

MG INDUSTRIES -- LIQUID OXYGEN -- 9135-00-965-2527

===== Product Identification =====

Product ID:LIQUID OXYGEN

MSDS Date:06/19/1996

FSC:9135

NIIN:00-965-2527

MSDS Number: CHNLB

=== Responsible Party ===

Company Name:MG INDUSTRIES

Address:3 GREAT VALLEY PKY

City:MALVERN

State:PA

ZIP:19355-1424

Country:US

Info Phone Num:610-695-7449

Emergency Phone Num:610-695-7449

CAGE:08772

=== Contractor Identification ===

Company Name:MG INDUSTRIES

Address:3 GREAT VALLEY PKY

Box:City:MALVERN

State:PA

ZIP:19355-1424

Country:US

Phone:610-695-7400 / 610-695-7449

CAGE:08772

===== Composition/Information on Ingredients =====

Ingred Name:OXYGEN (GAS)

CAS:7782-44-7

RTECS #:RS2060000

Fraction by Wt: 100%

===== Hazards Identification =====

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

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

Health Haz

ards Acute and Chronic:INHALATION: MAY CAUSE MUCOUS MEMBRANE IRRITATION & PULMONARY EDEMA AFTER 24 HOURS. RESPIRATORY SYSTEM EFFECTS MAY INCLUDE TRACHEOBRONCHITIS/PNEUMONIA/EDEMA/FIBROBLASTIC/PROLIFERATION & HYPERPLASIA OF ALVEOLAR CELLS. CARDIOVASCULAR SYSTEM EFFECTS MAY INCLUDE BRADYCARDIA/HYPOTHERMIA & PERIPHERAL VASOCONSTRICTION. (SUPP)

Explanation of Carcinogenicity:NONE

Effects of Overexposure:IRRITATION/TIGHTNESS IN THE CHEST/DISCOMFORT/COUGHING/CONGESTION/ASTHMA-LIKE

ATTACKS/APNEA/RAPID PANTING/MOOD CHANGES/NAUSEA/DIZZINESS/SLOW MENTAL PROCESS/TINGLING OF FINGERS/MUSCULAR TWITCHING/VISUAL LOSS OF CONSCIOUSNESS/COLLAPSE/REDNESS/PAIN/NUMBNESS/BLISTERS/BLURRED VISION/PHOTOPHOBIA/AMBLYOPIA/MYDRIASIS.

#### ===== First Aid Measures =====

First Aid:INHALATION: REMOVE TO FRESH AIR. GIVE CPR IF NECESSARY. KEEP WARM & AT REST. TREAT SYMPTOMATICALLY & SUPPORTIVELY. SKIN: GENTLY WRAPPED AFFECTED PARTS IN BLANKETS. ALLOW CIRCULATION TO RETURN NATURALLY . EYES: WASH W/LARGE AMOUNTS OF WATER. IF FROSTBITE OCCURS, USE WARM WATER. INGESTION: TREAT SYMPTOMATICALLY & SUPPORTIVELY. OBTAIN MEDICAL ATTENTION IN ALL CASES. NO SPECIFIC ANTIDOTE.

#### ===== Fire Fighting Measures =====

Extinguishing Media:DRY CHEMICAL/CO2. LARGE: WATER SPRAY, FOG/REGULAR FOAM.

Fire Fighting Procedures:APPLY COOLING WATER TO SIDES OF CONTAINERS UNTIL FIRE IS OUT. USE UNMANAGED HOSE HOLDER/MONITOR NOZZLES/W/DRAW FROM AREA & LET FIRE BURN. EVACUATE AREA.

Unusual Fire/Explosion Hazard:CONTAINER MAY EXPLODE IN HEAT/FIRE. CONTACT W/EASILY OXIDIZABLE, ORGANIC/OTHER COMBUSTIBLE MATERIALS MAY RESULT IN IGNITION, VIOLENT COMBUSTION/EXPLOSION.

#### ===== Accidental Release Measures =====

Spill Release Procedures:MOVE CONTAINER FROM FIRE AREA SAFELY W/O RISK. STAY AWAY FROM ENDS OF TANKS. DON'T USE WATER ON MATERIAL ITSELF. EVAC

UATE TO A RADIUS OF 1500 FEET IF FIRE BECOMES UNCONTROLLABLE/IF  
CONTAINER IS EXPOSE D TO DIRECT FLAME.

===== Handling and Storage =====

Handling and Storage Precautions:PROTECT AGAINST PHYSICAL DAMAGE.  
PROTECT AGAINST OVERHEATING. OUTSIDE STORAGE OF LIQUID OXYGEN TANKS  
IS RECOMMENDED.

Other Precautions:ISOLATE FROM COMBUSTIBLE GAS INSTALLATIONS &  
COMBUSTIBLE MATERIALS BY ADEQUATE DISTANCE/BY GAS TIGHT FIRE  
RESISTIVE BARRIERS. AVOID CONTACT  
W/COMBUSTIBLE MATERIALS. IGNITION  
MAY OCCUR W/COMBUSTIBLES. CONTENTS ARE UNDER PRESSURE.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:ANY SUPPLIED AIR RESPIRATOR/SCBA W/A FULL  
FACEPIECE/ANY SUPPLIED AIR RESPIRATOR W/A FULL FACEPIECE IN A  
PRESSURE DEMAND MODE IN COMBINATION W/AN AUXILIARY SCBA; WHICH MUST  
NOT EXCEED THE LIMITS & MUST BE APPROVED BY NIOSH/MSHA.

Ventilation:GENERAL DILUTION

Protective Gloves:FULL PROTECTIVE/COLD INS  
ULATING

Eye Protection:SPLASH PROOF SAFETY GOGGLES/FACESHIELD

Other Protective Equipment:PROTECTIVE CLOTHING & EQUIPMENT, EYE WASH  
FOUNTAIN & QUICK DRENCH SHOWER.

Supplemental Safety and Health

SKIN: LIQUID MAY CAUSE FROSTBITE. EYES: MAY CAUSE IRRITATION & CAUSE  
FROSTBITE. INGESTION: FROSTBITE DAMAGE OF THE LIPS, MOUTH & MUCOUS  
MEMBRANES MAY OCCUR.

===== Physical/Chemical Properties =====

Boiling Pt:B.P. Text:-297F

Melt/Freeze Pt:M.P/F.P Text:-361F

Vapor

Pres:760

Vapor Density:1.1

Spec Gravity:1.1407

Solubility in Water:3.2%

Appearance and Odor:ODORLESS LIGHT BLUE LIQUID

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

WOOD, PAPER, OIL.

Stability Condition to Avoid:HEAT/FLAME.

Hazardous Decomposition Products:NON-HAZARDOUS

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSE OF IAW/FEDERAL, STATE & LOCAL  
REGULATIONS. EPA HAZARDOUS

WASTE D001, UN1073.

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