MILLER-STEPHENSON CHEMICAL CO -- MS-171/CO2 CONNECTOR PLUS -- 6850-00N022773

========= Product Identification =============== Product ID:MS-171/CO2 CONNECTOR PLUS MSDS Date:11/01/1989 FSC:6850 NIIN:00N022773 MSDS Number: BPYPR === Responsible Party === Company Name: MILLER-STEPHENSON CHEMICAL CO Address: GEORGE WASHINGTON HIGHWAY City:DANBURY State:CT ZIP:06810 Country: US Info Phone Num: 203-743-4447 Emergency Phone Num: 203-743-4447; 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: METHYL CHLOROFORM (1,1,1-TRICHLOROETHANE) (SARA III) CAS:71-55-6 RTECS #:KJ2975000 Fraction by Wt: 96%

Other REC Limits: NONE RECOMMENDED

OSHA PEL:350 PPM

ACGIH TLV:350 PPM/450STEL;9394

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ozone Depleting Chemical:1

Ingred Name: CARBON DIOXIDE

CAS:124-38-9

RTECS #:FF6400000 Fraction by Wt: 3%

OSHA PEL:5000 PPM

ACGIH TLV:5000PPM/30000STEL;93

Ingred Name: FIRST AID PROC: MD. SKIN: FLUSH W/SOAP & WATER FOR AT LEAST 15 MIN, WHILE REMOVING CONTAM CLTHG & SHOES. IF IRRIT(ING 4) RTECS #:9999992Z

Ingred Name: ING 3: OCCURS, CALL MD. THORO CLEAN CONTAM CLTHG & SHOES BEFORE REUSE/DISCARD. INGEST: IF CONSCIOUS, DRINK LRG (ING 5) RTECS #:9999992Z

Ingred Name: ING 4: QTYS OF WATER. DO NOT INDUCE VOMITING. TAKE IMMED TO A HOSPITAL. DO NOT ATTEMPT TO GIVE ANYTHING BY MOUTH (ING 6) RTECS #:9999999ZZ

Ingred Name:ING 5: TO AN UNCONSCIOUS PERSON.

RTECS #:9999999ZZ

Ingred Name: SUPP DATA: ACUTELY OR CHRONICALLY EXPOSED TO CHLOROCARBONS

RTECS #:9999992Z

Ingred Name: OTHER PREC: AREA OF USE. DO NOT USE IN GENERAL VICINITY OF ARC WELDING, OPEN FLAMES OR HOT SURF. HEAT AND/OR UV (ING 9) RTECS #:9999992Z

Ingred Name: ING 8: RADIATION MAY CAUSE THE FORMATION OF HCL AND/OR PHOSGENE .

RTECS #:9999992Z

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

LD50 LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

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

Health Hazards Acute and Chronic:INHAL:EXCESS INHAL OF CONC VAP CAN CAUSE DIZZ, HDCH, NARCOSIS, ANESTH, SUFFOCATION, CIRCULATORY SYS DEPRESS, POSS CNS DMG & EVEN DEATH IN CONFINED/POORLY VENT AREAS.FATALITIES FOLLOWING SEVERE ACUTE E XPOS TO VARIOUS CHLORINATED SOLV HAVE BEEN ATTRIBUTED TO VENTICULAR FIBRILLATION. SKIN: PRLNG/ (EFTS OF OVEREXP)

Explanation of Carcinogenicity: NOT RELEVANT

Effects of Overexposure: HLTH HAZ: RPTD CONT W/LIQ ON SKIN CAN CAUSE IRRIT & DERMAT. EYE: CONT WILL CAUSE EXTREME IRRIT. INGEST: IRRIT OF MOUTH & GI TRACT W/OTHER EFTS LISTED FOR INHAL. VOMIT & SUBSEQUENT ASPIR IN LUNGS MAY L EAD TO CHEM PNEUM & PULM EDEMA WHICH ISA POTENTIALLY FATAL CONDITION. CHLOROCARBON MATLS HAVE PRODUCED (SUPP DATA)

Medical Cond Aggravated by Exposure: 9CARDIOVASCULAR DISEASE: SEE PRINCIPAL HAZARDS: INHALATION SECTION.

First Aid:INHAL:EXCESS VAP INHAL: MOVE PATIENT TO FRESH AIR.IF NEC, GIVE ARTF RESP/OXYGEN.DO NOT GIVE EPINEPHRINE/SIMILAR DRUGS AS SUCH DRUGS MAY INDUCE VENTRICULAR ARRYTHMIA.PYROLIZED FUMES INHAL:NORMAL RECOVE RY OCCURS WITHIN 1-2 DAYS.NOTE TO MD:DONOT ADMINISTER ADRENALIN/SIMILAR DRUGS.SUCH DRUGS MAY INDUCE VENTRICULAR ARRYTHMIA.EYE:FLUSH WITH WATER FOR AT LEAST 15 MIN.IF IRRIT OCCURS,CONSULT (SUPP DATA)

Flash Point Method: TOC

Flash Point: NONE

Lower Limits:8%

Upper Limits:15%

Extinguishing Media: WATER, DRY CHEMICALS, OR CO*2.

