

LIQUID AIR CORP CALIFORNIA PLZ -- OXYGEN GAS

MSDS Safety Information

FSC: 6830

NIIN: 01-108-6039

MSDS Date: 09/02/1991

MSDS Num: CDQNH

Product ID: OXYGEN GAS

MFN: 02

Responsible Party

Cage: 18260

Name: LIQUID AIR CORP CALIFORNIA PLZ

Address: 2121 N CALIFORNIA BLVD

City: WALNUT CREEK CA 94596

Info Phone Number: 415-977-6500 / FAX 415-977-6747

Emergenc

y Phone Number: 415-977-6500

Preparer's Name: CORPORATE SAFETY OFFICE

Review Ind: Y

Published: Y

Contractor Summary

Cage: 11243

Name: COSMODYNE LLC

Address: 2920 COLUMBIA ST

City: TORRANCE CA 90503-3881

Phone: 310-320-5650

Cage: 18260

Name: LIQUID AIR CORP ONE CALIFORNIA PLAZA

Address: 2121 N. CALIFORNIA BLVD

City: WALNUT CREEK CA 94596

Phone: 415-977-6500

Item Description Information

Item Manager: S9G

Item Name: CALIBRATING GAS MIXTURE

Specification Number: G-4.3-1994

Type/Grade/Class: TYPE I, GRADE F

Unit of Issue: CY

Quantitative Expression: 00000000080CF

UI Container Qty: 1

Type of Container: CYLINDER

Ingredients

Cas: 7782-44-7

RTECS #: RS2060000

Na

me: OXYGEN  
% Wt: 99-100  
Other REC Limits: NONE SPECIFIED  
OSHA PEL: NOT ESTABLISHED  
ACGIH TLV: NOT ESTABLISHED

=====

Health Hazards Data

=====

LD50 LC50 Mixture: ORAL LD50 (RAT) IS UNKNOWN  
Route Of Entry Inds - Inhalation: YES  
Skin: YES  
Ingestion: NO  
Carcinogenicity Inds - NTP: NO  
IARC: NO  
OSHA: NO  
Effects of Exposure: INHALATION: HIGH CONCENTRATIONS CAUSES SYMPTOMS OF  
HYPEROXIA. SKIN AND EYES:  
CONTACT WITH LIQUID PRODUCT MAY CAUSE TISSUE  
FREEZING.

Explanation Of Carcinogenicity: NO INGREDIENT OF A CONCENTRATION OF 0.1% OR  
GREATER IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN.

Signs And Symptions Of Overexposure: INHALATION: CRAMPS, NAUSEA, DIZZINESS,  
HYPOTHERMIA, AMBYLOPIA, RESPIRATION DIFFICULTIES, BRADYCARDIA, FAINTING  
SPELLS AND CONVULSIONS CAPABLE OF LEADING TO DEATH.

Medical Cond Aggravated By Exposure: NONE SPECIFIED BY MANUFACTURER.

First Aid: INHALATION: REMOVE TO  
FRESH AIR. ADMINISTER BREATHING SUPPORT  
MEASURES IF NECESSARY. PHYSICIAN SHOULD BE INFORMED THAT THE VICTIM COULD BE  
EXPERIENCING HYPEROXIA. SKIN: REMOVE CONTAMINATED CLOTHING AN D FLUSH  
AFFECTED AREAS WITH LUKEWARM WATER. DO NOT USE HOT WATER. EYES: DO NOT WASH  
THE EYES WITH HOT OR EVEN TEPID WATER. TAKE VICTIM TO AN OPHTHALMOLOGIST FOR  
TREATMENT AND FOLLOW UP.

