

LIQUID AIR CORP,ALPHAGAZ DIV -- 0.1-17.9% OXYGEN IN NITROGEN

---

MSDS Safety Information

---

FSC: 6830

NIIN: 01-309-7635

MSDS Date: 01/01/1992

MSDS Num: BYFCJ

Product ID: 0.1-17.9% OXYGEN IN NITROGEN

MFN: 01

Responsible Party

Cage: 1JK08

Name: LIQUID AIR CORP,ALPHAGAZ DIV

Address: 2121 N CALIFORNIA BLVD

City: W

ALNUT CREEK CA 94596

Info Phone Number: 510-977-6500 / FAX 510-977-6747

Emergency Phone Number: 510-977-6500

Preparer's Name: NONE

Review Ind: Y

Published: Y

---

Contractor Summary

---

Cage: 42568

Name: LIQUID AIR CORP ALPHAGAZ DIVISION

Address: 2121 N CALIFORNIA BLVD

City: WALNUT CREEK CA 94596

Phone: 510-977-6500

Cage: 1JK08

Name: LIQUID AIR CORP,CARDOX CORP DIV

Address: 150 S WARNER RD, SU

ITE 268

City: KING OF PRUSSIA PA 19406

Phone: 215-975-0880

Cage: 24821

Name: ROSEMOUNT ANALYTICAL INC

Address: 1201 N MAIN ST

Box: 901

City: ORRVILLE OH 44667-1016

Phone: 216-684-4449

Cage: 0ABX5

Name: S A R C O

Address: 55 HARKER AVENUE

City: BERLIN NJ 08009

Phone: 609-795-0699

---

Item Description Information

---

Item Manager: S9G

Item Name: CALIBRATING GAS MIXTURE

Specification Number: NON

E

Type/Grade/Class: NONE

Unit of Issue: EA

UI Container Qty: 1

Type of Container: CYLINDER

=====

Ingredients

=====

Cas: 7727-37-9

RTECS #: QW9700000

Name: NITROGEN

% Wt: 82-99.9

Other REC Limits: NONE RECOMMENDED

OSHA PEL: NOT ESTABLISHED

ACGIH TLV: ASPHYXIANT; 9394

=====

Cas: 7782-44-7

RTECS #: RS2060000

Name: OXYGEN

% Wt: 0.1-18

Other REC Limits: NONE RECOMMENDED

OSHA P

EL: NOT ESTABLISHED

ACGIH TLV: NOT ESTABLISHED

=====

Health Hazards Data

=====

LD50 LC50 Mixture: UNKNOWN

Route Of Entry Inds - Inhalation: YES

Skin: NO

Ingestion: NO

Carcinogenicity Inds - NTP: NO

IARC: NO

OSHA: NO

Effects of Exposure: HIGH CONCENTRATIONS DISPLACE THE OXYGEN IN THE AIR  
NECESSARY FOR LIFE.

Signs And Symtoms Of Overexposure: HEADACHE, DIZZINESS, LABORED BREATHING AND  
EVENTUA

L UNCONSCIOUSNESS.

Medical Cond Aggravated By Exposure: PERSONS IN ILL HEALTH.

First Aid: 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 UNCONTAMINATE D AREA, GIVEN  
ASSISTED RESPIRATION AND SUPPLEMENTAL OXYGEN. FURTHER TREATMENT SHOULD BE  
SYMPTOMATIC AND SUPPORTIVE.

=====

Handling and Disposal

=====

=====

Spill Release Procedures: EVACUATE PERSONNEL FROM AFFECTED AREA. USE APPROPRIATE PROTECTIVE EQUIPMENT. REMOVE LEAKING CONTAINER TO OPEN AIR AWAY FROM PERSONNEL. (PER DSCR- SINCE NO INSTRUCTIONS RECEIVED FROM DISTRIBUTOR OF DISPOSABLE CYLINDERS OF CALIBRATING GAS MIXTURE.)

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods: DISPOSE OF WASTE IN COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. (PER DSCR- VENT GAS TO ATMOSPHERE IN OPEN AREA AWAY FROM ALL PERSONNEL. DISPOSE OF EMPTY CYLINDERS IN COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.)

Handling And Storage Precautions: USE ONLY IN WELL-VENTILATED AREAS. USE A PRESSURE REDUCING REGULATOR WHEN CONNECTING CYLINDER TO LOWER PRESSURE PIPING OR SYSTEMS. DO NOT HEAT.

Other Precautions: NONE

=====

Fire and Explosion Hazard Information

=====

Flash Point Text: NOT FLAMMABLE

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

Fire Fighting Procedures: IF CYLINDERS ARE INVOLVED IN A FIRE, SAFELY RELOCATE OR KEEP COOL WITH WATER SPRAY.

Unusual Fire/Explosion Hazard: NONE

=====

Control Measures

=====

Respiratory Protection: POSITIVE PRESSURE AIR-LINE WITH MASK OR SELF-CONTAINED BREATHING APPAR

ATUS.

Ventilation: LOCAL EXHAUST.

