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 IRREG ULARITIES, 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 Practices: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 Pres: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 .