

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

Count

ry: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 Limi

ts: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

ASPHYXIANT. MILD IRRITATION O

F 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 DEATH FROM VENTRICULAR FIBRILLATION. INGESTION: NARCOTIC EFFEC

T, PNEUMONITIS, CNS DEPRESSION, ARRHYTHMIAS.

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

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===== 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.

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===== 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.

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===== 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 TIGHTLY 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 PUBLISHED 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. LAUNDRER CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health
PROVIDE AN EYE WASH STATION AND SAFETY SHOWER WITHIN THE IMMEDIATE 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/Mate

rials 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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