Protective Gloves: ANY MATERIAL

Eye Protection: SAFETY GOGGLES OR GLASSES.

Other Protective Equipment: NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices: NORMAL WORKPLACE HYGENIC PRACTICES ARE ADEQUATE..

Supplemental Safety and Health: NONE

=====

Physical/Chemical Properties

=====

HCC: G3

B.P. Text: -320F,-196C

M.P/F.P Text: -346F,-210C

Decomp Text: UNKNOWN

Vapor Pres: UNKNOWN  
Vapor Density: UNKNOWN  
Spec Gravity: 0.97-0.99  
Solubility in Water: SLIGHT  
Appearance and Odor: COLORLESS, ODORLESS GAS.  
Corrosion Rate: UNKNOWN

=====

#### Reactivity Data

=====

Stability Indicator: YES  
Materials To Avoid: NONE  
Hazardous Decomposition Products: NONE  
Hazardous Polymerization Indicator: NO

=====

#### Toxicological Information

=====

#### Ecological Information

=====

#### MSDS Transport Information

=====

#### Regulatory Information

=====

#### Other Information

=====

Transportation Information

=====

Responsible Party Cage: 1JK08  
Trans ID NO: 124194  
Product ID: 0.1-17.9% OXYGEN IN NITROGEN  
MSDS Prepared Date: 01/01/1992  
Review Date: 02/23/1996  
MFN: 1  
Tech Entry NOS Shipping Nm: NITROGEN, OXYGEN.  
Net Unit Weight: UNKNOWN  
Multiple KIT Number: 0  
Review I

ND: Y  
Unit Of Issue: EA  
Container QTY: 1  
Type Of Container: CYLINDER

---

---

Detail DOT Information

---

---

DOT PSN Code: DQQ  
Symbols: G  
DOT Proper Shipping Name: COMPRESSED GASES, N.O.S.  
Hazard Class: 2.2  
UN ID Num: UN1956  
Label: NONFLAMMABLE GAS  
Special Provision: B13  
Non Bulk Pack: 302,305  
Bulk Pack: 314,315  
Max Qty Pass: 75 KG  
Max Qty Cargo: 150 KG  
Vessel Stow Req: A

---

---

Detail IMO Information

---

---

IMO PSN Code: EQH  
IMO Proper Shipping Name: COMPRESSED GAS, N.O.S. o  
IMDG Page Number: 2124  
UN Number: 1956  
UN Hazard Class: 2(2.2)  
IMO Packaging Group: -  
Subsidiary Risk Label: -  
EMS Number: 2-04  
MED First Aid Guide NUM: 620

---

---

Detail IATA Information

---

---

IATA PSN Code: HDO  
IATA UN ID  
Num: 1956  
IATA Proper Shipping Name: COMPRESSED GAS, N.O.S. \*  
IATA UN Class: 2.2  
IATA Label: NON-FLAMMABLE GAS  
Packing Note Passenger: 200  
Max Quant Pass: 75KG  
Max Quant Cargo: 150KG  
Packaging Note Cargo: 200

---

---

Detail AFI Information

---

---

AFI PSN Code: HDO  
AFI Symbols: \*  
AFI Proper Shipping Name: COMPRESSED GAS, N.O.S.  
AFI Hazard Class: 2.2  
AFI UN ID NUM: UN1956  
Special Provisions: P5  
Back P

HAZCOM Label

---

Product ID: 0.1-17.9% OXYGEN IN NITROGEN

Cage: 1JK08

Company Name: LIQUID AIR CORP,CARDOX CORP DIV

Street: 150 S WARNER RD, SUITE 268

City: KING OF PRUSSIA PA

Zipcode: 19406

Health Emergency Phone: 510-977-6500

Label Required IND: Y

Date Of Label Review: 02/23/1996

Status Code: C

Label Date: 02/23/1996

Origination Code: F

Eye Protection IND:

YES

Skin Protection IND: YES

Signal Word: CAUTION

Respiratory Protection IND: YES

Health Hazard: Slight

Contact Hazard: Slight

Fire Hazard: None

Reactivity Hazard: None

Hazard And Precautions: HIGH CONCENTRATIONS DISPLACE THE OXYGEN IN THE AIR NECESSARY FOR LIFE. USE ONLY IN WELL-VENTILATED AREAS. USE A PRESSURE REDUCING REGULATOR WHEN CONNECTING CYLINDER TO LOWER PRESSURE PIPING OR SYSTEMS . DO NOT HEAT. FIRST AID: CONSCIOUS PERSONS SHOULD BE ASSISTED TO AN UNCONTAMINATED AREA AND INHA

LE 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. TARGET ORGANS: RESPIRATORY SYSTEM, SKIN, EYES.

---

Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense.

The United States of America in no manner whatsoever expressly or implied warrants, states, or intends said information to have any application, use or viability by or to any person or persons outside the Department of Defense nor any person or persons contracting with any instrumentality of the United States of America and disclaims all liability for such use. Any person utilizing this instruction who is not a military or civilian employee of the United States of Americ

a should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation regardless of similarity to a corresponding Department of Defense or other government situation.