

MILLER-STEPHENSON CHEMICAL CO -- MS-238 CONTACT RE-NU AND LUBE -- 6850-01-099-9842
===== Product Identification =====

Product ID:MS-238 CONTACT RE-NU AND LUBE
MSDS Date:01/01/1989
FSC:6850
NIIN:01-099-9842
MSDS Number: BRFSC
=== Responsible Party ===
Company Name:MILLER-STEPHENSON CHEMICAL CO
Address:GEORGE WASHINGTON HWY
City:DANBURY
State:CT
ZIP:06810
Country:US
Info Phone Num:203-743-4447
Emerg
ency Phone Num:203-797-2212;800-424-9300(CHEMTREC)
Preparer's Name:JANET STEPHENS
CAGE:18598
=== Contractor Identification ===
Company Name:MILLER-STEPHENSON CHEMICAL CO INC
Address:55 BACKUS AVE/GEORGE WASHINGTON HWY
Box:950
City:DANBURY
State:CT
ZIP:06810
Country:US
Phone:203-743-4447
CAGE:18598

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

Ingred Name:1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113) (SARA
III)
CAS:76-13-1
RTECS #:KJ4000000
Fraction by Wt: 79%
OS

HA PEL:1000 PPM;1250 STEL
ACGIH TLV:1000 PPM;1250 STEL
Ozone Depleting Chemical:1

Ingred Name:DICHLORODIFLUOROMETHANE (SARA III)
CAS:75-71-8
RTECS #:PA8200000
Fraction by Wt: 20%
OSHA PEL:1000 PPM
ACGIH TLV:1000 PPM
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS
Ozone Depleting Chemical:1

Ingred Name:SYNTHETIC HYDROCARBON BASE OIL
CAS:68649-12-7
Fraction by Wt: 1%

Ingred Name:SUPP DATA:BECAUSE OF POSS INCR RISK OF ELICITING CARDIAC
DYSTRYTHMIAS, CATECHOLAMINE DRUGS, SUCH AS EPINEPHRINE, (ING
5)
RTECS #:9999999ZZ

Ingred Name:ING 4:SHOULD BE CONSIDERED ONLY AS LAST RESORT IN LIFE
THREATING EMERGENCIES.
RTECS #:9999999ZZ

Ingred Name:EFTS OF OVEREXP:IRREGULARITIES. CHLOROFLUOROCARBON (CFC)
MATL HAVE PRODUCED SENSIT OF MYOCARDIUM TO (ING 7)
RTECS #:9999999ZZ

Ingred Name:ING 6:EPINEPHRINE IN LAB ANIMALS & COULD HAVE SIMILAR EFT
IN HUMANDS. ADRENOMIMETICS (E.G., EPINEPHRINE) MAY BE (ING 8)
RTECS #:9999999ZZ

Ingred Name:ING 7:CONTRAINDICATED EXCEPT FOR LIFE-SUSTAINING USES I
N
HUMANS ACUTELY/CHRONICALLY EXPOSED TO CFC'S.
RTECS #:9999999ZZ

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

LD50 LC50 Mixture:LD50: (ORAL, RAT) 43,000 MG/M3
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:INHAL:VAP IS HVR/AIR & CAN CAUSE
SUFFICATION BY REDUCING OXYGEN AVAIL FOR BRTHG.BRTHG HIGH CONC OF
VAP MAY CAUSE LIGHT-HEADEDNESS, GIDDINESS, SHORTNESS OF BREATH

, &
MAY LEAD TO NARCOSIS, CARDIAC IRREGULARITIES,
UNCONSCIOUS/DEATH.SKIN:NOT CORR/IRRIT AFTER SINGLE CNTCT.HOWEVER,
RPTD LIQ CNTCT CAN CAUSE (EFTS OF OVEREXP)
Explanation of Carcinogenicity:NOT RELEVANT
Effects of Overexposure:HLTH HAZ:DEFAT OF SKIN RESULTING IN IRRIT.MATL
IS POORLY ABSORBED THRU SKIN.EYE:LIQ CNTCT CAN CAUSE DISCOMFORT,
USUALLY NO EXTENDED EFT.NOTE:IN SCREENING TESTS W/EXPERIMENTAL
ANIMALS, EXPOS AT APPROX 5,000 PPM (V/V) & ABOVE, FOLLOWED BY
LGINTR
AVENOUS EPINEPHRINE CHALLENGE, HAS INDUCED SERIOUS CARDIAC
(ING 6)
Medical Cond Aggravated by Exposure:CARDIOVASCULAR DISEASE

