

LIQUID AIR CORP CALIFORNIA PLZ -- OXYGEN GAS

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MSDS Safety Information  
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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  
Emergency Phone Number: 415-977-6500  
Preparer's Name: CORPORATE SAFETY OFFICE  
Review Ind: Y  
Published: Y

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Contractor Summary  
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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: WALNU  
T CREEK CA 94596  
Phone: 415-977-6500

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Item Description Information  
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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

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Ingredients  
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Cas: 7782-44-7  
RTECS #: RS2060000  
Name: OXYGEN  
% Wt: 99-100  
Other REC Limits: NONE SPECIFIED  
OSHA PEL: NOT ESTABLISHED  
ACGIH TLV: NOT ESTABLISHED  
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Health Hazards Data

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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 Symptoms 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 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.

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Handling and Disposal

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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 QUANTITIES. RETURN IN THE SHIPPING CONTAINER PROPERLY LABELED, WITH ANY VALVE OUTLET PLUGS OR CAPS

SECURED AND VALVE PROTECTION CAP IN PLACE TO ALPHAGAZ FOR PROPER 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.

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### Fire and Explosion Hazard Information

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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).

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### Control Measures

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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 Protective 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.

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### Physical/Chemical Properties

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

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Reactivity Data  
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Stability Indicator: YES  
Stability Condition To Avoid: HIGH TEMPERATURES  
Materials To Avoid: THIS PRODUCT VIGOROUSLY ACCELERATES CONBUSTION.  
Hazardous Decomposition Products: NONE SPECIFIED BY MANUFACTURER.  
Hazardou  
s Polymerization Indicator: NO  
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Toxicological Information  
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Ecological Information  
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MSDS Transport Information  
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Regulatory Information  
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Other Information  
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Transportation Information  
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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 Wei

ght: 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.

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Detail DOT Information  
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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: 31  
4,315  
Max Qty Pass: 75 KG  
Max Qty Cargo: 150 KG  
Vessel Stow Req: A

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Detail IMO Information  
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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

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Detail  
IATA Information  
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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

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Detail AFI Information  
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AFI PSN Code: S

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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

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HAZCOM Label

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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.

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