SAFETY DATA SHEET

Section 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Argon
Other Identifiers: Argon
Recommended Use: Charging agent in fire extinguishers.
Manufacturer: AMEREX CORPORATION
Internet Address: www.amerex-fire.com
Address: 7595 Gadsden Highway, P.O. Box 81
Trussville, AL 35173-0081
Company Telephone: (205) 655-3271
E-mail Address: info@amerex-fire.com
Emergency Contacts: Chemtrec 1(800) 424-9300 or
(703) 527-3887
Revised: March 7, 2019

Section 2. HAZARDS IDENTIFICATION

GHS – Classification

<table>
<thead>
<tr>
<th>Health</th>
<th>Environmental</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity: Category None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Skin Corrosion/Irritation: None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Skin Sensitization: NO</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Eye: Category None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>STOT – None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Carcinogen: Category None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

GHS – Label Symbol(s): Gas Under Pressure

GHS – Words(s): Warning

Other Hazards Not Resulting in Classification: Argon is a simple asphyxiate. May displace oxygen and cause rapid suffocation.

May cause frostbite in contact with skin or eyes.
### GHS – Hazard Phrases

<table>
<thead>
<tr>
<th>GHS Hazard</th>
<th>GHS Codes(s)</th>
<th>Code Phrase(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td>H280, 281</td>
<td>* Contains gas under pressure; may explode if heated. Contains refrigerated gas; may cause cryogenic burns or injury.</td>
</tr>
<tr>
<td>Health</td>
<td>H313, 332</td>
<td>May be harmful in contact with skin. Harmful if inhaled.</td>
</tr>
<tr>
<td>Environmental</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**Precautionary:**

- **General**: P101 - If medical advice is needed, have product container or label at hand
- **Prevention**:
  - 251 - Do not pierce of burn, even after use.
  - 261 - Avoid breathing gas.
  - 271 - Use only outdoors or in a well-ventilated area.
  - 280 - Wear protective gloves/protective clothing/eye protection/face protection. [As modified by IV ATP].
  - 282 - Wear cold insulating gloves/face shield/eye protection
- **Response**:
  - P312 - Call a POISON CENTER/ doctor/...if you feel unwell. [As modified by IV ATP] Specific treatment (see Section 4 – First Aid Measures).
  - 321 - Thaw frosted parts with lukewarm water. Do not rub affected areas.
  - 336 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  - 304+340 - IF IN EYES: Immediately call a doctor.
  - 305+310 - May be harmful in contact with skin or if inhaled.
- **Storage**:
  - P405 - Store locked up
  - 403+233 - Store in a well ventilated place. Keep container tightly closed
  - 410+403 - * Protect from sunlight. Store in well-ventilated place.
- **Disposal**:
  - P501 - Dispose of contents through a licensed disposal company. Contaminated container should be disposed of as unused product.

* - If under pressure

### Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EC No.</th>
<th>REACH Reg. No.</th>
<th>CAS-No.</th>
<th>Weight %</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argon</td>
<td>231-147-0</td>
<td>7440-37-1</td>
<td>100</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

**Emergency overview:** Colorless, odorless.

**Adverse health effects and symptoms:** None in normal quantities. Simple aphyxiant and can cause frostbite on skin and in eyes.

### Section 4. FIRST AID MEASURES

**Eye Exposure:** Can cause freezing injury to eyes. Flush eyes with cool water for 15 minutes; hold eyelids open during the irrigation to assure that all surfaces are flushed. Seek medical attention immediately.
Skin Exposure: May cause cold burns or frostbite. Remove contaminated clothing and flush affected areas with lukewarm (NOT HOT) water. Seek medical attention immediately if blistering of the dermal surface or if deep tissue freezing occurs.

Inhalation: May cause irritation, along with coughing. If respiratory irritation or distress occurs, remove victim to fresh air. Seek medical attention if irritation persists.

Ingestion: Argon is a simple asphyxiate. May cause coughing, dizziness, headache, dyspnea, unconsciousness and death. If symptoms appear or respiratory distress occurs, remove victim to fresh air. Seek medical attention immediately.

Medical conditions possibly aggravated by exposure: None

Section 5. FIRE-FIGHTING MEASURES

Flammable Properties: Not flammable
Flash Point: None
Suitable Extinguishing Media: Non-combustible. Use extinguishing media suitable for surrounding conditions. Cool fire-exposed cylinders until flames are extinguished. Damaged cylinders should be handled only by specialists.

Hazardous Combustion Products: None
Explosion Data:
  Sensitivity to Mechanical Impact: Not sensitive
  Sensitivity to Static Discharge: Not sensitive
  Unusual fire/explosion hazards: Cylinders could rupture under heat of fire.

