

MG INDUSTRIES -- LIQUID NITROGEN -- 9135-00-559-5287

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

Product ID:LIQUID NITROGEN
MSDS Date:09/10/1998
FSC:9135
NIIN:00-559-5287
Status Code:A
MSDS Number: CJGXH
=== Responsible Party ===
Company Name:MG INDUSTRIES
Address:3 GREAT VALLEY PARKWAY
City:MALVERN
State:PA
ZIP:19355-1424
Country:US
Info Phone Num:215-630-5422
Emergency Phone Num:800-424-9300(CHEMTREC) 21
5-630-5422
Preparer's Name:OCCUPATIONAL HEALTH SRVCS
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.
Other REC Limits:NONE SPECIFIED

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

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Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:INHALATION: MAY CAUSE IRRITATION, LUNG
CONGESTION & BLOOD DISORDERS. LONG TERM EXPOSURE MAY CAUSE LUNG
DAMAGE. SKIN: FROSTBITE. EYES: IRRITATION, BLURRED VISION,
BLINDNESS. INGESTION: FROSTBITE.
Effects of Overexposure:IRRITATION, NAUSEA, ASTHMA, IRREGULAR
HEARTBEAT, DIZZINESS, TINGLING SENSATION, DILATED PUPILS,
CONGEST
ION, CONVULSIONS, CHEST PAIN, BLISTERS, FROSTBITE, BLURRED
VISION

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

First Aid:INHALE:REMOVE FROM EXPOSURE IMMEDIATELY. USE A BAG VALVE
MASK/SIMILAR DEVICE TO PERFORM CPR IF NEEDED. SKIN: WASH IF NEEDED.
IF FROSTBITE, FREEZING/CRYOGENIC BURNS OCCUR, WARM AREA IN WARM
WATER/GENTL Y WRAP AFFECTED PARTS IN BLANKETS. ALLOW CIRCULATION TO
RETURN NATURALLY. EYES: WASH IMMEDIATELY W/LARGE AMOUNTS OF WATER.
OBTAI
N MEDICAL ATTENTION IN ALL CASES.

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

Extinguishing Media:CARBON DIOXIDE, REGULAR/DRY CHEMICAL.
Fire Fighting Procedures:USE FOAM/FLOOD W/FINE WATER SPRAY. MOVE
CONTAINER FROM FIRE W/O RISK. COOL CONTAINERS W/WATER SPRAY/W/WATER
FROM UNMANNED HOSE HOLDER/MONITOR NOZZLES UNTIL FIRE IS OUT. KEEP
PEOPLE AWAY, ISOLATE AREA & DENY ENTRY.STAY AWAY FROM THE ENDS OF
TANKS. EVACUATE RADIUS: 800 METERS/1 HALF MILE.
Unusual
Fire/Explosion Hazard:MAY IGNITE/EXPLODE ON CONTACT
W/COMBUSTIBLE MATERIALS. CONTAINERS MAY RUPTURE/EXPLODE IF EXPOSED
TO HEAT.

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

Spill Release Procedures:AVOID CONTACT W/COMBUSTIBLE MATERIALS. DON'T
TOUCH SPILLED MATERIAL. STOP LEAK IF POSSIBLE W/O RISK. KEEP
UNNECESSARY PEOPLE AWAY, ISOLATE AREA & DENY ENTRY.

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

Handling and Storage Precautions

:STORE & HANDLE IN ACCORDANCE W/OSHA
29CFR1910.104. PROTECT FROM PHYSICAL DAMAGE. KEEP SEPARATED FROM
INCOMPATIBLE SUBSTANCES. STORE IN A COOL, DRY PLACE. STORE
OUTSIDE/IN A DETACHED BUILDING.

Other Precautions:AVOID CONTACT WITH COMBUSTIBLE MATERIALS.

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

Respiratory Protection:FOR FREQUENT USE/HEAVY EXPOSURE, USE ANY
SUPPLIED-AIR RESPIRATOR W/FULL FACEPIECE & OPERATED IN A PRESSURE
DEMAND /OTHER POSITIVE PRES
SURE MODE IN COMBINATION W/A SEPARATE
ESCAPE SUPPLY/ANY SELF CONTAINED BREATHING APPARATUS W/A FULL
FACEPIECE.

Ventilation:ENSURE COMPLIANCE W/APPLICABLE EXPOSURE LIMITS.

Protective Gloves:INSULATED

Eye Protection:SPLASH-RESISTANT SAFETY GOGGLES

Other Protective Equipment:EMERGENCY EYE WASH FOUNTAIN, QUICK DRENCH
SHOWER IN THE IMMEDIATE WORK AREA, PROTECTIVE COLD INSULATING
CLOTHING.

Supplemental Safety and Health
CONTACT LENSES SHOULD NOT BE WORN.

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

HCC:G7
Boiling Pt:=-183.C, -297.4F
Melt/Freeze Pt:=-218.C, -360.4F
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
COMBUSTIBLE MATERIALS; HALO CARBONS, METALS, BASES, REDUCING AGENTS,
AMINES, METAL SALTS, OXIDIZING MATERIALS.

Stability Condition to Avoid:HEAT
Haza

rdous Decomposition Products:FORMS EXPLOSIVE MIXTURES, PEROXIDES,
COMPOUNDS

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

Toxicological Information:LIQUID MAY CAUSE FROSTBITE TO EYES & SKIN.
MAY CAUSE REDNESS, TINGLING, PAIN & NUMBNESS. IN SEVERE CASES, THE
SKIN MAY BECOME HARD & WHITE, DEVELOPING BLISTERS. EYES: MAY CAUSE
BLURRED VISION. IF LIQ UID IS SWALLOWED, FROSTBITE DAMGE OF THE
LIPS, MOUTH & MUCOUS MEMBRANES MAY OCCUR.

===== Di
sposal Considerations =====

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE W/LOCAL, STATE &
FEDERAL REGULATIONS.

===== MSDS Transport Information =====

Transport Information:U.S. EPA 40 CFR 262. HAZARDOUS WASTE NUMBER D001.
U.S. DOT 49 CFR 172.101 OXYGEN REFRIGERATED LIQUID UN1073.

===== Regulatory Information =====

SARA Title III Information:SARA HAZARD CATEGORIES, SARA SECTIONS
311/312 40CFR370.21
: FIRE, SUDDEN RELEASE
State Regulatory Information:EUROPEAN REGULATIONS: EC RISK & SAFETY
PHRASES; CONTACT W/COMBUSTIBLE MATERIAL MAY CAUSE FIRE. R8.

===== Other Information =====

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