

## **LIQUID OXYGEN**

### **MSDS Number**

BHDWC

### **National Stock Number**

6830-00-781-8194

### **Product Name**

LIQUID OXYGEN

### **Manufacturer**

LIQUID AIR CORP

### **Product Identification**

Product ID: LIQUID OXYGEN

MSDS Date: 10/01/1985

FSC: 6830

NIIN: 00-781-8194

MSDS Number: BHDWC

### **Responsible Party**

LIQUID AIR CORPORATION

2121 N. CALIFORNIA BLVD., SUITE 350

WALNUT CREEK, CA 94596

US

Emergency Phone: 800-434-9300 OR NIGHT 800-231-1366

Info Phone: 415-977-6500

Cage: DO426

### **Contractor**

LIQUID AIR CORPORATION

WALNUT CREEK, CA 94596

US

510-977-6500

Cage: DO426

### **Ingredients**

LIQUID OXYGEN

CAS: 7782-44-7

RTECS: RS2060000

### **Hazards**

Routes of Entry: Inhalation: YES Skin: YES Ingestion: NO

Reports of Carcinogenicity: NTP: NO IARC: NO OSHA: NO

Health Hazards Acute and Chronic: THE PROPERTY IS THAT OF HYPEROXIA WHICH LEADS TO PNEUMONIA. CONCENTRATION BETWEEN 25 & 75 MOLAR PERCENT PRESENT RISK OF INFLAMMATION OF ORGANIC MATTER IN THE BODY. FROSTBITE EFFECTS ARE A CHANGE IN COLOR OF THE SKIN TO GRAY OR WHITE POSSIBLY FOLLOWED BY BLISTERING.

Effects of Overexposure: BREATHING HIGH CONCENTRATIONS OF LIQ OXY CAUSES SYMPTOMS OF HYPEROXIA WHICH

INCLUDE CRAMPS, NAUSEA, DIZZINESS, HYPOTHERMIA, AMBYLOPIA, RESPIRATORY DIFFICULTIES, BRADYCARDIA, FAINTING SPELLS & CONVULSIONS CAPABLE OF LEADING TO DEATH. SEE L'AIR LIQUIDE'S ENCYCLOPEDIA. DES GAZ. CONTACT WITH CRYOGENIC LIQ CAN CAUSE TISSUE FREEZING OR FROSTBITE

Medical Condition Aggravated by Exposure: BREATHING HIGH CONCENTRATIONS

CAUSES SYMPTOMS OF HYPEROXIA. CONTACT WITH CRYOGENIC LIQUID CAN CAUSE TISSUE FREEZING OR FROSTBITE.

## First Aid

First Aid: RESCUE PEOPLE SHOULD BE COGNIZANT OF EXTREME FIRE HAZARD ASSOC. WITH OXYGEN-RICH ATMOSPHERES. PERSON SHOULD BE MOVED TO UNCONTAMINATED AREA & BREATHE FRESH AIR. KEEP WARM & QUIET. IF PERSON IS UNCONSCIOUS, GIVE CPR, WHEN BREATHING IS RESTORED CONT. AS ABOVE. PROMPT MEDICAL/PHYSICIAN ATTENTION IS MANDATORY. FOR FROSTBITE, FLUSH AFFECTED AREAS WITH LUKEWARM WATER. DO NOT USE HOT WATER.

## Fire Fighting

Extinguishing Media: COPIOUS QUANTITIES OF ATR FOR FIRS WITH OXYGEN AS THE OXYDIZER.

Fire Fighting Procedures: IF POSSIBLE, STOP THE FLOW OF OXYGEN WHICH IS SUPPORTING THE FIRE.

Unusual Fire/Explosion Hazard: VIGOROUSLY ACCELERATES COMBUSTION.

## Accidental Release

Spill Release Procedures: IF THERE IS A MALFUNCTION OR OPERATIONAL PROBLEM WITH VESSEL, CONTACT MANUFACTURER IMMEDIATELY. NO SMOKING OR OPEN FLAME SHOULD BE ALLOWED NEAR THESE VESSELS. CYLINDERS MUST ALWAYS BE KEPT IN UPRIGHT POSITION. USE ONLY IN WELL-VENTILATED AREAS.

## Handling

Handling and Storage Precautions: CYLINDERS SHOULD BE STORED AWAY FROM OTHER FLAMMABLE PRODUCTS. CYLIND. MUST BE KEPT IN UPRIGHT POSITION USE IN WELL VENTILATED AREAS. SEE CGA PAMP G4, P12, 14

Other Precautions: EQUIPMENT TO CONTAIN LIQUID OXYGEN MUST BE "CLEANED FOR OXYGEN SERVICE". SEE CGA PAMPHLET G-4.1. LIQUEFIED GAS CYLINDERS SHOULD NOT BE REFILLED EXCEPT BY QUALIFIED PRODUCERS OF PRODUCT.

## Exposure Controls

Ventilation: TO PREVENT ACCUMULATION ABOVE 25 MOLAR PERCENT

Protective Gloves: LOOSE FITTING, INSULATED

Eye Protection: SAFETY GOGGLES/GLASSES PLUS FACE SHIELD

Other Protective Equipment: SAFETY SHOES, SAFETY SHOWER

Supplemental Safety and Health

OXYGEN VIGOROUSLY ACCELERATES COMBUSTION. CONTACT WITH ALL FLAMMABLE MATERIALS SHOULD BE AVOIDED. SOME MATERIALS WHICH ARE NOT FLAMMABLE IN AIR WILL BURN IN PURE OXYGEN OR OXYGEN-ENRICHED ATMOSPHERES. DO NOT ALLOW LIQ OXY TO LEAK, DRIP OR SPILL ONTO HYDROCARBON-BASED PAVING OR ONTO PLASTIC-BASE/FLAMMABLE FLOORING.

## Chemical Properties

Boiling Pt: B.P. Text: -297F/-182C

Vapor Pres: \*SEE BELOW

Solubility in Water: 68F/20C BUNSEN = .0310

Appearance and Odor: CLEAR, PALE BLUE, ODORLESS LIQUID

## Stability

Stability Indicator/Materials to Avoid: YES

ALL FLAMMABLE MATERIALS

Hazardous Decomposition Products: NONE

## Disposal

Waste Disposal Methods: NOT LOCATED ON MSDS

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