

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
Emer
gency 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%
O

SHA 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
IN
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 BREAT

H, &
MAY LEAD TO NARCOSIS, CARDIAC IRREGULARITIES,
UNCONSCIOUS/DEATH. SKIN: NOT CORROSIVE/IRRITANT AFTER SINGLE CONTACT. HOWEVER,
REPORTED LIQUID CONTACT CAN CAUSE (EFFECTS OF OVEREXPOSURE)

Explanation of Carcinogenicity: NOT RELEVANT

Effects of Overexposure: HEALTH HAZARD: DEFAT OF SKIN RESULTING IN IRRITATION. MATERIAL
IS POORLY ABSORBED THROUGH SKIN. EYE: LIQUID CONTACT CAN CAUSE DISCOMFORT,
USUALLY NO EXTENDED EFFECT. NOTE: IN SCREENING TESTS WITH EXPERIMENTAL
ANIMALS, EXPOSURE AT APPROX 5,000 PPM (V/V) & ABOVE, FOLLOWED BY
LIGHT

RAVENOUS EPINEPHRINE CHALLENGE, HAS INDUCED SERIOUS CARDIAC
(INGESTION)

Medical Condition Aggravated by Exposure: CARDIOVASCULAR DISEASE

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

First Aid: INHALATION: REMOVE TO FRESH AIR, CALL MD. IF NOT BREATHING, GIVE ARTIFICIAL
RESPIRATION. PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN. DO
NOT GIVE EPINEPHRINE/SIMILAR DRUGS. EYE: IMMEDIATELY FLUSH WITH PLENTY OF
WATER FOR AT LEAST 15 MIN. CALL MD. SKIN: FLUSH WITH WATER. GET MD
ATTENTION IF IRRITATION IS

PRESENT. INGESTION: NO SPECIFIC INTERVENTION IS
INDICATED AS COMPOUND IS NOT LIKELY TO BE HAZARDOUS BY INGESTION. HOWEVER,
CONSULT (SUPPLEMENTARY DATA)

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

Flash Point Method: TOC

Flash Point: NONE

Lower Limits: NON-FLAMMABLE

Upper Limits: NON-FLAMMABLE

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.

Unusual

Fire/Explosion Hazard: PRESSURIZED AEROSOL CONTAINERS AT ELEVATED
TEMPERATURES MAY VENT, RUPTURE/BURST & ADD TO FLYING/FALLING DEBRIS. DECOMPRESSION
MAY OCCUR. THERMAL DECOMPOSITION PRODUCTS MAY INCLUDE (SUPPLEMENTARY 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 a

nd 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:UNDE

R 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 Practic

es: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 VOM 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 P

res: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 ABO

VE 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 .

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