Fire Fighting Procedures: WEAR NIOSH/MSHA APPROVED PRESSURE DEMAND SCBA & FULL PROTECTIVE EQUIPMENT .

Unusual Fire/Explosion Hazard:PRESSURIZED AEROSOL CNTNRS AT ELEVATED TEMPS MAY VENT, RUPTURE/BURST & ADD TO FLYING & FALLING DEBRIS. INTENSE HEAT MAY CAUSE DECOMP W/EMISSION OF (SUPP DATA)

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

Spill Release Procedures: EVAC & VENT AREA. REMOVE POSS IGNIT SOURCES.
ONLY PERS EQUIPPED W/PROPER RESP & SKIN/EYE PROT SHOULD BE
PERMITTED IN AREA. DIKE SPILL. COLLECT ON ABSORB MATL & TRANSFER TO
STEEL DRUMS FOR RECOVERY/DIS P. IF SPILL IS SM, WIPE UP & ALLOW TO
EVAP.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions: DO NOT STORE NEAR SOURCES OF HEAT, INDIRECT SUNLIGHT, OR WHERE TEMPERATURES EXCEED 49C/120F. ROTATE STOCK TO SHELF LIFE OF ONE YEAR.

Other Precautions:DO NOT SPRAY LIQ ON HANDS/DIRECT SPRAY TO EYES. DO NOT USE IN POORLY VENT/CONFINED AREAS W/O PROPER RESP PROT. VAPS ARE HVR/AIR & WILL COLLECT IN LOW AREAS. LIQ OXYGEN/STRONG OXIDANTS MAY FORM EXPLO M IXT W/ING 1. NO SMOKING IN (ING 8)

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

Respiratory Protection: UNDER NORMAL MANUFACTURING CONDITIONS NO RESPIRATORY PROTECTION IS REQUIRED, BUT ADEQ VENT IS REQUIRED TO CONTROL EXPOS BELOW PERMISSIBLE LIMITS. NIOSH/MSHA APPROVED RESPIRATOR APPROPRIATE FOR EXPOSUR E OF CONCERN.

Ventilation: ADEQUATE VENTILATION IS REQUIRED TO CONTROL EXPOSURES BELOW

PERMISSIBLE LIMITS.

Protective Gloves: NEOPRENE, VITON, OR POLYETHYLENE GLOVES.

Eye Protection: CHEMICAL WORKERS GOGGLES .

Other Protective Equipment: NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

PH: 6.0 TO 7.5. EXPLO HAZ: HALOGEN ACIDS. THERMAL DECOMP PRODS MAY INCLUDE HCL & PHOSGENE . EFTS OF OVEREXP: SENSIT OF THE MYOCARDIUM TO EPINEPHRINE IN LAB ANIMALS & COULD HAVE A SIMILAR EFT IN HUMANS. ADRENOMIMETICS (E.G. EPINEPHRINE) MAY BE CONTRAINDICATED EXCEPT FOR LIFE-SUSTAINING USES IN HUMANS (ING 7)

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

Boiling Pt:B.P. Text:165F,74C

Vapor Pres:120 @ 68F

Vapor Density: 4.54 @ 68F

pH:SUPDAT

Evaporation Rate & Reference:0.13 (CC14=1)

Solubility in Water: NEGLIGIBLE

Appearance and Odor: COLORLESS LIQUID WITH ETHEREAL ODOR.

Percent Volatiles by Volume:99

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

Stability Indicator/Materials to Avoid:YES

FINELY DIVIDED REACTIVE METALS AND STRONG CAUSTICS.

Stability Condition to Avoid: AVOID SPRAYING NEAR OPEN FLAMES OR RED HOT SURFACES. DO NOT HEAT AEROSOL CNTNRS ABOVE 49C/120F.

Hazardous Decomposition Products: CAN BE DECOMPOSED BY TEMP (OPEN FLAMES, GLOWING SURF, ETC.) FORMING HALOGEN ACIDS & PHOSGENE IN SM AMTS. HCL.

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

Waste Disposal Methods: COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS. REMOVE TO A PERMITTED WASTE DISPOSAL FACILITY. DO NOT

PUNCTURE OR INCINERATE AEROSOL CANS.

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