Product ID:TF SOLVENT (LIQUID) MSDS Date:09/18/1990 FSC:6850 NIIN:00-319-0834 **MSDS Number: BJCYB** === Responsible Party === **Company Name: CHEMTRONICS INC** Address:681 OLD WILLETS PATH City:HAUPPAUGE State:NY ZIP:11788 Country:US Info Phone Num:516-582-3322 Emergency Phone Num:516-582-3322 Preparer's Name: MICHAEL S. WATKINS CAGE:2M589 === Contractor Identification === Com pany Name: CHEMTRONICS INC Address:8125 COBB CENTER DRIVE Box:City:KENNESAW State:GA ZIP:30152 Country:US Phone:770-424-4888/800-645-5244 CAGE:21267 Company Name: CHEMTRONICS INC (CANCELLED USE 21267) City:HAUPPAUGE State:NY ZIP:11760 Country:US CAGE:2M589

Ingred Name:1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113) (SARA III) CAS:76-13-1 RTECS #:KJ4000000 Fraction by Wt: 100% Other REC Limits:NONE SPECIFIED OSHA PEL:1000P PM/1250STEL ACGIH TLV:1000PPM/1250STEL9192 Ozone Depleting Chemical:1

LD50 LC50 Mixture:LD50(ORAL RAT)= 43,000 MG/KG. Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:ACUTE: CAN CAUSE SUFFOCATION BY REDUCING OXYGEN AVAILABLE FOR BREATHING. MAY LEAD TO NARCOSIS, CARDIAC IRREGULARITIES, UNCONSCIOUSNESS OR DEATH. REPEATED LIQUID CONTACT WITH THE SKIN CAN CAUSE DEFATTI NG OF THE SKIN. CHRONIC: UNKNOWN. Explanation of Carcinogenicity:NONE OF THE CHEMICALS IN THIS PRODUCT IS LISTED BY IARC, NTP OR OSHA AS A CARCINOGEN. Effects of Overexposure:LIGHT-HEADEDNESS, GIDDINESS, SHORTNESS OF

BREATH, IRRITATION OF THE UPPER RESPIRATORY PASSAGES FROM INHALING. DEFATTING LEADING TO IRRITATION OF THE SKIN.

Medical Cond Aggravated by Exposure:CARDIOVASCULAR DISEASE.

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

First Aid:EYES- FLUSH WITH WATER FOR AT LEAST 15 MINS. GET MEDICAL AID. SKIN- WASH WITH MILD SOAP AND WATER. IF IRRITATION PERSISTS, SEE DR.. INHALE- REMOVE TO FRESH AIR. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF BREATHING HAS STOPPED GIVE ARTIFICIAL RESPIRATION. INGEST- DO NOT INDUCE VOMITING, GET MEDICAL ATTENTION.

Flash Point:NONE

Lower Limits:NON-FLAMM.

Upper Limits:NON-FLAMM.

Exting

uishing Media:NONFLAMMABLE. USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY CHEMICAL FOR SURROUNDING FIRE.

Fire Fighting Procedures: (1/9/95 HMIS INFOMATION-KEEP CONTAINERS COOL WITH WATER SPRAY. WEAR SELF-CONTAINED BREATHING APPARATUS.) Unusual Fire/Explosion Hazard: DECOMPOSTION MAY OCCUR.

Spill Release Procedures: VENTILATE AREA. REMOVE OPEN FLAMES OR RED HOT SURFACES. ALLOW TO EVAPORATE. (1/9/95 HMIS INFORMATION-EVACU ATE

AREA. ABSORB SPILLED MATERIAL WITH AN INERT MATERIAL. SHOVEL (SPARK PROOF) ABSORBENT MATER IAL INTO DRUMS AND CLOSE. PROVIDE VENTILATION.)

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

Handling and Storage Precautions: KEEP CONTAINERS CLOSED WHEN NOT IN USE. KEEP AWAY FROM OPEN FLAME, FIRE AND SPARKS. STORE IN COOL, DRY PLACE.

Other Precautions:WASH CONTAMINATED CLOTHING BEFORE RE-USE. (1/9/95 H

MIS INFORMATION-AVOID BREATHING VAPORS. VAPORS ARE HEAVY AND MAY ACCUMULATE. PROTECT CONTAINERS FROM DAMAGE DURING STORAGE. PREVENT LEAKAGE. INDOOR U SAGE IN CONFINED SPACE, USE DETECTOR.)

Respiratory Protection:UNDER NORMAL CONDITIONS, NO RESPIRATORY PROTECTION IS REQUIRED. (1/9/95 HMIS INFORMATION- ABOVE 1,000 PPM, USE SELF-CONTAINED BREATHING APPARATUS.) Ventilation:LOCAL EXHAUST SHOULD BE USED WHEN LARGE AM

OUNTS ARE

RELEASED. MECHANICAL VENTILATION SHOULD BE USED IN LOW PLACES. Protective Gloves:SOLVENT RESISTANT

Eye Protection: CHEMICAL SAFETY GOGGLES/FACE SHIELD

Other Protective Equipment:SAFETY SHOWER AND EYE BATH. OTHER EQUIPMENT AS REQUIRED TO MINIMIZE EXPOSURE FROM PROLONGED OR REPEATED CONTACT.

Work Hygienic Practices: WASH THROUGHLY AFTER HANDLING AND BEFORE EATING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

(1/9/95 HMIS INFORMATION-FREON 113 M

AY DILUTE OR DISPLACE OXYGEN BELOW

LEVELS NECESSARY TO SUSTAIN LIFE.)

HCC:N1 Boiling Pt:B.P. Text:118F,48C Vapor Pres:334 Vapor Density:6.5 Spec Gravity:1.57 pH:7.0 Evaporation Rate & amp; Reference:>1(N-BUTYL ACETATE=1) Solubility in Water:NEGLIGIBLE Appearance and Odor:CLEAR, COLORLESS LIQUID WITH SLIGHT ETHEREAL ODOR. Percent Volatiles by Volume:100

tability Indicator/Materials to Avoid:YES ALKALI OR ALKALINE EARTH METALS, POWDERED AL, ZN, BE, ETC. Stability Condition to Avoid:HIGH TEMPERATURES, SPARKS, AND OPEN FLAMES Hazardous Decomposition Products:THIS COMPOUND CAN BE DECOMPOSED BY HIGH TEMPERATURES FORMING HYDROCHLORIC AND HYDROFLUORIC ACIDS, CARBONYL HALIDES.

Waste Disposal Methods:COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS. RECLAIM BY DISTILLATION OR REMOVE TO PERMITTED WASTE DISPOSAL FACILITY.

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