

MG INDUSTRIES -- OXYGEN -- 6505-00-132-5225

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

Product ID:OXYGEN
MSDS Date:09/10/1998
FSC:6505
NIIN:00-132-5225
Status Code:A
MSDS Number: CJZFB
=== Responsible Party ===
Company Name:MG INDUSTRIES
Address:3 GREAT VALLEY PKY
City:MALVERN
State:PA
ZIP:19355-1424
Country:US
Info Phone Num:215-695-7400 / 610-695-7449
Emergency Phone Num:610-695-7449
Resp. Party Other M
SDS Num.:MGI12831
Chemtrec Ind/Phone:(800)424-9300
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
CAS:7782-44-7
RTECS #:RS2060000
= Wt:100.

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

LD50 LC50 Mixture:NONE PROVIDED BY MFR.
Routes of

Entry: Inhalation: YES Skin: YES Ingestion: NO
Reports of Carcinogenicity: NTP: NO IARC: NO OSHA: NO
Health Hazards Acute and Chronic: ACUTE: EYES: IRRITATION, BLURRED VISION. SKIN: BLISTERS, FROSTBITE. INHALATION: IRRITATION, NAUSEA, ASTHMA, IRREGULAR HEARTBEAT, DIZZINESS, TINGLING SENSATION, DILATED PUPILS, BLINDNESS, LUNG CONGESTION, BLOOD DISORDERS, CONVULSIONS. INGESTION: FROSTBITE. CHRONIC: EYES: NO INFORMATION ON SIGNIFICANT ADVERSE EFFECTS. SKIN: NO INFORMATION ON SIGNIFICANT ADVERSE EFFECTS. INHALATION: CHEST PAIN, LUNG DAMAGE. INGESTION: NO INFORMATION IS AVAILABLE.

Explanation of Carcinogenicity: NONE PROVIDED BY MFR.

Effects of Overexposure: EYES: IRRITATION, BLURRED VISION. SKIN: BLISTERS, FROSTBITE. INHALATION: IRRITATION, NAUSEA, ASTHMA, IRREGULAR HEARTBEAT, DIZZINESS, TINGLING SENSATION, DILATED PUPILS, BLINDNESS, LUNG CONGESTION, BLOOD DISORDERS, CONVULSIONS, CHEST PAIN, LUNG DAMAGE. INGESTION: FROSTBITE.

Medical Condition Aggravated by Exposure: NONE PROVIDED BY MFR.

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

First Aid: INHALATION: REMOVE FROM EXPOSURE. USE A BAG VALVE MASK OR SIMILAR DEVICE TO PERFORM ARTIFICIAL RESPIRATION IF NEEDED. GET MEDICAL ATTENTION. SKIN: WASH IF NEEDED. IF FROSTBITE, FREEZING OR CRYOGENIC BURNS OCCUR, WARM AREA IN WARM WATER. IF NOT AVAILABLE, WRAP AFFECTED PARTS IN BLANKETS. ALLOW CIRCULATION TO RETURN NATURALLY. GET MEDICAL ATTENTION. EYES: WASH IMMEDIATELY WITH LARGE AMOUNTS OF WATER, OCCASIONALLY LIFTING UPPER & LOWER LIDS UNTIL NO EVIDENCE OF CHEMICAL REMAINS. GET MEDICAL ATTENTION. INGESTION: UNLIKELY EMERGENCY TREATMENT REQUIRED. IF NEEDED, GET MEDICAL ATTENTION.

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

Flash Point: NOT PROVIDED
Lower Limits: NOT PROVIDED
Upper Limits: NOT PROVIDED
Extinguishing Media: CARBON DIOXIDE, REGULAR DRY CHEMICAL. LARGE FIRES: USE REGULAR FOAM OR FLOOD WITH

FINE WATER SPRAY.

Fire Fighting Procedures:MOVE CONTAINER FROM FIRE AREA IF IT CAN BE DONE WITHOUT RISK. COOL CONTAINERS WITH WATER SPRAY UNTIL WELL AFTER THE FIRE IS OUT. STAY AWAY FROM THE ENDS OF TANKS. FOR FIRES IN CARGO OR STORAGE AREA: COOL CONTAINERS WITH WATER FROM UNMANNED HOSE HOLDER OR MONITOR NOZZLES UNTIL WELL AFTER FIRE IS OUT.

Unusual Fire/Explosion Hazard:NEGLIGIBLE FIRE HAZARD. OXIDIZER. MAY IGNITE OR EXPLODE ON CONTACT WITH COMBUSTIBLE MATERIALS. CONTAINERS MAY REPTURE OR EXPLODE IF EXPOSED TO HEAT.

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

Spill Release Procedures:STOP LEAK IF POSSIBLE WITHOUT PERSONAL RISK. AVOID CONTACT WITH COMBUSTIBLE MATERIALS. KEEP UNNECESSARY PEOPLE AWAY. ISOLATE HAZARD AREA AND DENY ENTRY. VENTILATE CLOSED SPACED BEFORE ENTERING.

Neutralizing Agent:NONE PROVIDED BY MFR.

