

1 PRODUCT: Argonite®

MSDS No. ARGONITE Version: 5 Date: January 1, 2005

IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

MSDS No. Argonite
Product Name Argonite
Chemical Formula N₂ / Ar

Company Identification Local filling station
Emergency Phone Numbers Local filling station

1.1 COMPOSITION / INFORMATION ON INGREDIENTS

Substance / Preparation Preparation

Components / Impurities Contains no components or impurities which will influence the

classification of the product

CAS No. N/A EEC No. N/A

Specifications

Argonite Mixture of $50\% - 52\% N_2$ and 48% - 50% Ar. $H_2O \le 10$ ppm $O_2 \le 10$ ppm in base components.

1.2 HAZARDS IDENTIFICATION

Hazards Identification In high concentrations may cause asphyxiation.

Compressed gas.

1.3 FIRST AID MEASURES

Inhalation May cause asphyxiation at high concentrations. Symptoms may include

loss of mobility / consciousness. Victim may not be aware of

asphyxiation.

Wearing self-contained breathing apparatus, remove victim to an uncontaminated area. Keep victim warm and at rest. Seek medical assistance. Apply artificial respiration if breathing has stopped.

Skin / eye contact Compressed gas directed at the skin can enter the body through small

wounds or can even penetrate the skin, causing serious or fatal injuries.

Seek medical advice immediately.

Ingestion Ingestion is not considered a potential route of exposure.



1.4 FIRE FIGHTING MEASURES

Specific Hazards Exposure to fire may cause containers to rupture / explode. Call the

Fire Department

Non flammable.

Hazardous combustion products None.

Suitable extinguishing media All known extinguishants can be used.

Specific methods If possible, stop flow of product.

Move container away or cool with water from a protected position.

Special protective equipment

for fire fighters

In confined spaces use self-contained breathing apparatus.

1.5 ACCIDENTAL RELEASE MEASURES

Personal precautions Evacuate area.

Use self-contained breathing apparatus when entering area unless

atmosphere is proved safe.

Ensure adequate air ventilation.

Environmental precautions Provided it is safe to do so, try to stop release.

Prevent entry to sewers, basements, and workpits or any place where

accumulation can be dangerous.

Clean up methods Ventilate area.

1.6 HANDLING AND STORAGE

Handling and Storage Backflow of any contaminating substance into container must be

prevented.

Use only equipment that is specified as suitable for this product, its supply pressure and temperature. Contact your supplier if in doubt. Compressed gas cylinders are heavy and contain considerable stored energy. Use suitable equipment and handle with appropriate caution.

Refer to suppliers.

Keep containers below 50°C in a well-ventilated place.

1.7 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limit Value - ELV No ELV specified, but atmosphere must have a minimum 18% free

oxygen

Personal Protection Ensure adequate air ventilation.



1.8 PHYSICAL AND CHEMICAL PROPERTIES

Molecular weight 33.95

Melting point -199.7°C

Boiling point -190.1°C

Critical temperature -134.7°C

Relative density gas Heavier than air

Relative density liquid N/A
Vapour pressure 20°C N/A
Solubility in water Negligible
Appearance / colour Colorless gas

Odor No odor warning properties

Auto ignition temperature Not applicable Flammability range Non flammable

Other data Vapor is heavier than air. May accumulate in confined spaces,

particularly at or below ground level.

1.9 STABILITY AND REACTIVITY

Stability and Reactivity Stable under normal conditions.

1.10 TOXICOLOGICAL INFORMATION

General No toxicological effects from this product.

LC50/ ih (ppm) No acute toxicity

1.11 ECOLOGICAL INFORMATION

General No ecological damage is caused by this product.

Nitrogen and Argon are natural components of air. Nitrogen

constituting approximately 78% and Argon approximately 0.9% of the

earth's atmosphere.

1.12 DISPOSAL CONSIDERATIONS

General To atmosphere in well ventilated area. Consider noise and pressure

hazards. Do not discharge into any place where its accumulation

could be dangerous.

Contact your Chemetron Fire Systems' supplier if guidance is

required.



1.13 TRANSPORT INFORMATION

UN No. 1981 Class / Div. 2.2

Emergency Action Code None specified

ADR / RID ITEM No. 1 2.1a IMDG page 2141

IMO EMS 2 - 04
ADR / RID Hazard No. Not specified

Labelling ADR Non flammable non-toxic gas.

Other transport information Avoid transport on vehicles where the load space is not separated

from the driver's compartment.

Ensure vehicle driver is aware of the potential hazards of the load and

knows what to do in an emergency.

Before transporting product containers ensure:

cylinder valve is closed and not leaking

valve outlet cap or plug (where provided) is correctly fitted

adequate ventilation

compliance with applicable regulations.

1.14 REGULATORY INFORMATION

Number in annex 1 of Dir. 67/548 Not included in Annex 1.

EC Classification Not classified as a dangerous substance.

EC Labelling (Symbols, R & S phrases)

Symbols Compressed gas.

Risk Phrases Asphyxiate in high concentrations.

• Safety Phrases Do not breathe the gas. Keep containers in a well-ventilated place.

1.15 OTHER INFORMATION

The hazard of asphyxiation is often overlooked and must be stressed during operator training.

Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.

Details in this document are believed to be correct at present. While great care has been taken in the preparation of this information, no liability for injury, damage or non-compliance with any legislation or directive arising from its use can be accepted.

This sheet does not constitute or substitute for the user's own assessment of workplace risk as required by other health and safety legislation.