

FISHER SCIENTIFIC,CHEMICAL MFG DIV -- T-180, 1,1,2-TRICHLORO-1,2,2-TRIFLUORETHANE --
6830-01-325-5586

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

Product ID:T-180, 1,1,2-TRICHLORO-1,2,2-TRIFLUORETHANE
MSDS Date:12/06/1991
FSC:6830
NIIN:01-325-5586
MSDS Number: BQNSL
=== Responsible Party ===
Company Name:FISHER SCIENTIFIC,CHEMICAL MFG DIV
Address:1 REAGENT LANE
City:FAIR LAWN
State:NJ
ZIP:07410-2802
Country:US
Info Phone Num:201-796-7100
Emergency Phone Num:201-796-7100;800-424-9300(CHEMTREC)
CAGE:1B464
=== Contractor Identification ===
Company Name:FISHER SCIENTIFIC CO. CHEMICAL MFG DIV
Address:1 REAGENT LANE
Box:City:FAIRLAWN
State:NJ
ZIP:07410-2802
Country:US
Phone:201-796-7100
CAGE:1B464

===== Composition/Information on Ingredients =====

Ingred Name:1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE; (T 180) (SARA III)
CAS:76-13-1
RTECS #:KJ4000000
Fraction by Wt: 100%
Other REC Limits:NONE SPECIFIED
OSHA PEL:1000 PPM;1250 STEL
ACGIH TLV:1000 PPM;1250 STEL
Ozone Depleting Chemical:1

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

LD50 LC50 Mixture:ORAL LD50 (RAT) IS 43 GM/KG.
Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:EYES: IRRITATION. SKIN: IRRITATION,
DERMATITIS WITH DRYING AND CRACKING. INHALATION: NARCOTIC/SIMPLE
ASPHYXIA. MILD IRRITATION OF

UPPER RESPIRATORY TRACT. MAY BE ANESTHETIC AND CAUSE CNS DEPRESSION WITH DROWSINESS AND ARRHYTHMIAS AND DEATH FROM VENTRICULAR FIBRILATION. INGESTION: NARCOTIC EFFECT, CNS DEPRESSION.

Effects of Overexposure:EYES: IRRITATION. SKIN: IRRITATION, DERMATITIS WITH DRYING AND CRACKING. INHALATION: IRRITATION OF UPPER RESPIRATORY TRACT, ANESTHESIA, CNS DEPRESSION, DROWSINESS, ARRHYTHMIAS, ASPHYXIATION, SUDDEN DE ATH FROM VENTRICULAR FIBRILLATION. INGESTION: NARCOTIC EFFECT , PNEUMONITIS, CNS DEPRESSION, ARRHYTHMIAS.

Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN DISORDERS, IMPAIRED CARDIOVASCULAR FUNCTION, PARTICULARLY CARDIAC ARRYTHMIAS OR IMPAIRED RESPIRATORY FUNCTION MAY BE AT INCREASED RISK FROM EXPOSURE TO THIS MATERIAL.

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

First Aid:EYES: FLUSH WITH LARGE AMOUNTS OF WATER OR NORMAL SALINE. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH AREA WITH SOAP AND WATER. GET MEDICAL ATENTION. INHALATION: MOVE TO FRESH AIR. IF NOT BREATHING GIVE CPR. GET MEDICALATTENTION. INGESTION: TREAT SYMPTOMATICALLY AND SUPPORTIVELY. GET MEDICAL ATTENTION. IF VOMITING OCCURS, KEEP HEAD LOWER THAN HIPS TO PREVENT ASPIRATION.