Protective Equipment and
Precautions for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Monitor oxygen level.
Personal Protective Equipment: Wear self-contained breathing apparatus when entering area unless atmosphere is proved safe.

Emergency Procedures: Handle in accordance with good health and safety practices.

Methods for Containment: Stop the flow of gas or remove cylinder to outdoor location if this can be done without risk. If leak is in container or container valve, contact the appropriate emergency telephone number in Section 1 or call your closest supplier location.

Methods for Clean Up: Return cylinder to authorized distributor.

Other: None

Section 7. HANDLING AND STORAGE

Personal Precautions: Only experienced and properly instructed persons should handle gases under pressure.

Conditions for Safe Storage: If under pressure - Protect from sunlight and store in a cool, well-ventilated place. Always store and handle compressed gas cylinders in accordance with Compressed Gas Association, Pamphlet CGA-P1, Safe Handling of Compressed Gases in Containers.

Incompatible Products: None

Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>DFG MAK *</th>
<th>EU BLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argon</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
</tr>
</tbody>
</table>

*German regulatory limits; NR = Not Regulated.

**Engineering Controls:**
Local exhaust ventilation to prevent accumulation of high concentrations and maintain air-oxygen levels at or above 19.5%. Oxygen detectors should be used when asphyxiating gases may be released. Systems under pressure should be regularly checked for leakages.
Personal Protective Equipment – PPE Code E:

Eye/Face Protection: Tightly fitting safety goggles or face shield
Skin and Body Protection: Wear protective gloves, safety shoes.
Respiratory Protection: If oxygen levels are unknown or are below 19.5%, use positive-pressure, supplied air respirator with escape cylinder. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures: Good personal hygiene practices are essential, such as avoiding food, tobacco products, or other hand-to-mouth contact when handling. Do not allow in eyes, on skin, or on clothing.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless gas
Molecular Weight: 39.95
Odor: Odorless
Odor Threshold: None
Decomposition Temperature °C: No information available
Freezing Point °C: -189.4
Initial Boiling Point °C: -185.7 aat 760 mmHg
Physical State: Gas
pH: No information available
Flash Point °C: None
Autoignition Temperature °C: None
Boiling Point/Range °C: -185.7
Melting Point/Range °C: -189.2
Flammability/Explosion Limits in Air °C: Upper – None; Lower-None
Explosive Properties: None
Oxidizing Properties: None
Volatile Component (%vol) No information available
Evaporation Rate: No information available
Vapor Density: 1.38 at 21 °C
Vapor Pressure: 8.82E+007 at 25 C
Specific gravity: 1.38 at 21 C
Solubility: 0.058 at 20 C in water
Partition Coefficient: 1.28E-016 (Mackay model) gas coefficient
Viscosity (absolute; 10^{-5} Pa s): 2.1 at 2.23 C

Section 10. STABILITY AND REACTIVITY

Stability: Stable
Incompatibles: None
Conditions to Avoid: High temperatures (>125°F); poorly ventilated areas.
Hazardous Decomposition Products: None
Possibility of Hazardous Reactions: None
Hazardous Polymerization: Does not occur

Section 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation, skin and eye contact.
Symptoms:
   Immediate:
      Inhalation: Increased respiration, headache, mild narcotic effects, increased blood pressure and pulse rate, unconsciousness, death.
      Eyes: Contact with liquid/gas may cause burns/frostbite.
      Skin: Contact with liquid/gas may cause burns/frostbite.
   Delayed: None
Acute Toxicity:
   Short-term Exposure: None known.
   Long-term Exposure: None known

Acute Toxicity Values - Health

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 (Inhalation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argon</td>
<td>NA</td>
<td>NA</td>
<td>&gt;82,000 ppm/4hr (rat)</td>
</tr>
</tbody>
</table>

Reproductive Toxicity: This product’s ingredients are not known to have reproductive or teratogenic effects.
Target Organs and Effects (TOST): This product’s ingredients are not known to have reproductive or teratogenic effects.
## Other Toxicity Categories

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Germ Cell Mutagenicity</th>
<th>Carcinogenicity</th>
<th>Reproductive</th>
<th>TOST Single Exp</th>
<th>TOST Repeated Exp</th>
<th>Aspiration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argon</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

## Section 12. ECOLOGICAL INFORMATION

Ecotoxicity: No negative effects known

Persistence/Degradability: No negative effects known,

Bioaccumulation: No negative effects known.

Mobility in soil: No negative effects known.

Other Adverse Ecological Effects: No other known effects at this time

### Aquatic Toxicity Values – Environment – None Known

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Acute (LC50)</th>
<th>Chronic (LC50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argon</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

## Section 13. DISPOSAL CONSIDERATIONS

**Safe Handling**

Use appropriate PPE when handling (see Section 8). Only experienced and properly instructed persons should handle gases under pressure.