=====

Handling and Disposal

=====

=====

Spill Release Procedures: KEEP COMBUSTIBLES AWAY FROM SPILLED MATERIAL. DO NOT  
TOUCH OR WALK THROUGH SPILLED MATERIAL. STOP LEAK IF YOU CAN DO IT WITHOUT  
RISK. ISOLATE AREA UNTIL GAS HAS DISPERSED.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods: DO NOT ATTEMPT TO DISPOSE OF WASTE OR UNUSED  
QUANTATIES. RETURN IN THE SHIPPING CONTAINER PROPERLY LABELED, WITH ANY VALVE  
OUTLET PLUGS OR CAPS SECURED AND VALVE PROTECTION CAP IN PLACE TO ALPHAGAZ FO  
R PROPE

## R DISPOSAL.

Handling And Storage Precautions: USE ONLY IN WELL-VENTILATED AREAS. VALVE PROTECTION CAPS MUST REMAIN IN PLACE UNLESS CONTAINER IS SECURED WITH VALVE OUTLET PIPED TO USE POINT.

Other Precautions: DO NOT HEAT CYLINDER BY ANY MEANS TO INCREASE THE DISCHARGE RATE OF PRODUCT FROM THE CYLINDER. PROTECT CYLINDERS FROM PHYSICAL DAMAGE. DO NOT ALLOW THE TEMPERATURE WHERE CYLINDERS ARE STORED TO EXCEED 130F.

## Fire and Explosion Hazard Information

Extinguishing Media: COPIOUS QUANTITIES OF WATER FOR FIRES WITH OXYGEN AS THE OXIDIZER. CAN USE DRY CHEMICAL OR CARBON DIOXIDE FOR SMALL FIRE

Fire Fighting Procedures: IF POSSIBLE, STOP THE FLOW OF OXYGEN WHICH IS SUPPORTING THE FIRE AND MOVE CONTAINER FROM FIRE AREA. SPRAY COOLING WATER ON CYLINDERS.

Unusual Fire/Explosion Hazard: HIGH PRESSURE OXIDIZING GAS. HIGH TEMPERATURES OR FIRE MAY CAUSE EXPLOSIVE RUPTURE OF CYLINDER. VIGOROUSLY ACCELERATES COMBUSTION (BURNING).

## Control Measures

Respiratory Protection: NONE SPECIFIED BY MANUFACTURER.

Ventilation: USE LOCAL EXHAUST TO PREVENT ACCUMULATION OF HIGH CONCENTRATIONS THAT INCREASE THE OXYGEN LEVEL IN AIR TO MORE THAN 25%.

Protective Gloves: LOOSE FITTING AND INSULATED.

Eye Protection: SAFETY GOGGLES OR GLASSES & FACE SHIELD.

Other Protec

tive Equipment: SAFETY SHOES, SAFETY SHOWER.

Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health: NSN FOR CYLINER ONLY: 8120-01-205-1424, DOT 3AA2015.

## Physical/Chemical Properties

HCC: G4

B.P. Text: -297F,-183C

M.P/F.P Text: -362F,-219C

Decomp Text: UNKNOWN

Vapor Pres: UNKNOWN

Vapor Density: 0.08LB/FT3

Spec Gravity: 1.11

Viscosity: UNKNOWN

Solubil

ity in Water: SLIGHT  
Appearance and Odor: COLORLESS, ODORLESS GAS.  
Corrosion Rate: UNKNOWN

=====

Reactivity Data

=====

Stability Indicator: YES  
Stability Condition To Avoid: HIGH TEMPERATURES  
Materials To Avoid: THIS PRODUCT VIGOROUSLY ACCELERATES CONBUSTION.  
Hazardous Decomposition Products: NONE SPECIFIED BY MANUFACTURER.  
Hazardous Polymerization Indicator: NO

=====

=====

Toxicological Information

=====

=====

Ecological Information

=====

=====

MSDS Transport Information

=====

=====

Regulatory Information

=====

=====

=====

Other Information

=====

=====

Transportation Information

=====

Responsible Party Cage: 18260  
Trans ID NO: 108023  
Product ID: OXYGEN GAS  
MSDS Prepared Date: 09/02/1991  
Review Date: 04/28/1997  
MFN: 2  
Net Unit Weight: UNKNOWN  
Multiple KIT Number: 0  
Review IND: Y  
Unit Of Issue:

CY  
Container QTY: 1  
Type Of Container: CYLINDER  
Additional Data: PSN IS PER MFR MSDS.

