

NATIONAL WELDERS SUPPLY -- ARGON - ARGON  
MATERIAL SAFETY DATA SHEET  
NSN: 6830002904291  
Manufacturer's CAGE: 18264  
Part No. Indicator: B  
Part Number/Trade Name: ARGON

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General Information

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Item Name: ARGON  
Company's Name: NATIONAL WELDERS SUPPLY CO INC  
Company's Street: 810 GESCO  
Company's P. O. Box: 31007  
Company's City: CHARLOTTE  
Company's State: NC  
Company's Country: US  
Company's Zip Code: 28231  
Company's Emerg Ph #: 704-333-5475 800-424-9300(CHEMTREC)  
Company's Info Ph #: 704-333-5475 800-866-4422  
Record No. For Safety Entry: 007  
Tot Safety Entries This Stk#: 009  
Status: FE  
Date MSDS Prepared: 01JAN91  
Safety Data Review Date: 13MAY93  
Supply Item Manager: CX  
MSDS Serial Number: BQQFH  
Specification Number: MIL-A-18455  
Hazard Characteristic Code: G3  
Unit Of Issue: CF  
Unit Of Issue Container Qty: 243 CUBIC FT  
Type Of Container: CYLINDER  
Net Unit Weight: UNKNOWN  
Net Explosive Weight: NK  
Coast Guard Ammunition Code: NK

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Ingredients/Identity Information

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Proprietary: NO  
Ingredient: ARGON  
Ingredient Sequence Number: 01  
Percent: >99.9  
NIOSH (RTECS) Number: C72300000  
CAS Number: 7440-37-1  
OSHA PEL: NOT ESTABLISHED  
ACGIH TLV: NOT ESTABLISHED  
Other Recommended Limit: NONE



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### Physical/Chemical Characteristics

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Appearance And Odor: GAS;COLORLESS;ODORLESS

Boiling Point: -302F/-185C

Vapor Density (Air=1): 1.6KG/M3

Specific Gravity: 1.38

Solubility In Water: SLIGHT

Viscosity: NK

Radioactivity: NK

Autoignition Temperature: NK

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### Fire and Explosion Hazard Data

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Flash Point: NON-FLAMMABLE

Extinguishing Media: NONFLAMMABLE, INERT GAS.USE APPROPRIATE MEDIA FOR SURROUNDING FIRE.

Special Fire Fighting Proc: EVACUATE PERSONNEL.USE WATER SPRAY TO COOL FIRE EXPOSED CYLINDERS.HMIS SUGGESTS ALWAYS USING A SELF-CONTAINED BREATHING APPARATUS WHEN FIGHTING A CHEMICAL FIRE.

Unusual Fire And Expl Hazrds: CONTAINER MAY RUPTURE FROM HEAT.

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### Reactivity Data

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Stability: YES

Cond To Avoid (Stability): NONE SPECIFIED BY MANUFACTURER.

Materials To Avoid: NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomp Products: NONE SPECIFIED BY MANUFACTURER.

Hazardous Poly Occur: NO

Conditions To Avoid (Poly): NONE.

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### Health Hazard Data

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LD50-LC50 Mixture: TLV OCCURS WHEN OXYGEN <18 MOL PERCENT

Route Of Entry - Inhalation: YES

Route Of Entry - Skin: NO

Route Of Entry - Ingestion: NO

Health Haz Acute And Chronic: ARGON ACTS AS AN ASPHYXIANT;IT DISPLACES OXYGEN.OXYGEN LEVELS SHOULD NOT FALL BELOW 18 MOL PERCENT.

Carcinogenicity - NTP: NO

Carcinogenicity - IARC: NO

Carcinogenicity - OSHA: NO

Explanation Carcinogenicity: NOT APPLICABLE.

Signs/Symptoms Of Overexp: LOSS OF BALANCE,DIZZINESS,TIGHTNESS IN THE FRONTAL REGION OF THE FOREHEAD,TINGLING IN THE TOES,FINGERS,TONGUE,AFFECTED



SPEECH, INABILITY TO UTTER SOUNDS, RAPID REDUCTION IN MOTOR CONTROL, ALTERED CONSCIOUSNESS, LOSS OF FEELING. NOTE! ARGON ASPHYXIATION MAY OCCUR WITHOUT WARNING.

Med Cond Aggravated By Exp: NOT REPORTED

Emergency/First Aid Proc: INHAL: REMOVE TO FRESH AIR. GIVE OXYGEN OR ARTIFICIAL RESPIRATION IF NEEDED. GET PROMPT QUALIFIED MEDICAL HELP.

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#### Precautions for Safe Handling and Use

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Steps If Matl Released/Spill: EVACUATE ALL PERSONNEL FROM AFFECTED AREA. USE APPROPRIATE PROTECTIVE EQUIP. IF LEAK IS IN CONTAINER VALVE, CONTACT YOUR CLOSEST SUPPLIER OR CALL 800-424-9300 (CHEMTREC).

Neutralizing Agent: NONE.

