MATERIAL
SAFETY
DATA SHEET

PRODUCT NAME	CAS#
Argon	7440-37-1
TRADE NAME AND SYNONYMS	**DOT I.D. NO.**
Argon; Argon, Compressed	UN 1006
CHEMICAL NAME AND SYNONYMS	**DOT HAZARD CLASS**
Argon	Division 2.2
ISSUE DATE AND REVISIONS	**FORMULA**
Revised June 2007	Ar
	CHEMICAL FAMILY
	Inert Gas

HEALTH HAZARD DATA

TIME WEIGHTED AVERAGE EXPOSURE LIMIT

Argon is defined as a simple asphyxiant. Oxygen levels should be maintained at greater than 18 molar percent at normal atmospheric pressure which is equivalent to a partial pressure of 135 mm Hg (ACGIH 1990-1991). OSHA 1989 does not list a TWA for Argon.

SYMPTOMS OF EXPOSURE

Effects of exposure to high concentrations so as to displace the oxygen in the air necessary for life are headache, drowsiness, dizziness, excitation, excess salivation, vomiting and unconsciousness. Lack of oxygen can cause death.

TOXICOLOGICAL PROPERTIES

Argon is nontoxic but the liberation of a large amount in a confined area could displace the amount of oxygen in air necessary to support life.

Argon is not listed in the IARC, NTP or by OSHA as a carcinogen or potential carcinogen.

Persons in ill health where such illness would be aggravated by exposure to Argon should not be allowed to work with or handle this product.

RECOMMENDED FIRST AID TREATMENT

PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE TO ARGON. RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SELF-CONTAINED BREATHING APPARATUS.

Inhalation: Conscious persons 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, given assisted respiration and supplemental oxygen. Further treatment should be symptomatic and supportive.

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES

None

PHYSICAL DATA

BOILING POINT	SPECIFIC VOLUME AT 70 °F
-302.6°F	9.68 ft^3/lb.
VAPOR PRESSURE @ 70 °F	**MOLECULAR WEIGHT**
Gas	39.948
SOLUBILITY IN WATER	**FREEZING POINT**
Negligible	-308.6°F
EVAPORATION RATE	**SPECIFIC GRAVITY (AIR=1)**
N/A	1.378 @ 70°F
APPEARANCE AND ODOR	
Colorless, odorless gas	

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	AUTO IGNITION TEMPERATURE	FLAMMABLE LIMITS % BY VOLUME
N/A	N/A	LEL N/A UEL N/A
EXTINGUISHING MEDIA		**ELECTRICAL CLASSIFICATION**
Nonflammable, inert gas		Nonhazardous
SPECIAL FIRE FIGHTING PROCEDURES		
N/A		
UNUSUAL FIRE AND EXPLOSION HAZARDS		
N/A		

REACTIVITY DATA

STABILITY		CONDITIONS TO AVOID
Unstable		N/A
Stable	X	
INCOMPATIBILITY (Materials to avoid)		
None		
HAZARDOUS DECOMPOSITION PRODUCTS		
None		
HAZARDOUS POLYMERIZATION		**CONDITIONS TO AVOID**
May Occur		N/A
Will Not Occur	X	

SPECIAL PROTECTION INFORMATION

RESPIRTORY PROTECTION (Specify type)	
Positive pressure air line with mask or self-contained breathing apparatus should be available for emergency use.	
VENTILATION	**SPECIAL**
See Local Exhaust	N/A
MECHANICAL (Gen.)	**OTHER**
N/A	N/A
LOCAL EXHAUST	
To prevent accumulation of high concentrations so as to reduce the oxygen level in the air to less than 18 molar percent.	
PROTECTIVE GLOVES	***EYE PROTECTION***
Any material	Safety goggles or glasses
OTHER PROTECTIVE EQUIPMENT	
Safety shoes	

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Evacuate all personnel from affected area. Use appropriate protective equipment. If leak is in container or container valve, contact HSG for special advice.

WASTE DISPOSAL METHOD

Do not attempt to dispose of waste or unused quantities. Return in the shipping container properly labeled, with any valve outlet plugs or caps secured and valve protection cap in place to your supplier. For emergency disposal assistance, contact HSG for special advice.

SPECIAL PRECAUTIONS*

SPECIAL LABELING INFORMATION	DOT Hazard Class: Division 2.2
DOT Shipping Name: Argon, Compressed DOT Shipping Label: Nonflammable Gas	I.D. No.: UN 1006

SPECIAL HANDLING RECOMMENDATIONS

Use only in well-ventilated areas. Valve protection caps must remain in place unless container is secured with valve outlet piped to use point. Do not drag, slide or roll cylinders. Use a suitable hand truck for cylinder movement. Use a pressure reducing regulator when connecting cylinder to lower pressure (<3,000 psig) piping or systems. Do not heat cylinder by any means to increase the discharge rate of product from the cylinder. Use a check valve or trap in the discharge line to prevent hazardous back flow into the cylinder.

SPECIAL STORAGE RECOMMENDATIONS

Protect cylinders from physical damage. Store in cool, dry, well-ventilated area away from heavily trafficked areas and emergency exits. Do not allow the temperature where cylinders are stored to exceed 125°F. Cylinders should be stored upright and firmly secured to prevent falling or being knocked over. Full and empty cylinders should be segregated. Use a "first in - first out" inventory system to prevent full cylinders being stored for excessive periods of time.

SPECIAL PACKING RECOMMENDATIONS

Argon is noncorrosive and may be used with any common structural material.

OTHER RECOMMENDATIONS OR PRECAUTIONS

Compressed gas cylinders should not be refilled except by qualified producers of compressed gases. Shipment of a compressed gas cylinder which has not been filled by the owner or with his (written) consent is a violation of Law. Always secure cylinders in an upright position before transporting them. NEVER transport cylinders in trunks of vehicles, enclosed vans, truck cabs or in passenger compartments. Transport cylinders secured in open flatbed or in open pick-up type vehicles.