Product ID:TRICHLOROTRIFLUOROETHANE MSDS Date:03/26/1982 FSC:6850 NIIN:00-681-5688 MSDS Number: BJNWW === Responsible Party === Company Name: PENNWALT CORPORATION Address:THREE PARKWAY City:PHILADELPHIA State:PA ZIP:19102 Country:US Info Phone Num:215-587-7711/502-395-7121 Emergency Phone Num:215-587-7711 Preparer's Name:TOM DOYLE CAGE:7K913 === Contractor Id entification === Company Name: PENNWALT CORPORATION/ELF ATOCHEM NORTH AMERICA Address: THREE PARKWAY City:PHILADELPHIA State:PA ZIP:19102 Phone:215-587-7711 CAGE:7K913 

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:1000PPM/1250STEL ACGIH TLV:1000PPM/1250STEL9192 Ozone Depleting Chemical:1

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Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:ACUTE-EYE:IRRITATION.,VAPORS:CONJUNCTIVITIS.,LIQUID:FROSTBI TE, SEVERE IRRITATION. SKIN: IRRITATION. INHALATION: CAN CAUSE NARCOSIS, UNCONSCIOUSNESS, RESPIRATORY DEPRESSION, TACHYCARDIA.HYPOTENSION & DEATH DUE TO ASPHYXIATION.INGESTION:INGESTIONOF TOXIC DOSE IS UNLIKELY. Explanation of Ca rcinogenicity:CHLORODIFLUOROMETHANE (I-22) IS NOT CARCINOGEN TO HUMAN (IARC). Effects of Overexposure: INHALATION OF HIGH CONCENTRATION OF VAPORS: TACHYCARDIA, HYPOTENSION, DEPRESSED VENTICULAR FUNCTION, SENSITIZATION OF HEART TO EPINEPHRINE. LIQUID CONTACT-SKIN: FROSTBITE; EYES: SEVERE IRRITATION AND PAIN. Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER. First Aid:GET MEDICAL ATTENTION-EYE:FLU SH W/WATER FOR 15 MIN HOLDING EYELIDS OPEN. SKIN: IF FROSTBITTEN, WASH WITH WARM WATER SLOWLY. INHALATION: REMOVE TO FRESH AIR, GIVE CPR/OXYGEN IF NECESSARY. KEEP VICTIM QUI ET. DON'T GIVE EPINEPHRINE OR SIMILAR DRUGS. INGESTION: DO NOT INDUCE VOMITING, GET MEDICAL ATTENTION. Flash Point:NON-FLAMMABLE Fire Fighting Procedures:WEAR SELF CONTAINED BREATHING APPARATUS IF FIGHTING NEAR THIS PRODUCT DUE TO TOXIC T HERMAL DECOMPOSITION PRODUCTS.KEEP CONTAINER COOL.

Unusual Fire/Explosion Hazard:MAY DECOMPOSE IN CONTACT WITH FLAMES,HEATING ELEMENTS OR IN GAS ENGINE (EXTREME HEAT) RELEASING IRRITATING, TOXIC AND CORROSIVE GASES.

Spill Release Procedures: KEEP UPWIND. EVACUATE ENCLOSED SPACE. DISPERSE GAS WITH FLOOR LEVEL FORCED AIR VENTILATION OR WATER SPRAY. DO NOT SMOKE. REMOVE FLAMES, HEATING ELEMENTS, GAS ENGINE, ETC

. ABSROB LARGE SPILLS WITH INER T ABSORBENTS,COLLECT IN COVERED DRUMS FOR DISPOSAL Neutralizing Agent:NONE
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Handling and Storage Precautions:STORE BELOW 50C IN TIGHTLY CLOSED CONTAINERS IN A COOL, WELL VENTILATED AREA, AWAY FROM HEAT,SPARKS & FLAMES.
Other Precautions:DO NOT DROP,REUSE OR REFILL CONTAINER.DO NOT STORE IN DIRECT SUN.KEEP IT BELOW 120F.READ LABEL BEFORE USE.PROTECT ALL EXPOSED SKIN FROM LI QUID CONTACT.
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Respiratory Protection:SELF CONTAINED BREATHING APPARATUS OR SUPPLIED AIR MASK Ventilation:LOCAL EXHAUST Protective Gloves:SYNTHETIC RUBBER Eye Protection:GOGGLES
Other Protective Equipment:EYE WASH STATION AND SAFETY SHOWER. INDUSTRIAL-TYPE WORK CLOTHING AND APRON AS REQUIRED. Work Hygienic Practices:DO NOT INHALE VAPORS. WASH HANDS BEFORE EATING AND DRINKING. Supplemental Safety and Health
======== Physical/Chemical Properties ====================================
HCC:N1 Boiling Pt:B.P. Text:118F,48C Vapor Pres:334 Vapor Density:6.6 Spec Gravity:1.42 Solubility in Water:SLIGHT Appearance and Odor:COLORLESS LIQUID WITH FAINT ETHEREAL ODOR
Percent Volatiles by Volume:100 ===================================

Stability Indicator/Materials to Avoid:YES ALKALINE EARTH METALS, POWDERED AL, ZN, BE AND MG. Stability Condition to Avoid:HIGH TEMPERATURES AND FLAMES Hazardo

## us Decomposition Products:HYDROGEN FLUORIDE AND CHLORIDE, CHLORINE, PHOSGENE (POSSIBLY)

Waste Disposal Methods:BEST TO RECYCLE OR RECLAIM, IF POSSIBLE. DISPOSAL MUST BE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL AUTHORITIES.

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