Waste Disposal Method: DO NOT ATTEMPT TO DISPOSE OF WASTE OR UNUSED QUANTITIES. RETURN IN THE SHIPPING CONTAINER PROPERLY LABELED, WITH VALVE

OUTLET PLUGS OR CAPS SECURED AND VALVE PROTECTION CAP IN PLACE TO YOUR

SUPPLIER. CALL SUPPLIER FOR EMERGENCY DISPOSAL ASSISTANCE.

Precautions-Handling/Storing: USE/STORE IN COOL, DRY, WELL VENTILATED AREA. KEEP CYLINDERS UPRIGHT & SECURED. SEGREGATE FULL/EMPTY CYL. KEEP CYLINDERS

AWAY FROM HEAT SOURCES.

Other Precautions: COMPRESSED GAS CYLINDERS SHOULD NOT BE REFILLED EXCEPT

BY QUALIFIED PRODUCERS OF COMPRESSED GASES. USE A CHECK VALVE OR TRAP IN THE

DISCHARGE LINE TO PREVENT HAZARDOUS BACK FLOW INTO THE CYLINDER.

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#### Control Measures

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Respiratory Protection: POSITIVE PRESSURE AIR LINE WITH MASK OR SELF-CONTAINED BREATHING APPARATUS SHOULD BE AVAILABLE FOR EMERGENCY USE.

Ventilation: MAINTAIN OXYGEN ABOVE 18 MOL PERCENT.

Protective Gloves: NOT NECESSARY.

Eye Protection: SAFETY GOGGLES OR GLASSES

Other Protective Equipment: SAFETY SHOES

Work Hygienic Practices: NO SPECIAL REQUIREMENTS.

Suppl. Safety & Health Data: HMIS SPOKE TO NORMAN BROWN, AT NATIONAL WELDERS, ON 5/12/93. HE TOLD US THAT THE PERCENTAGE OF ARGON IS 99.995. IT WAS

NOT SPECIFIED ON THE MSDS.



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Transportation Data

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Trans Data Review Date: 93133  
DOT PSN Code: BHZ  
DOT Proper Shipping Name: ARGON, COMPRESSED  
DOT Class: 2.2  
DOT ID Number: UN1006  
DOT Label: NONFLAMMABLE GAS  
DOT/DoD Exemption Number: NK  
IMO PSN Code: BNB  
IMO Proper Shipping Name: ARGON, COMPRESSED  
IMO Regulations Page Number: 2105  
IMO UN Number: 1006  
IMO UN Class: 2(2.2)  
IMO Subsidiary Risk Label: -  
IATA PSN Code: CJI  
IATA UN ID Number: 1006  
IATA Proper Shipping Name: ARGON, COMPRESSED  
IATA UN Class: 2.2  
IATA Label: NON-FLAMMABLE GAS  
AFI PSN Code: CJI  
AFI Prop. Shipping Name: ARGON, COMPRESSED  
AFI Class: 2.2  
AFI ID Number: UN1006  
AFI Basic Pac Ref: 6-6,6-10  
MMAC Code: NK  
Additional Trans Data: MANUFACTURER SPECIFIES UN1006,NON-FLAMMABLE GAS  
DOT  
CLASS.

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Label Data

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Label Required: YES  
Technical Review Date: 13MAY93  
MFR Label Number: UNKNOWN  
Label Status: F  
Common Name: ARGON  
Chronic Hazard: NO  
Signal Word: CAUTION!  
Acute Health Hazard-Slight: X  
Contact Hazard-None: X  
Fire Hazard-None: X  
Reactivity Hazard-None: X  
Special Hazard Precautions: ARGON ACTS AS AN ASPHYXIAN;IT DISPLACES





OXYGEN.OXYGEN LEVELS SHOULD NOT FALL BELOW 18 MOL PERCENT.  
USE/STORE IN  
COOL, DRY, WELL VENTILATED AREA. KEEP CYLINDERS UPRIGHT &  
SECURED. SEGREGATE  
REMOVE TO FRESH AIR. GIVE OXYGEN OR ARTIFICIAL RESPIRATION IF  
NEEDED. GET  
PROMPT QUALIFIED MEDICAL HELP.

Label Name: NATIONAL WELDERS SUPPLY CO INC

Label Street: 810 GESCO

Label P.O. Box: 31007

Label City: CHARLOTTE

Label State: NC

Label Zip Code: 28231

Label Country: US

*Retrieved 5 June 2002 from:*

*[msds.pdc.cornell.edu/msds/siri/msds/h/q194/q493.html](http://msds.pdc.cornell.edu/msds/siri/msds/h/q194/q493.html)*



**SECTION #3 - PHYSICAL DATA Continued...**Odor

Odorless

**SECTION #4 - FIRE FIGHTING & EXPLOSION DATA**

Flash Point: None

Lower Explosive Limit (%): N/A

Upper Explosive Limit (%): N/A

Fire and Explosion Hazards

None.

Extinguishing Media

Nonflammable, inert gas - Use any extinguishing media which is suitable for the surrounding fire.

Special Fire Fighting Instructions

None.

