percent
LD50 Lethal dose, 50 percent
LDLO Lethal Dose Low
LOEC Lowest-Observed-Effective Concentration
MARPOL International Convention for the Prevention of Pollution from Ships
MSHA Mine Safety and Health Administration (USA)
NCRP National Council on Radiation Protection & Measurements (USA)
NDSL Non-Domestic Substances List (Canada)
NFPA National Fire Protection Association (USA)
NIOSH National Institute for Occupational Safety and Health (USA)
NOEC No Observed Effect Concentration
N.O.S. Not Otherwise Specified
NRC Nuclear Regulatory Commission (USA)
NTP National Toxicology Program (USA)
OSHA Occupational Safety and Health Administration (USA)
PBT Persistent Bioaccumulative and Toxic Chemical
PEL Permissible Exposure Limit
PIH Poisonous by Inhalation Hazard
RCRA Resource Conservation and Recovery Act (USA)
RCT Radiation Control Technician
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (Europe)
RID Regulations Concerning the International Transport of Dangerous Goods by Rail
RTECS Registry of Toxic Effects of Chemical Substances
SARA Superfund Amendments and Reauthorization Act (USA)
TDG Transportation of Dangerous Goods (Canada)
TIH Toxic by Inhalation Hazard

TLV Threshold Limit Value
TPQ Threshold Planning Quantity
TSCA Toxic Substances Control Act
TWA Time Weighted Average
UN United Nations (Number)
VOC Volatile Organic Compound
vPvB Very Persistent Very Bioaccumulative Chemical
WGK Wassergefährdungsklassen (Germany: Water Hazard Classes)
WHMIS Workplace Hazardous Materials Information System

References:

Not available.

Full text of any H-statements not written out in full under Sections 2 to 15:

H280 Contains gas under pressure; may explode if heated.

Revision information:

None.

Training information:

Follow training instructions when handling this material.

Further Information:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.