Product ID: PTFE RELEASE AGENT/DRY LUBRICANT
MSDS Date: 02/01/1999
FSC: 9150
NIIN: 01-443-9003
Status Code: A
MSDS Number: CKYHL

Responsible Party
Company Name: MILLER-STEPHENSON CHEMICAL CO, INC
Address: 55 BACKUS AVE/GEORGE WASHINGTON HIGHWAY
Box: 950
City: DANBURY
State: CT
ZIP: 06810
Country: US
Info Phone Num: 203-743-4447
Emergency Phone Num: (800) 424-9300
Preparer's Name: JANET STEPHENS
Chemetrec Ind/Phone: (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
Company Name: RADIANT INTL LLC
Address: 8501 N MOPAC BLVD
Box: 201088
City: AUSTIN
State: TX
ZIP: 78720-1088
Country: US
Phone: 512-419-5224
Contract Num: SP0450-00-D-4021
CAGE: 29913

Composition/Information on Ingredients

Ingred Name: 1,1-DICHLORO-1-FLUOROETHANE
CAS: 1717-00-6
RTECS #: KI0997000
Minimum % Wt: 77.
Maximum % Wt: 80.
Ozone Depleting Chemical: 2

Ingred Name: TELOMER OF TETRAFLUOROETHYLENE (65530-85-0, 163440-89-9, 131324-06-6)
= Wt: 1.
Ingred Name: 1,1,1,2-TETRAFLUOROETHANE
CAS: 811-97-2
Minimum % Wt: 18.
Maximum % Wt: 22.

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

Reports of Carcinogenicity: NTP: NO  IARC: NO  OSHA: NO
Health Hazards Acute and Chronic: INHALATION OF HIGH CONCENTRATIONS OF VAPOR MAY BE HARMFUL AND MAY CAUSE HEART IRREGULARITIES, UNCONSCIOUSNESS, OR DEATH. THE COMPOUND IS A SKIN IRRITANT, IS A MILD EYE IRRITANT, AND IS NOT A SKIN SENSITIZER IN ANIMALS. A SINGLE EXPOSURE OF 1,1-DICHLORO-1-FLUOROETHANE BY SKIN CONTACT CAUSED DECREASED BODY WEIGHT, REDNESS OF SKIN, AND LIVER EFFECTS. Effects of Overexposure: INHALATION OF HIGH CONCENTRATIONS OF VAPOR MAY BE HARMFUL AND MAY CAUSE HEART IRREGULARITIES, UNCONSCIOUSNESS, OR DEATH. THE COMPOUND IS A SKIN IRRITANT, IS A MILD EYE IRRITANT, AND IS NOT A SKIN SENSITIZER IN ANIMALS.

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

First Aid: INHALATION: IMMEDIATELY REMOVE TO FRESH AIR. KEEP PERSONS CALM. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN. EYE: IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. SKIN: FLUSH SKIN WITH WATER AFTER EXCESSIVE CONTACT. WASH CONTAMINATED CLOTHING BEFORE REUSE. ORAL: IF SWALLOWED, DO NOT INDUCE VOMITING, IMMEDIATELY GIVE TWO GLASSES OF WATER. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. CALL A PHYSICIAN.

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

Flash Point Method: TCC
Flash Point: NONE
Autoignition Temp: Autoignition Temp Text: ND
Lower Limits: 7.4
Upper Limits: 15.5
Extinguishing Media: WATER SPRAY OR FOG, FOAM, DRY CHEMICAL OR CARBON DIOXIDE.
Fire Fighting Procedures: EVACUATE PERSONNEL TO SAFE AREA. USE WATER SPRAY OR FOG. WEAR SELF-CONTAINED BREATHING APPARATUS (SCBA).
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. CONTAINERS MAY RUPTURE UNDER FIRE CONDITIONS. USE WATER SPRAY TO COOL CONTAINERS.