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

Flash Point:NONE
Autoignition Temp:Autoignition Temp Text:1256F
Extinguishing Media:DRY CHEMICAL, CARBON DIOXIDE, HALON, WATER SPRAY, REGULAR FOAM. FOR LARGER FIRES, USE WATER SPRAY, FOG OR REGULAR FOAM.
Fire Fighting Procedures:MOVE CONTAINER FROM FIRE AREA IF POSSIBLE. DO NOT SCATTER SPILLED MATERIAL WITH HIGH PRESS WATER STREAMS. DIKE FIRE-CONTROL WATER FOR LATER DISPOSAL.
Unusual Fire/Explosion Hazard:USE AGENTS SUITABLE FOR TYPE OF SURROUNDING FIRE. AVOID BREATHING HAZARDOUS VAPORS, KEEP UPWIND. NEGLIGIBLE FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME.

===== Accidental Release Measures ===

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Spill Release Procedures:STOP LEAK IF YOU CAN WITHOUT RISK. TAKE UP
SPILL WITH SAND OR OTHER ABSORBENT MATERIAL AND PLACE INTO CLEAN,
DRY CONTAINERS FOR LATER DISPOSAL. KEEP UNNECESSARY PEOPLE AWAY.
ISOLATE AREA AND DENY ENTR Y.
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN A COOL, DRY, VENTILATED AREA
AWAY FROM INCOMPATIBLE SUBSTANCES. KEEP IN TIG
HTLY CLOSED
CONTAINER.
Other Precautions:MAY BURN BUT DOES NOT IGNITE READILY. AVOID CONTACT
WITH STRONG OXIDIZERS, EXCESSIVE HEAT, SPARKS, OR OPEN FLAME.

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

Respiratory Protection:SPECIFIC RESPIRATOR SELECTED MUST BE BASED ON
CONTAMINATION LEVELS FOUND IN WORK PLACE, MUST NOT EXCEED WORKING
LIMITS OF RESPIRATOR AND BE JOINTLY APPROVED BY NIOSH AND MSHA.
Ventilation:PROVIDE GENERAL DILUTION VENTILATION TO MEET PUB
LISHED
EXPOSURE LIMITS.
Protective Gloves:GLOVES NOT REQUIRED BUT ARE RECOMMENDED.
Eye Protection:WEAR SAFETY GOGGLES AND FACESHIELD.
Other Protective Equipment:WEAR APPROPRIATE PROTECTIVE (IMPERVIOUS)
CLOTHING AND EQUIPMENT TO PREVENT REPEATED/PROLONGED SKIN CONTACT.
Work Hygienic Practices:WASH AFTER HANDLING AND BEFORE EATING,
DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.
Supplemental Safety and Health
PROVIDE AN EYE WASH STATION AND SAFETY SHOWER WITHIN THE IM
MEDIATE WORK
AREA FOR EMERGENCY USE.

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

HCC:N1
Boiling Pt:B.P. Text:114F,46C
Melt/Freeze Pt:M.P/F.P Text:55.8F,13.2C
Vapor Pres:284 @ 20C
Vapor Density:6
Spec Gravity:1.6 @ 77F
Evaporation Rate & Reference:0.45 (ACETONE=1)
Solubility in Water:0.028%
Appearance and Odor:COLORLESS LIQUID. AMMONIA ODOR AT HIGH
CONCENTRATIONS.

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

Stability Indicator/Mater

ials to Avoid: YES

BERYLLIUM, CALCIUM, LITHIUM, MAGNESIUM, POTASSIUM, SAMARIUM, SODIUM, SODIUM-POTASSIUM ALLOY, TITANIUM (POWDERED), ZINC.

Stability Condition to Avoid: STABLE UNDER NORMAL TEMPERATURES AND PRESSURES. AVOID ALKALI METALS, PLASTICS, RUBBER, COATINGS, ALUMINUM, BARIUM, CONT.

Hazardous Decomposition Products: THERMAL DECOMPOSITION PRODUCTS MAY INCLUDE TOXIC AND CORROSIVE FUMES OF CHLORIDES, FLUORIDES AND TOXIC OXIDES OF CARBON.

Conditions to Avoid Polymerization: HAS NOT BEEN REPORTED TO OCCUR UNDER NORMAL TEMPERATURES AND PRESSURES.

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

Waste Disposal Methods: DISPOSE OF WASTE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

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