

MATERIAL SAFETY DATA SHEET

For R&D use only. Not for drug, household or other uses.

Click <http://www.lookchem.com/cas-76/76-13-1.html> for suppliers of this product.

Composition/Information on Ingredient

Cas:
76-13-1
Code:
M

RTECS:
KJ4000000
Code:
M

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

Other REC Limits:
N/P

OSHA PEL:
1000PPM/1250STEL
Code:
M

OSHA STEL:

Code:

ACGIH TLV:
1000PPM/1250STEL9192
Code:
M

ACGIHSTEL:
N/P
Code:

Control Measures

Respiratory Protection:
NIOSH/MSHA APPROVED SCBA FOR ENCLOSED AREAS.

Ventilation:
LOCAL IF SPILL LIKELY MECHANICAL (GEN) REQD.

Protective Gloves:
IMPERVIOUS

Eye Protection:
CHEM SAFETY GOGGLES

Other Protective Equipment:
Equipment EYE WASH STATIONS. SAFETY SHOWERS, IMPERVIOUS APRON IF REQD.

Work Hygienic Practices:
N/P

Supplemental Safety and Health:
4 MSDS DATED OCT 1985. ***POWDERED TITANIUM,CALCIUM,MAGNESIUM,ZINC & BERYLLIUM ARE INCOMPATIBLE & MAY REACT VIOLENTLY.

Health Hazards Data

LD50LC50Mixture:
N/P

Route Of Entry Inds - Inhalation:
N/P

Skin:
N/P

Ingestion:
N/P

Carcinogenicity Inds - NTP:
N/P

IARC:
N/P

OSHA:
N/P

Health Hazards Acute And Chronic:
N/P 2

Explanation Of Carcinogenicity:
N/P

Signs And Symptions Of Overexposure:
ASPHYXIATION,DROW,IRRIT THROAT,DERM,INCO,EXCITEMENT,ARRHY,MILD EYE & SKIN IRRIT.

Medical Cond Aggravated By Exposure:
N/P

First Aid:
INHAL:RMV TO FRESH AIR. IF NOT BRTHNG GIVE CPR; IF BRTHNG DIFF GIVE OXYGEN. EYE:IMMED FLUSH W/PLENTY OF WATER. SKIN:WASH W/SOAP&WATER. RMV CONTAM CLTHG&SHOES. INGEST:INDUCE VOMIT. RPT UNTIL VOMIT IS C LEAR. NOTHG BY MOUTH IF UNCONSC. GET MEDICAL ATTN.

Spill Release Procedures:
EVACUATE UNPROTECTED PERSONNEL. ELIMIN ANY FLAMES. SHUT OFF LEAK. ABSORB LIQ SPILL W/INERT MATL. SHOVEL INTO METAL DRUMS,CLOSE & DISPOSE. DIKE LG AMTS W ABSORBENT & PUMP INTO DRUMS FOR RECLAMATION OR DISPOSAL.

Neutralizing Agent:
N/P

Waste Disposal Methods:
DISPOSE I/A/W ALL LOCAL, STATE AND FEDERAL REGULATIONS.

Handling And Storage Precautions:
STORE IN A CLEAN, COOL, DRY AND WELL VENTILATED AREA OF LOW FIRE RISK. PROTECT CONTAINERS FM PHYSICAL DAMAGE AND KEEP CLOSED WHEN NOT IN USE.

Other Precautions:
TANKS CANNOT BE EFFECTIVELY FLUSHED OF VAPOR IF SUMP CONTAINS LIQUID, "EMPTY" CONTAINER MAY CONTAIN PRODUCT RESIDUES (VAPOR OR LIQUID). RMV CLOSURES CAREFULLY TO RELIEVE POSSIBLE PRESSURE.

Fire and Explosion Hazard Information

Flash Point Method:
N/P 3

Flash Point:

Flash Point Text:
NONE

Autoignition Temp:

Autoignition Temp Text:
680C

Lower Limits:
N/R

Upper Limits:
N/R

Extinguishing Media:
MATL IS NON-FLAMMABLE. USE AGENT SUITABLE FOR SURROUND FIRE.

Fire Fighting Procedures:
WEAR NIOSH APPROVED SCBA. USE WATER SPRAY TO COOL CONTAINERS

Unusual Fire/Explosion Hazard:
AVOID CONTACT W/ACTIVE METALS. HEAT DECOMPOSITION PRODUCTS ARE HALOGENS, HALOGEN ACIDS, & PHOSGENE.

Physical/Chemical Properties

HCC:
N1

NRC/State LIC No:
N/R

Net Prop WT For Ammo:

Boiling Point:

B.P. Text:
117F,47.6C

Melt /Freeze Pt:

M.P/F.P Text:
N/A

Decomp Temp:

Decomp Text:
N/A

Vapor Pres:
284

Vapor Density:
6.45

Volatile Org Content %:

Spec Gravity:
1.57

VOC Pounds/Gallon:

PH: N/P

VOC Grams/Liter:

Viscosity:
N/P

Evaporation Rate & Reference:
2 (ETHER=1)

Solubility in Water:
NEGILIGIBLE

Appearance and Odor:
CLEAR, COLORLESS LIQUID, FAINT ETHEREAL ODOR

Percent Volatiles by Volume:
100

Corrosion Rate:
N/P

Reactivity Data

Stability Indicator:
YES

Stability Condition To Avoid:
TEMPERATURES ABOVE 482F,250C CAUSE THERMAL/OXIDATIVE DECOMP.

Materials To Avoid:
ALUMINUM POWDER,FINELY DIVIDED BARIUM,LITHIUM SHAVINGS ***

Hazardous Decomposition Products:
HALOGENS,HF,HCL, CARBONYL HALIDES SUCH AS PHOSGENE.

Hazardous Polymerization Indicator:
NO 5

Conditions To Avoid Polymerization:
N/R

Toxicological Information

Information:N/P

MSDS Transport Information

Information:N/P

Regulatory Information

Sara Title III Information: N/P

Federal Regulatory Information: N/P

State Regulatory Information: N/P

Other Information

Other Information:N/P