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

Spill Release Procedures: REVIEW FIRE AND EXPLOSION HAZARDS AND SAFETY PRECAUTIONS BEFORE PROCEEDING WITH CLEAN UP. USE APPROPRIATE PERSONAL PROTECTIVE Equipment DURING CLEAN UP. VENTILATE AREA. DO NOT FLUSH TO SEWERS. COLLECT ON ABSORBENT MATERIAL AND TRANSFER TO DRUMS FOR RECOVERY OR DISPOSAL.

================= 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.

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

Respiratory Protection: WHERE VENTILATION IS INADEQUATE USE LOCAL EXHAUST SYSTEM DESIGNED FOR FLAMMABLE GAS ATOMOSPHERE TO REMOVE VAPORS.
Ventilation: USE WITH SUFFICIENT VENTILATION TO KEEP EMPLOYEE EXPOSURE BELOW THE RECOMMENDED EXPOSURE LIMIT.
Protective Gloves: MYLAR GLOVES
Eye Protection: CHEMICAL SPLASH GOGGLES
Work Hygienic Practices: AVOID BREATHING VAPORS OR MIST. AVOID CONTACT WITH EYES, SKIN OR CLOTHING. WASH THOROUGHLY AFTER HANDLING.

Supplemental Safety and Health

INHALATION OF VAPORS IN THE PRESENCE OF TABACCO PRODUCTS CAUSES POLYMER FUME FEVER.

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

HCC:N1
Boiling Pt.:=32.C, 89.6F
B.P. Text: APPROX
Vapor Pres:10 PSIA AT 21C
Vapor Density:4.0
Spec Gravity:1.23 G/CC
pH: NEUTRAL
Evaporation Rate & Reference: >1 (CC14=1)
Solubility in Water: NEGLIGIBLE
Appearance and Odor: WHITE MILKY LIQUID, FAINT ETHERAL ODOR
Percent Volatiles by Volume: 99

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

Stability Indicator/Materials to Avoid: YES
STRONG ACIDS AND ALKALIS. FINELY POWDERED METALS SUCH AS AL, MG, ZN.
STORNG OXIDIZING AGENTS AND SOME DESICCANTS.
Stability Condition to Avoid: AVOID HEAT, SPARKS AND FLAME.
Hazardous Decomposition Products: THIS PRODUCT CAN BE DECOMPOSED BY HIGH TEMPERATURES (FLAME, GLOWING METAL SURFACES, ETC.) FORMING HYDORGEN FLUORIDE HYDROGEN CHLORIDE, CARBON MONOXIDE AND CARBON DIOXIDE.
Conditions to Avoid Polymerization: WILL NOT OCCUR.

================== Toxicological Information =================

Toxicological Information: IN A TWO YEAR INHALATION STUDY, 1,1-DICHLORO-1-FLUOROETHANE, AT CONCENTRATIONS OF 5,000 PPM OR 15-20,000 PPM, PRODUCED AN INCREASED INCIDENCE OF BENIGN TESTICULAR TUMORS IN RATS. THE NO EFFECT LEVEL F OR THIS STUDY WAS 1,500 PPM. ANIMAL DATA SHOW DEVELOPMENTAL EFFECTS ONLY AT EXPOSURE LEVELS PRODUCING OTHER TOXIC EFFECTS IN THE ADULT ANIMAL. REPRODUCTIVE DATA ON RATS SHOW INTERFERENCE WITH REPRODUCTION ONLY AT LEVELS WHICH PRODUCE OTHER TOXIC EFFECTS IN THE ADULT ANIMAL. TESTS IN BACTERIAL AND MAMMALIAN CELL CULTURES ARE GENERALLY NEGATIVE. IT HAS NOT PRODUCED GENETIC DAMAGE IN TESTS ON ANIMALS.
Ecological Information

Aquatic Toxicity: 1,1-Dichloro-1-Fluoroethane 96 hrs. LC50, Rainbow Trout: 20 mg/L.

Disposal Considerations

Waste Disposal Methods: Comply with Federal, State and Local Regulations.

MSDS Transport Information


Regulatory Information


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