

CLIMAX MOYLB DENUM MARKETING CORP. -- MOLYBDENUM DISULFIDE -- 6810-00-264-6715  
===== Product Identification =====

Product ID:MOLYBDENUM DISULFIDE

MSDS Date:05/05/1997

FSC:6810

NIIN:00-264-6715

Status Code:A

MSDS Number: CKBQM

=== Responsible Party ===

Company Name:CLIMAX MOYLB DENUM MARKETING CORP.

Address:1501 W. FOUNTAINHEAD PARKWAY

Box:22015

City:TEMPE

State:AZ

ZIP:85285-2015

Country:US

Info Pho

ne Num:480-929-4400

Emergency Phone Num:480-929-4400

Chemtrec Ind/Phone:(800)424-9300

CAGE:TO494

=== Contractor Identification ===

Company Name:CHEMICAL SPECIALISTS AND DEVELOPMENT INC

Address:2210 HACKBERRY LN

Box:687

City:CONROE

State:TX

ZIP:77305

Country:US

Phone:409-756-1065

Contract Num:SP0450-00-M-D347

CAGE:4N760

Company Name:CLIMAX MOYLB DENUM MARKETING CORP.

Address:1501 W. FOUNTAINHEAD PARKWAY

Box:22015

City:TEMPE

State:AZ

ZIP:85285-2015

Country:US

Phone:480-929-4400

CAGE:TO494

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

Ingred Name:MOLYBDENUM DISULFIDE

CAS:1317-33-5

RTECS #:QA4697000

> Wt:99.

==== Hazards Identification =====

LD50 LC50 Mixture:ORAL LD50(RAT): UNKOWN

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

Health Hazards Acute and Chronic:SHORT TERM EXPOSURE: MAY CAUSE IRRITATION TO SKIN AND EYES. LONG TERM EFFECTS: NO INFORMATION AVAILABLE ON SIGNIFICANT ADVERSE EFFECTS.

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

First Aid:INHALATION:REMOVE FROM EXPOSURE AREA TO FRESH AIR IMMEDIATELY. IF BREATHING HAS STOPPED, PERFORM ARTIFICIAL RESPIRATION. KEEP PERSON WARM & AT REST. GET MEDICAL AID.

SKIN:REMOVE CONTAMINATED CLOTHING/ SHOES IMMEDIATELY. WASH AFFECTED AREA WITH SOAP OR MILD DETERGENT & LARGE AMOUNTS OF WATER UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROX. 15-20 MINS). GET MEDICAL AID.

EYE:WASH EYES IMMEDIATELY WITH LARGE AMOUNTS

OF WATER OR NORMAL

SALINE, LIFTING UPPER & LOWER LIDS, UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROX. 15-20 MINS). INGEST:KEEP HEAD LOWER THAN HIPS TO PREVENT ASPIRATION. GET MEDICAL AID IF NEEDED.

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

Extinguishing Media:EXTINGUISH USING AGENT SUITABLE FOR TYPE OF SURROUNDING FIRE.

Fire Fighting Procedures:FULL FIREFIGHTING TURN-OUT GEAR (BUNKER GEAR). ANY SUPPLIED-AIR RESPIRATOR WITH FULL FACEPIECE & OPE RATED 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.

Unusual Fire/Explosion Hazard:SLIGHT FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME. NO ACUTE HAZARD. MOVE CONTAINER FROM FIRE AREA IF POSSIBLE. AVOID BREATHING VAPORS OR DUST; KEEP UPWIND.

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

Spill Release Procedures:FOR LARGE SPILLS, SWEEP UP WITH

A MINIMUM OF

DUSTING AND PLACE INTO SUITABLE CLEAN, DRY CONTAINERS FOR RECLAMATION OR LATER DISPOSAL. RESIDUE SHOULD BE CLEANED UP USING A HIGH-EFFICIENCY PARTICULATE FILTER VACUUM.

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

Handling and Storage Precautions:OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS WHEN STORING OR DISPOSING OF THIS SUBSTANCE. STORE AWAY FROM INCOMPATIBLE SUBSTANCES.

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

Respiratory Protection:ANY DUST, MIST, FUME RESPIRATOR. ANY CHEMICAL CARTRIDGE RESPIRATOR WITH A DUST, MIST, FUME FILTER. ANY POWERED AIR-PURIFYING RESPIRATOR WITH A DUST, MIST, FUME FILTER. ANY TYPE 'C' SUPPLIED-AIR RESPIRATOR WITH A FULL FACEPIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE OR WITH A FULL FACEPIECE, HELMET OR HOOD OPERATED IN CONTINUOUS-FLOW MODE.

