

MILLER-STEPHENSON CHEMICAL CO INC. -- MS-190HD/CO2 HEAVY DUTY FLUX REMOVER --  
6850-00-602-2347

===== Product Identification =====

Product ID:MS-190HD/CO2 HEAVY DUTY FLUX REMOVER

MSDS Date:03/01/1991

FSC:6850

NIIN:00-602-2347

MSDS Number: BQDLJ

=== Responsible Party ===

Company Name:MILLER-STEPHENSON CHEMICAL CO INC.

Address:GEORGE WASHINGTON HIGHWAY

Box:950

City:DANBURY

State:CT

ZIP:06810

Country

:US

Info Phone Num:203-743-4447

Emergency Phone Num:203-797-2212 OR 203-743-4447

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:METHYLENE CHLORIDE (SARA III)

CAS:75-09-2

RTECS #:PA8050000

Fraction by Wt: 40-45%

Other

REC Limits:NONE SPECIFIED  
OSHA PEL:500 PPM/C,1000; Z2  
ACGIH TLV:50 PPM, A2; 9293  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113) (SARA III)

CAS:76-13-1  
RTECS #:KJ4000000  
Fraction by Wt: 50-56%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:1000PPM/1250STEL  
ACGIH TLV:1000PPM/1250STEL9293  
Ozone Depleting Chemical:1

Ingred Name:CARBON DIOXIDE  
CAS:124-38-9  
RTECS #:FF6400000  
Fraction by Wt: 2-4%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:5000  
PPM  
ACGIH TLV:5000PPM/30000STEL;93

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===== Hazards Identification =====  
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Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:YES IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE:IRRITATION OF EYES,SKIN AND  
RESPIRATORY TRACT;CAUSES  
SUFFOCATION,HEADACHE,GIDDINESS,NARCOSIS,CARDIAC  
IRREGULARITIES;METHYLENE CHLORIDE IS METABOLIZED TO CO,RAISING  
THE/CARBOXY HEMOGLOBIN=CARBONMONOXIDE:DRYING OF  
SKIN,DERMA  
TITIS;SYSTEMIC EFFECTS.  
Explanation of Carcinogenicity:NTP LISTS METHYLENE CHLORIDE AS A KNOWN  
CARCINOGEN. THIS IS ONE COMPONENT OF THE MIXTURE.  
Effects of Overexposure:SUFFOCATION,LI-HEAD,GIDD,SHORTNESS/BREATH,  
NAR,CARD IRREG,UNCONSCIOUSNESS OR DEATH. CO POISONING.  
Medical Cond Aggravated by Exposure:PRE-EXISTING CONDITIONS MAY BE  
WORSEN.

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===== First Aid Measures =====  
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First Aid:INHAL:RMV TO FRESH AIR. IF NOT BRTHNG GIVE CPR; IF BRTHNG  
DIF

F GIVE OXYGEN. EYE:IMMED FLUSH W/PLENTY OF WATER. SKIN: WASH W/SOAP & WATER. RMV CONTAM CLTHG & SHOES. INGEST:DO NOT INDUCE VOMIT. NOTHG BY MOUTH IF UNCONSC. GET MEDICAL ATTN.

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

Flash Point Method:TOC  
Flash Point:NONE  
Lower Limits:NONFLAMMABLE  
Upper Limits:NONFLAMMABLE  
Extinguishing Media:USE MEDIA SUITABLE FOR SURROUNDING FIRE  
Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.  
Unusual Fire/Explosion Hazard:MAY VENT, RUPTURE, BURST AT ELEVATED TEMPERATURES. HIGH HEAT CAUSES DECOMPOSITION-EMISSION OF HALOGENS

===== 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 and Storage Precautions:DO NOT STORE NEAR SOURCES OF HEAT, IN DIRECT SUNLIGHT OR WHERE TEMPERATURE EXCEEDS 120F.  
Other Precautions:DO NOT SPRAY LIQUID ON SKIN. DO NOT PUNCTURE OR DAMAGE CONTAINERS. ROTATE STOCK TO SHELF LIFE OF ONE YEAR.

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

Respiratory Protection:NONE NORMALLY REQUIRED. SCBA FOR LG AMTS.  
Ventilation:LOCAL EXHAUST TO MAINTN BELOW TLV.  
Protective Gloves:RUBBER  
Eye Protection:SAFETY GLASSES OR GOGGLES  
Other Protective Equipment:NORMAL WORK CLOTHING COVERING ARMS & LEGS.  
Work Hygienic Practices:USE NORMAL CHEMICAL HYGIENE PRACTICE. DO NOT USE IN ENCLOSED AREA; ASPHYRIATION HAZARD  
Supplemental Safety and Health

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

HCC:V2  
Boiling Pt:=36.5C, 97.6F  
Vapor Pres:500 MM HG  
Vapor Density:4.9(AIR=1)  
Spec Gravity:1.42 (WATER=1)  
pH:7.0  
Evaporation Rate & Reference:0.3 (CCL4=1)  
Solubility in Water

:NEGLIGIBLE

Appearance and Odor: CLEAR, COLORLESS LIQUID WITH 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: SPRAYING NEAR OPEN FLAMES OR RED HOT SURFACES.

Hazardous Decomposition Products: HYDROCHLORIC/HYDROFLUORIC ACIDS, POSSIBLE CARBONYL HALIDES.

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

Waste Disposal Methods: ALLOW TO EVAPORATE. DO NOT PUNCTURE OR INCINERATE AEROSOL CANS. DISPOSAL SERVICE TO LANDFILL IS APPROPRIATE.

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