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

First Aid:INHAL:REMOVE TO FRESH AIR, CALL MD. IF NOT BRTHG, GIVE ARTF
RESP. PREFERABLY MOUTH-TO-MOUTH. IF BRTHG IS DFCLT, GIVE OXYGEN. DO
NOT GIVE EPINEPHRINE/SIMILAR DRUGS. EYE:IMMED FLUSH W/PLENTY OF
WATER FO R AT LEAST 15 MIN. CALL MD. SKIN:FLUSH W/WATER. GET MD
ATTN IF IRRIT IS
PRESENT. INGEST:NO SPECIFIC INTERVENTION IS
INDICATED AS COMPOUND IS NO LIKELY TO BE HAZ BY INGEST. HOWEVER,
CONSULT (SUPP DATA)

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

Flash Point Method:TOC
Flash Point:NONE
Lower Limits:NON-FLAMM
Upper Limits:NON-FLAMM
Extinguishing Media:NON-FLAMMABLE. USE EXTINGUISHING MEDIA SUITABLE FOR
SURROUNDING FIRE .
Fire Fighting Procedures:WEAR NIOSH/MSHA APPROVED PRESSURE DEMAND SCBA
AND FULL PROTECTIVE EQUIPMENT .
Unus
ual Fire/Explosion Hazard:PRESSURIZED AEROSOL CNTNRS AT ELEVATED
TEMPS MAY VENT, RUPTURE/BURST & ADD TO FLYING/FALLING DEBRIS.DECOMP
MAY OCCUR.THERMAL DECOMP PRODS MAY INCL (SUPP DATA)

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

Spill Release Procedures:VENTILATE AREA. REMOVE OPEN FLAMES OR RED HOT
SURFACES. ALLOW TO EVAPORATE.
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling an

d Storage Precautions:DO NOT STORE NEAR SOURCES OF HEAT, IN
DIRECT SUNLIGHT/WHERE TEMPS EXCEED 120F. DO NOT PUNCTURE/DAMAGE
CNTNRS. ROTATE STOCK TO SHELF LIFE OF ONE YEAR.
Other Precautions:NO SMOKING IN AREA OF USE. DO NOT USE IN GENERAL
VICINITY OF ARC WELDING, OPEN FLAMES OR HOT SURFACES. HEAT AND/OR
UV RADIATION MAY CAUSE THE FORMATION OF FLUORIDES, CHLORIDES, AND
PHOSGENE .

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

Respiratory Protection:UNDER
NORMAL MFR CONDITIIONS NO RESPIRATORY
PROTECTION IS REQUIRED WHEN USING THIS PRODUCT. SELF-CONTAINED
BREATHING APPARATUS IS REQUIRED IF A LARGE SPILL OCCURS. DO NOT
SPRAY LIQUID ON SKIN.
Ventilation:NORM VENT FOR STANDARD MFR PROC IS GENERALLY ADEQ. LOC
EXHAUST SHOULD BE USED WHEN LG AMTS ARE RELEASED. MECH(SUPP DATA)
Protective Gloves:BUTYL GLOVES.
Eye Protection:CHEM WORK GOGG/FULL LENGTH FSHLD .
Other Protective Equipment:NONE SPECIFIED BY MANUFACTURER.
Work Hygienic Practice
s:NONE SPECIFIED BY MANUFACTURER.
Supplemental Safety and Health
EXPLO HAZ:FLUORIDES, CHLORIDES & PHOSGENE. HAZ DECOMP:ACIDS-POSS
CARBONYL HALIDES. NORM COMBUST MAY FORM CARBON DIOXIDE.
FLUORIDES/CHLORIDES/PHOSGENE . FIRST AID:MD IF NEC. DO NOT INDUCE V
OM AS HAZ OF ASPIRATING MATLS INTO LUNGS IS GREATER HAZ THAN
ALLOWING IT TO PROGRESS THRU INTESTINAL TRACT. NOTE:(ING 4)

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

Boiling Pt:B.P. Text:118F,48C
Vapor Pr
es:334 @ 77F
Vapor Density:2.9 @ 77F
pH:NEUT
Evaporation Rate & Reference:1 (N-BUAC=1)
Solubility in Water:NEGLIGIBLE
Appearance and Odor:CLEAR LIQUID. FAINT SOLVENT ODOR.
Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES
ALKALI OR ALKALINE EARTH METALS POWDERED AL, ZN, BE, ETC.
Stability Condition to Avoid:AVOID SPRAYING NEAR OPEN FLAMES OR RED HOT
SURFACES. DO NOT HEAT AEROSOL CONTAINERS ABOV

E 49C/120F.

Hazardous Decomposition Products:CMPD CAN BE DECOMPOSED BY HIGH TEMPS
(OPEN FLAMES/GLOWING METAL SURF/ETC).FORMING HYDROCHLORIC &
HYDROFLURIC (SUPP DATA)

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

Waste Disposal Methods:ALLOW TO EVAPORATE. DO NOT PUNCTURE OR
INCINERATE AEROSOL CANS. DISPOSAL SERVICE TO LANDFILL IS
APPROPRIATE. DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND
FEDERAL REGULATIONS .

Disclaimer (provided with this informati
on by the compiling agencies):

This information is formulated for use by elements of the Department
of Defense. The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all liability for its use. Any person utilizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.