

MILLER-STEPHENSON CHEMICAL CO INC -- MS-941/CO2 SAFEZONE PRECISION CLEANING
SOLVENT -- 6850-01-383-6719

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

Product ID:MS-941/CO2 SAFEZONE PRECISION CLEANING SOLVENT

MSDS Date:04/01/1993

FSC:6850

NIIN:01-383-6719

MSDS Number: BTHKL

=== Responsible Party ===

Company Name:MILLER-STEPHENSON CHEMICAL CO INC

Address:GEORGE WASHINGTON HWY

Box:950

City:DANBURY

State:CT

ZIP:06810

Country:US

Info Phone Num:203-743-4447

Emergency Phone Num

:203-797-2212(CHEMTREC 800-424-9300)

Preparer's Name:JOANNA SAFFO

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:ETHANE, 1,1-DICHLORO-1-FLUORO-

CAS:1717-00-6

RTECS #:KI0997000

Fraction by Wt: 97%

Other REC Limits:500 PPM (MFR)

Ozone Depleting Chem

ical:2

Ingred Name:CARBON DIOXIDE
CAS:124-38-9
RTECS #:FF6400000
Fraction by Wt: 3%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:5000 PPM
ACGIH TLV:5000PPM/30000STEL;94

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

Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE: INHALATION OR INGESTION MAY
CAUSE CNS DEPRESSION, CARDIAC ARRHYTHMIA, ASPHYXIATION; RESPIRATORY
AND GI TR
ACT IRRITATION. CONTACT MAY CAUSE SKIN AND EYE IRRITATION,
CONJUNCTIVITIS. CHRONIC: NONE SPECIFIED BY MANUFACTURER.
Explanation of Carcinogenicity:NO INGREDIENT OF A CONCENTRATION OF 0.1%
OR GREATER IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN.
Effects of Overexposure:INHALED/INGESTED: HEADACHE, DIZZINESS, NAUSEA,
LOSS OF CONCENTRATION, COUGHING, SHORTNESS OF BREATH. EYES:
REDNESS, TEARING, STINGING, DISCOMFORT. SKIN: REDNESS, DEFATTING,
DISCOMFORT.
Medical Cond Aggrava
ted by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:INHALED: IMMEDIATELY REMOVE TO FRESH AIR. IF NOT BREATHING,
GIVE ARTIFICIAL RESPIRATION. IF BREATHING DIFFICULT, GIVE OXYGEN.
GET MEDICAL ATTENTION. EYES: FLUSH WITH LOTS OF WATER FOR 15
MINUTES, HOLD LIDS OPEN. CALL A DOCTOR. SKIN: FLUSH WITH LOTS OF
WATER. INGESTED: DO NOT INDUCE VOMITING! IF CONSCIOUS, GIVE WATER.
GET MEDICAL ATTENTION. NEVER GI
VE ANYTHING BY MOUTH TO UNCONSCIOUS
PERSON.

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

Flash Point Method:TCC
Flash Point:NONE
Autoignition Temp:=550.C, 1022.F
Lower Limits:7.4
Upper Limits:15.5
Extinguishing Media:WATER SPRAY OR FOG, ALCOHOL FOAM, DRY CHEMICAL OR
CARBON DIOXIDE.
Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS.STOP
FLOW OF GAS,DO NOT PUT OUT FIRE UNLESS LEAK CAN BE STOPPED
IMMEDIATELY.USE WATER TO COOL FIRE EXPOSED CON

TAINERS.

Unusual Fire/Explosion Hazard:VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL TO A SOURCE OF IGNITION AND FLASH BACK. AVOID HIGH TEMPERATURES AND STATIC CHARGES.

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

Spill Release Procedures:VENTILATE AREA. DO NOT FLUSH TO SEWER. DIKE SPILL. COLLECT ON ABSORBENT MATEIRAL AND TRANSFER TO STEEL DRUMS FOR RECOVERY OR DISPOSAL.

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 TEMPERATURES EXCEED 120F/49C. ROTATE STOCK TO SHELF LIFE OF ONE YEAR.

Other Precautions:USE WITH SUFFICIENT VENTILATION TO KEEP EMPLOYEE EXPOSURES BELOW THE RECOMMENDED LIMIT.

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

Respiratory Protection:NONE NORMALLY REQUIRED. IF ENGINEERING CONTROLS FAIL OR NON-ROUTINE USE OR EMERGENCY OCCURS; USE NIOSH/MSHA

APPROVED RESPIRATOR OR SUPPLIED AIR RESPIRATOR OR SCBA, AS REQUIRED. USE IN ACCORDANCE WITH 29 CFR 1910.134.

Ventilation:USE ADEQUATE MECHANICAL VENTILATION TO MAINTAIN EXPOSURE BELOW PEL/TLV.

Protective Gloves:NEOPRENE, MYLAR

Eye Protection:SAFETY GLASSES/CHEMICAL SPLASH GOGGLES

Other Protective Equipment:NONE SPECIFIED BY MANUFACTURER. HMIS: EYE WASH STATION & SAFETY SHOWER.

Work Hygienic Practices:WASH HANDS AFTER USE AND BEFORE EATING, DRINKING, OR

SMOKING. LAUNDER CONTAMINATED CLOTHES BEFORE REUSE.

Supplemental Safety and Health

BECAUSE OF POSSIBLE DISTURBANCES OF CARDIAC RHYTHM, CATECHOLAMINE DRUGS, SUCH AS EPINEPHRINE, SHOULD BE CONSIDERED ONLY AS A LAST RESORT IN LIFE THREATENING EMERGENCIES.

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

HCC:V2

Boiling Pt:=32.2C, 90.F

Vapor Pres:517.2 MMHG

Vapor Density:4.0

Spec Gravity:1.23

pH:7

Evaporation Rate & Reference:>1 (CCL4=1)

Solubility in Water:NEGLIGIB

LE

Appearance and Odor: CLEAR, COLORLESS LIQUID IN AEROSOL CAN; FAINT
ETHEREAL ODOR

Percent Volatiles by Volume: 100

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

Stability Indicator/Materials to Avoid: YES

STRONG MINERAL ACIDS, STRONG ALKALIS, FINELY POWDERED METALS, STRONG
OXIDIZING AGENTS, SOME DESSICANTS.

Stability Condition to Avoid: UNSTABLE IF TEMPERATURES EXCEED 175F AND
IF EXPOSED TO FLAMES.

Hazardous Decomposition Products: PRODUCT IS DECOMPOSED BY TEMPER
ATURS

TO: HYDROGEN FLUORIDE, HYDROGEN CHLORIDE, AND POSSIBLY CHLORINE.

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

Waste Disposal Methods: DO NOT PUNCTURE OR INCINERATE CANS. DISPOSE OF
IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

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