=====

Detail DOT Information

=====

DOT PSN Code: LEH  
DOT Proper Shipping Name: OXYGEN, COMPRESSED  
Hazard Class: 2.2  
UN ID Num: UN1072  
Label: NONFLAMMABLE GAS, OXIDIZER  
Special Provision: A52  
Packaging Exception: 306  
Non Bulk Pack: 302  
Bulk Pack: 314,315  
Max Qty Pass: 75 KG  
Max Qty Cargo: 150 KG  
Vessel Stow Req:  
A

=====

Detail IMO Information

=====

IMO PSN Code: LBP  
IMO Proper Shipping Name: OXYGEN, COMPRESSED  
IMDG Page Number: 2169  
UN Number: 1072  
UN Hazard Class: 2(2.2)  
IMO Packaging Group: -  
Subsidiary Risk Label: OXIDIZING AGENT  
EMS Number: 2-04  
MED First Aid Guide NUM: NON

=====

Detail IATA Information

=====

=====

IATA PSN Code: SWO  
IATA UN ID Num: 1072  
IATA Proper Shipping Name: OXYGEN, COMPRESSED  
IATA UN Class: 2.2  
Subsidiary Risk Class: 5.1  
IATA Label: NON-FLAMMABLE GAS & OXIDIZER  
Packing Note Passenger: 200  
Max Quant Pass: 75KG  
Max Quant Cargo: 150KG  
Packaging Note Cargo: 200

=====

Detail AFI Information

=====

AFI PSN Code: SWO  
AFI Proper Shipping Name: OXYGEN, COMPRESSED  
AFI Hazard Class:

2.2  
AFI UN ID NUM: UN1072  
AFI Label: 5.1  
Special Provisions: P5  
Back Pack Reference: A6.3, A6.6

=====

HAZCOM Label

=====

Product ID: OXYGEN GAS  
Cage: 18260  
Company Name: LIQUID AIR CORP ONE CALIFORNIA PLAZA  
Street: 2121 N. CALIFORNIA BLVD  
City: WALNUT CREEK CA  
Zipcode: 94596  
Health Emergency Phone: 415-977-6500  
Label Required IND: Y  
Date Of Label Review: 04/28/1997  
Status Code: C  
Label Date: 04/  
28/1997  
Year Procured: 1991  
Origination Code: F  
Eye Protection IND: YES  
Skin Protection IND: YES  
Signal Word: WARNING  
Respiratory Protection IND: YES  
Health Hazard: Moderate  
Contact Hazard: Moderate  
Fire Hazard: None  
Reactivity Hazard: None  
Hazard And Precautions: CONTACT WITH LIQUID MAY CAUSE FROSTBITE. CYLINDER MAY  
EXPLODE IN HEAT OF FIRE. USE ONLY IN WELL-VENTILATED AREAS. VALVE PROTECTION  
CAPS MUST REMAIN IN PLACE UNLESS CONTAINER IS SECURED WITH VALVE OUTLET  
PIPED TO USE POINT. FIRST  
AID: INHALATION: REMOVE TO FRESH AIR. ADMINISTER  
BREATHING SUPPORT MEASURES IF NECESSARY. PHYSICIAN SHOULD BE INFORMED THAT  
THE VICTIM COULD BE EXPERIENCING HYPEROXIA. SKIN: REMOVE CONTAMINATED  
CLOTHING AND FLUSH AFFECTED AREAS WITH LUKEWARM WATER. DO NOT USE HOT WATER.  
EYES: DO NOT WASH THE EYES WITH HOT OR EVEN TEPID WATER. TAKE VICTIM TO AN  
OPHTHALMOLOGIST FOR TREATMENT AND FOLLOW UP.

=====

Disclaimer (provided with this informatio

n 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 America 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.