Ventilation:PROVIDE LOCAL EXHAUST VENTILATION AND/OR GENERAL DILUTION VENTILATION

TO MEET PUBLISHED EXPOSURE LIMITS.

Protective Gloves:PROTECTIVE GLOVES NOT REQUIRED BUT RECOMMENDED.

Eye Protection:SPLASH-PROOF OR DUST-RESISTANT SAFETY GOGGLES.

Other Protective Equipment:PROVIDE AN EYE WASH FOUNTAIN WITHIN THE IMMEDIATE WORK AREA FOR EMERGENCY USE. PROTECTIVE CLOTHING NOT REQUIRED. PROTECTIVE CLOTHING NOT REQUIRED.

Work Hygienic Practices:AVOID REPEATED OR PROLONGED CONTACT WITH THIS SUBSTANCE.

Supplemental Safety and Health

RESPIRATORY PROTECTION CONTINUED: ANY

SELF-CONTAINED BREATHING

APPARATUS WITH A FULL FACE PIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE.

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

HCC:N1

Melt/Freeze Pt:>315.C, 599.F

M.P/F.P Text:OXIDIZES

Vapor Pres:APPROX. 0@20C

Spec Gravity:4.80 @ 14C

Solubility in Water:INSOLUBLE

Appearance and Odor:ODORLESS, DARK GRAY TO BLACK POWDER.

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

Stability Indicator/Materials to Avoid

d: YES  
HYDROGEN PEROXIDE: VIGOROUS OR VIOLENT REACTION. OXIDIZERS (STRONG):  
FIRE AND EXPLOSION HAZARD. POTASSIUM NITRATE: FORMS EXPLOSIVE  
MIXTURE.  
Stability Condition to Avoid: PREVENT DISPERSION OF DUST IN AIR.  
Hazardous Decomposition Products: THERMAL DECOMPOSITION MAY RELEASE TOXIC  
AND/OR HAZARDOUS GASES.  
Conditions to Avoid Polymerization: HAZARDOUS POLYMERIZATION HAS NOT  
BEEN REPORTED TO OCCUR UNDER NORMAL TEMPERATURES AND PRESSURES.

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===== Toxicological Information  
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Toxicological Information: INHALATION: ACUTE EXPOSURE: NO SPECIFIC DATA  
AVAILABLE. INSOLUBLE MOLYBDENUM COMPOUNDS ARE CHARACTERIZED BY LOW  
TOXICITY. CHRONIC EXPOSURE: 25 ONE-HOUR EXPOSURES TO 490 MG/M<sup>3</sup>  
CAUSED NO EFFECTS IN ALL THE ANIMALS TESTED EXCEPT ONE WHICH DIED  
AFTER THE THIRD EXPOSURE. SKIN CONTACT: ACUTE EXPOSURE: DERMATITIS  
HAS NOT BEEN REPORTED IN EXPOSED WORKERS. EYE CONTACT: ACUTE  
EXPOSURE: NO SPECIFIC DATA AVAILABLE. SOME INSOLUBLE MOLYB  
DENUM  
COMPOUNDS ARE IRRITATING TO THE EYES. INGESTION: CHRONIC EXPOSURE:  
RATS FED UP TO 500 MG DAILY FOR 44 DAYS SHOWED NO TOXIC SIGNS & ALL  
GAINED WEIGHT.

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===== Ecological Information =====

Ecological: ACUTE AQUATIC TOXICITY: TEST CONDUCTED IN 1990 AT LEVELS UP  
TO 750 MG/L POWDERED MOS<sub>2</sub> RESULTED IN 0 MORTALITY TO RAINBOW TROUT  
(SALMO GAIRDNERI).

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

Waste Disposal Methods: OBS  
ERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS  
WHEN DISPOSING OF THIS SUBSTANCE.

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

Transport Information: NO CLASSIFICATION CURRENTLY ASSIGNED.

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

SARA Title III Information: SARA SECTIONS 302, 304, 313: NO.  
Federal Regulatory Information: TSCA INVENTORY STATUS: Y. TSCA 12(B)  
EXPORT NOTIFICATION: NOT LISTED. CERCLA SECTION 103 [40 CFR 302.4]:  
N.  
State R

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

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