**SECTION #5 - EXPOSURE and EFFECTS - INHALATION**Routes of Exposure - Inhalation

Argon is a simple asphyxiant. Maintain oxygen levels above 19.5% at sea level. Effects of overexposure to high concentrations so as to displace the oxygen in the air necessary for life may include any, all or none of the following:

- o Tingling of the tongue, fingertips or toes;
- o Weakened speech leading to the inability to utter sounds;
- o Rapid reduction in the ability to perform movements;
- o Loss of tactile sensations;
- o Heightened mental activity;

The above symptoms may or may not be present since there are no definite symptoms of exposure. 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.



**SECTION #5 - EXPOSURE and EFFECTS - INHALATION Continued...**First Aid - Inhalation

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

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 artificial resuscitation and supplemental oxygen. Further treatment should be symptomatic and supportive.

**SECTION #5 - EXPOSURE and EFFECTS - SKIN**Routes of Exposure - Skin

Frostbite effects appear as a change in the color of the skin to gray or white possibly followed by blistering and may occur upon contact with liquid.

First Aid - Skin

For dermal contact or frostbite: Remove contaminated clothing and flush affected areas with lukewarm water. DO NOT USE HOT WATER. A physician should see the patient promptly if the cryogenic "burn" has resulted in blistering of the dermal surface or deep tissue freezing.

**SECTION #5 - EXPOSURE and EFFECTS - EYES**Routes of Exposure - Eyes

Contact with liquid may cause tissue freezing.

First Aid - Eyes

IMMEDIATELY FLUSH with tepid water in large quantities, or with sterile saline solution. Seek medical attention. DO NOT USE HOT WATER.

**SECTION #5 - EXPOSURE and EFFECTS - INGESTION**Routes of Exposure - Ingestion

Since product is a gas at room temperature, ingestion is unlikely. Contact with liquid product may cause freezing of tissue and should be treated as frostbite. Consult a physician for treatment.



ARGON

Page: 4  
Rev. Date  
08/08/89**SECTION #5 - MISCELLANEOUS TOXICOLOGICAL INFORMATION**

Carcinogenicity: NTP: No

IARC: No

OSHA: No

**SECTION #6 - REACTIVITY & POLYMERIZATION**

Stability: Stable

Conditions to Avoid (Stability)

Product is an inert gas.

Hazardous Polymerization: Will Not Occur

**SECTION #7 - SPILL, LEAK, & DISPOSAL PROCEDURES**Steps to be Taken in The Event of Spills, Leaks, or Release

Evacuate all personnel from affected areas. Use appropriate protective equipment. If leak is in user's equipment, be certain to purge piping with an inert gas prior to attempting repairs. If leak is in container or container valve, contact CHEMTREC for emergency assistance or call your closest Airco location.

Waste Disposal Methods

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 Airco for proper disposal.

SARA Hazard Classes: Sudden Release of Pressure Hazard

**SECTION #8 - SPECIAL PROTECTIVE MEASURES**Ventilation

Use local exhaust ventilation to reduce concentrations to within current exposure limits. A laboratory type hood is suitable for handling small or limited quantities. Maintain oxygen levels above 19.5% at normal pressure.

Eye Protection

Safety goggles or glasses.





**SECTION #8 - SPECIAL PROTECTIVE MEASURES Continued...**Skin Protection

Protective gloves made of any suitable material. Use insulated gloves if contact with liquid product may occur.

Respiratory Protection

An airline respirator with full face piece equipped with an escape bottle or a Self Contained Breathing Apparatus should be available for emergency use. Operate this equipment in the positive pressure demand mode, PPD!

Other Protection

Safety shoes, eyewash, safety shower.

**SECTION #9 - SPECIAL PRECAUTIONS - STORAGE & HANDLING**Storage & Handling Conditions

Use only in well-ventilated areas. Valve protection caps must remain in place unless container is secured with valve protection 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 (<3000 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. Protect cylinders from physical damage. Store in cool, dry, well-ventilated area of non-combustible construction 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. Use a "first in-first out" inventory system to prevent full cylinders being stored for excessive periods of time.

Never carry a compressed gas cylinder or a container of a gas in cryogenic liquid form in an enclosed space such as a car trunk, van or station wagon. A leak can result in a fire, explosion, asphyxiation or a toxic exposure.

**SECTION #10 - SHIPPING INFORMATION**

Proper Shipping Name: Argon or Argon, Compressed

Hazard Class: Nonflammable Gas

DOT Identification Number: UN1006

DOT Shipping Label: Nonflammable Gas



ARGON

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**SECTION #11 - MISC COMMENTS & REFERENCE DOCUMENTATION**

Argon is non-corrosive and may be used with any common structural material. Compressed gas cylinders should not be refilled except by qualified producers of compressed gases. Shipments of a compressed gas cylinder, which has not been filled by the owner or with his (written) consent, is a violation of Federal Law (49CFR). For additional recommendations, consult Compressed Gas Association Pamphlets P-1, P-14, P-9, and Safety Bulletin SB-2.

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