**Waste Disposal Considerations**

Dispose in accordance with federal, state, and local regulations. Typically containers are returned to an authorized distributor for disposal.

**Contaminated Packaging**

Dispose in accordance with federal, state, and local regulations.

**NOTES:**

This product is not a RCRA characteristically hazardous or listed hazardous waste. Dispose of according to state or local laws, which may be more restrictive than federal laws or regulations. Used product may be altered or contaminated, creating different disposal considerations.
Section 14. TRANSPORT INFORMATION

UN Number: NA
UN Proper Shipping Name: NA
Transport Hazard Class: NA
Packing Group: NA
Marine Pollutant?: NO

IATA Not regulated
DOT Not regulated

Special Precautions for Shipping:
If shipped in a stored pressure-type fire extinguisher, and pressurized with a non-flammable, non-toxic inert expellant gas, the fire extinguisher is considered a hazardous material by the US Department of Transportation and Transport Canada. The proper shipping name shall be FIRE EXTINGUISHER and the UN designation is UN 1044. The DOT hazard class/division is LIMITED QUANTITY when pressurized to less than 241 psig and when shipped via highway or rail. UN Class 2.2. Non-Flammable Gas, when shipping via air. Packing Group – N/A

Section 15. REGULATORY INFORMATION

International Inventory Status: All ingredients are on the following inventories

<table>
<thead>
<tr>
<th>Country(ies)</th>
<th>Agency</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td>TSCA</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>DSL</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>EINECS/ELINCS</td>
<td>Yes</td>
</tr>
<tr>
<td>Australia</td>
<td>AICS</td>
<td>Yes</td>
</tr>
<tr>
<td>Japan</td>
<td>MITI</td>
<td>Yes</td>
</tr>
<tr>
<td>South Korea</td>
<td>KECL</td>
<td>Yes</td>
</tr>
<tr>
<td>Mexico</td>
<td>INSQ</td>
<td>Yes</td>
</tr>
</tbody>
</table>

REACH Title VII Restrictions: No information available

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Dangerous Substances</th>
<th>Organic Solvents</th>
<th>Harmful Substances Whose Names Are to be Indicated on Label</th>
<th>Pollution Release and Transfer Registry (Class II)</th>
<th>Pollution Release and Transfer Registry (Class I)</th>
<th>Poison and Deleterious Substances Control Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argon</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>
**European Risk and Safety phrases:**

EU Classification:
- R Phrases: None
- S Phrases: None

**U.S. Federal Regulatory Information:**

**SARA 313:**
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) - This product does not contain and chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372. None of the chemicals in this product are under SARA reporting requirements or have SARA threshold planning quantities (TPQs) or CERCLA reportable quantities (RQs), or are regulated under TSCA 8(d).

**SARA 311/312 Hazard Categories:**
- Acute Health Hazard: No
- Chronic Health Hazard: No
- Fire Hazard: No
- Sudden Release of Pressure Hazard: Yes
- Reactive Hazard: No

* - Only applicable if material is in a pressurized extinguisher.

**Clean Water/Clean Air Acts:**
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42) or Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61) and Section 112 of the Clean Air Act Amendments of 1990.

**U.S. State Regulatory Information:**

Chemicals in this product are covered under specific State regulations, as denoted below:

**Alaska** - Designated Toxic and Hazardous Substances: None

**California** – Permissible Exposure Limits for Chemical Contaminants: None
Florida – Substance List: None
Illinois – Toxic Substance List: None
Kansas – Section 302/303 List: None
Massachusetts – Substance List: None
Minnesota – List of Hazardous Substances: None
Missouri – Employer Information/Toxic Substance List: None
New Jersey – Right to Know Hazardous Substance List: None
North Dakota – List of Hazardous Chemicals, Reportable Quantities: None
Pennsylvania – Hazardous Substance List: None
Rhode Island – Hazardous Substance List: None
Texas – Hazardous Substance List: None
West Virginia – Hazardous Substance List: None
Wisconsin – Toxic and Hazardous Substances: None

California Proposition 65: No component is listed on the California Proposition 65 list.

Other:
Mexico – Grade No component listed
Canada – WHMIS Hazard Class No component listed

Section 16. OTHER INFORMATION

This SDS conforms to requirements under U.S., U.K., Canadian, Australian, and EU regulations or standards, and conforms to the proposed 2003 ANSI Z400.1 format. No modifications of this SDS are authorized by AMEREX Corporation. Questions or comments should be directed to AMEREX Corporation (See Section 1).

Issuing Date 17-June-2012
Revision Date 7-March-2019; Revision C
Revision Notes None

The information herein is given in good faith but no warranty, expressed or implied, is made. Updated by William F. Garvin, CIH.