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

Handling and Storage Precautions:STORE & HANDLE IN ACCORDANCE WITH ALL CURRENT REGULATIONS & STANDARDS. SUBJECT TO STORAGE REGULATIONS: U.S. OSHA 29 CFR 1910.104

Other Precautions:NONE PROVIDED BY MFR.

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

Respiratory Protection:FOR UNKNOWN CONCENTRATIONS OR IMMEDIATELY DANGEROUS TO LIFE OR HEALTH: ANY SUPPLIED-AIR RESPIRATOR WITH FULL FACEPIECE AND OPERATED IN A PRESSURE- DEMAND OR OTHER POSITIVE-PRESSURE MODE IN COMBINATION WITH A SEPARATE ESCAPE SUPPLY. ANY SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE.

Ventilation:PROVIDE LOCAL EXHAUST VENTILATION SYSTEM. ENSURE COMPLIANCE WITH APPLICABLE EXPOSURE LIMITS.

Protective Gloves:WEAR INSULATED GLOVES.

Eye Protection:NOT REQUIRED FOR GAS BUT RECOMMENDED. FOR LIQUID WEAR SPLASH RESISTANT GOGGLES

Other Protective Equipment:PROVIDE EYE WASH STATION AND SAFETY SHOWER IN IMMEDIATE WORK AREA. PROTECTIVE CLOTHING NOT REQUIRED FOR THE GAS. FOR THE LIQUID, WEAR APPR

OPRIATE PROTECTIVE, COLD INSULATING
CLOTHING.

Work Hygienic Practices:CONTACT LENSES SHOULD NOT BE WORN.

Supplemental Safety and Health

RESPRATOR: UNDER CONDITIONS OF FREQUENT USE OR HEAVY EXPOSURE,
RESPIRATORY PROTECTION MAY BE NEEDED. RESPIRATORY PROTECTION IS
RANKED IN ORDER FROM MINIMUM TO MAXIMUM. CONSIDER WARNING
PROPERTIES BEFO RE USE..

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

HCC:G4

Boiling Pt:=-182.6C, -297.F

Melt/Freeze Pt:=-217.6C, -360.F

Vapor Pres:760 MMHG @ -183 DEG C

Vapor Density:1.1(AIR=1)

Spec Gravity:0.001309 @25C

Viscosity:0.02075 CP @ 25 DEG C

Solubility in Water:3.2% @ 25 DEG C

Appearance and Odor:ODORLESS, COLORLESS, TASTELESS GAS

Percent Volatiles by Volume:NOT APPLICAB

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

Stability Indicator/Materials to Avoid:YES

COMBUSTIBLE MATERIALS. HALOCARBONS, METALS, BASES. REDUCING AGENTS,
AMINES, METAL SALTS, OXIDIZING MATERIALS.

Stability Condition to A

void:STABLE AT NORMAL TEMPERATURES & PRESSURE.

AVOID CONTACT WITH COMBUSTIBLE MATERIALS. PROTECT FROM PHYSICAL
DAMAGE & HEAT. CONTAINERS MAY RUPTURE OR EXPLODE IF EXPOSED TO
HEAT.

Hazardous Decomposition Products:NONE PROVIDED BY MFR.

Conditions to Avoid Polymerization:WILL NOT POLYMERIZE.

===== Toxicological Information =====

Toxicological Information:MFR'S MSDS HAS PAGES OF TOXICOLOGICAL
INFORMATION.

===== Ecological Information

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Ecological:NOT AVAILABLE.

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Disposal Considerations =====

Waste Disposal Methods:SUBJECT TO DISPOSAL REGULATIONS: U.S. EPA 40 CFR 262, HAZARDOUS WASTE NUMBER(S): D001. DISPOSE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

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MSDS Transport Information =====

Transport Information:U.S. DOT: PSN: OXYGEN, COMPRESSED, UN1072CLASS 2.2, LABEL: NONFLAMMABLE GAS, OXIDIZER. IATA/ICAO: OXYGEN,

COMPRESSED, UN1072, CLASS 2.2, LABEL NONFLAMMABLE GAS, OXIDIZER. IMO: OXYGEN, COMPRESSED, UN10 72, CLASS 2(2.2), SUBSIDERARY RISK LABEL: OXIDIZER.

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Regulatory Information =====

SARA Title III Information:SECTION302 (40 CFR 355.30): NO. SECTION 304 (40 CFR 40): NO. SECTION 313 (40 CFR 65): NO. SARA HAZARD CATEGORIES. SARA SECTIONS 311/312 (40 CFR 370.21): ACUTE: NO. CHRONIC: NO. FIRE: YES. REACTIVITY: NO. SUDDEN RELEASE: YES.

Federal

Regulatory Information:TSCA INVENTORY STATUS:YES. TSCA 12(B) EXPORT NOTIFICATION: NOT LISTED. CERCLA SECTION 103 (40 CFR 302.4): NO. OSHA PROCESS SAFETY (29 CFR 1910.119): NO.

State Regulatory Information:CALIFORNIA PROPOSITION 65: NO

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Other Information =====

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