

MILLER-STEPHENSON CHEMICAL CO INC. -- MS-122DF TFE RELEASE AGENT/DRY LUBRICANT --
9150-01-443-9003

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

Product ID:MS-122DF TFE RELEASE AGENT/DRY LUBRICANT

MSDS Date:01/01/1998

FSC:9150

NIIN:01-443-9003

MSDS Number: CFKZY

=== 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 800-424-9300

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-DICHLORO-1-FLUOROETHANE (SARA 313)

CAS:1717-00-6

RTECS #:KI0997000

Fraction by Wt: 77-80%

Other REC Limits:

NONE RECOMMENDED
Ozone Depleting Chemical:2

Ingred Name:POLY-TFE, ALPHA-(CYCLOHEXYLMETHYL)-OMEGA-HYDRO-, AND/OR
163440-89-9 AND/OR 131324-06-6
CAS:65530-85-0
Fraction by Wt: 1%
Other REC Limits:NONE RECOMMENDED

Ingred Name:1,1,1,2-TETRAFLUOROETHANE
CAS:811-97-2
Fraction by Wt: 18-22%
Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:NOT GIVEN FOR PRODUCT AS A WHOLE
Routes of Entry: Inhalation:YES Skin:YES Ingestion:
YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:INHALATION OF HIGH CONCENTRATIONS OF
VAPOR MAY BE HARMFUL AND CAUSE HEART IRREGULARITIES,
UNCONSCIOUSNESS, DEATH. COMPOUND IS A SKIN IRRITANT, A MILD EYE
IRRITANT.
Explanation of Carcinogenicity:THIS COMPOUND CONTAINS NO INGREDIENTS AT
CONCENTRATIONS OF 0.1% OR GREATER THAT ARE CARCINOGENS OR SUSPECT
CARCINOGENS.
Effects of Overexposure:HEART IRREGULARITIES, UNCONSCIOUSNESS, DEATH,
S
KIN IRRITATION, EYE IRRITATION.
Medical Cond Aggravated by Exposure:ASTHMA AND ANY OTHER RESPIRATORY
DISORDERS. SKIN ALLERGIES, ECZEMA, AND DERMATITIS.

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

First Aid:EYES: FLUSH WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS
OPEN. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING.
WASH WITH SOAP AND WATER. IF IRRITATION PERSIST, GET MEDICAL
ATTENTION. INH ALATION: REMOVE TO FRESH AIR. RESTORE BREATHING. G
ET
MEDICAL ATTENTION. INGESTION: DO NOT INDUCE VOMITING. IMMEDIATELY
GIVE 2 GLASSES OF WATER. NEVER GIVE ANYTHING BY MOUTH IF
UNCONSCIOUS. CALL MD.

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

Flash Point Method:TCC
Flash Point:NONE
Lower Limits:7.4 %
Upper Limits:15.5 %
Extinguishing Media:WATER SPRAY OR FOG. FOAM. DRY CHEMICAL OF CARBON
DIOXIDE.
Fire Fighting Procedures:EVACUATE PERSONNEL TO SAFE AREA. USE WATER
SPRAY OR FOG. WEAR SELF-CONTAINED BR

EATHING APPARATUS. USE WATER
SPRAY TO COOL CONTAINERS.

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

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

Spill Release Procedures:USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT
DURING CLEANUP. VENTILATE AREA. DO NOT FLUSH TO SEWERS. COLLECT ON
ABSORBENT MATERIAL AND TRA

NSFER TO DRUMS FOR RECOVERY OR DISPOSAL.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN A CLEAN DRY AREA. DO NOT HEAT
ABOVE 125F. ROTATE STOCK TO SHELF LIFE OF ONE YEAR. DO NOT CONSUME
FOOD, DRINK OR TOBACCO IN WORK AREA.

Other Precautions:USE WITH SUFFICIENT VENTILATION TO KEEP EMPLOYEES
EXPOSURE BELOW THE RECOMMENDED EXPOSURE LIMIT, ESPECIALLY FOR
ENCLOSED AND LOW

PLACES. WHERE VENTILATION IS INADEQUATE USE LOCAL

EXHAUST SYSTEM DESIGN ED FOR FLAMMABLE GAS TO REMOVE VAPORS.

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

Respiratory Protection:IF EXPOSURE MAY OR DOES EXCEED OCCUPATION
EXPOSURE LIMITS USE A NIOSH-APPROVED RESPIRATOR TO PREVENT
OVEREXPOSURE. IN ACCORD WITH 29 CFR 1910.134 USE EITHER AN
ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AI R-PURIFYING RESPIRATOR.

Ventilation:EXHAUST VENTILATION SUFFICIENT TO KEEP AIR
BORNE

CONCENTRATIONS BELOW RESPECTIVE TLV'S.

Protective Gloves:MYLAR GLOVES

Eye Protection:CHEMICAL GOGGLES, SAFETY GLASSES W/SIDES

Other Protective Equipment:CHEMICAL RESISTANT CLOTHING AS NECESSARY TO
PREVENT SKIN CONTACT. AN EMERGENCY EYEWASH AND SHOWER SHOULD BE
AVAILABLE.

Work Hygienic Practices:WASH HANDS THOROUGHLY WITH SOAP AND WATER
BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES.

Supplemental Safety and Health

REMOVE AND WASH CONTAMINATED CLOTHING BEFORE REU

SE.

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

HCC:V2

Boiling Pt:B.P. Text:89.6F,32.0C

Melt/Freeze Pt:M.P/F.P Text:NOT GIVEN

Decomp Temp:Decomp Text:NOT GIVEN

Vapor Pres:10 PSIA

Vapor Density:4.0

Spec Gravity:1.23

pH:7

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

Solubility in Water:NEGLIGIBLE

Appearance and Odor:WHITE LIQUID WITH FAINT ETHEREAL ODOR

Percent Volatiles by Volume:99 %

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

Stability Indic

ator/Materials to Avoid:YES

STRONG ACIDS AND ALKALIS, FINELY POWDERED METALS, STRONG OXIDIZING AGENTS AND SOME DESICCANTS.

Stability Condition to Avoid:HIGH TEMPERATURES, SPARKS, OPEN FLAMES

Hazardous Decomposition Products:HYDROGEN FLUORIDE, HYDROGEN CHLORIDE, CARBON MONOXIDE, CARBON DIOXIDE.

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

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING ENVIRONMENT. DISCARD ANY PRODUCT, RESIDUE, DISPOSAL CONTAINER OR

LINER IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

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