Product ID:1,1,1-TRICHLOROETHANE MSDS Date:08/01/1990 FSC:6810 NIIN:00-292-9625 **MSDS Number: BNTFJ** === Responsible Party === Company Name: CSD INC. (OBSOLETE ADDRESS; USE 4N760) Address:420 SEABOARD DRIVE **City:MATTHEWS** State:NC ZIP:28105-5073 Country:US Info Phone Num:704-821-9822 Emergency Phone Num:704-821-9822 CAGE:5W216 === Contractor Ident ification === Company Name: CSD INC. (PRE 1985 NAME: MATHEWS, INC) Address:420 SEABOARD DRIVE Box:City:MATTHEWS State:NC ZIP:28105-5073 Country:US Phone:704-821-9822 CAGE:5W216 Ingred Name: METHYL CHLOROFORM (1,1,1-TRICHLOROETHANE) (SARA III) CAS:71-55-6 RTECS #:KJ2975000

Fraction by Wt: >95%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:350 PPM ACGIH TLV:350 PPM/450STEL;9394

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ozone Deplet

ing Chemical:1

Ingred Name:CONTAINS A PROPRIETARY INHIBITOR PKG-INCLUDES DIETHYLENE ETHER (1.4 DIOXENE) (123-91-1) AT A LEVEL OF 2.5%. (SARA 313) RTECS #:99999992Z Other REC Limits:NONE SPECIFIED OSHA PEL:25 PPM SKIN ACGIH TLV:25 PPM SKIN

LD50 LC50 Mixture:LD50 RATS-10,000 MG/KG Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES Health Hazards Acute and Chron ic:EYE: LIQ MAY CAUSE PAIN/SLIGHT TEMPORARY IRRIT W/SLIGHT CORNEAL INJURY. VAPORS MAY IRRIT. SKIN: PROLONG/REPEAT EXPOS MAY CAUSE IRRIT/DRYING/FLAKING. INHAL: INHAL OF CONC OF 500-1000 PPM MAY PRODUCE MI NIMAL ANESTHETIC/NARCOTIC EFFECTS. CONCOF 1000 PPM MAY CAUSE DIZZINESS/DRUNKENNESS. CONC OF 10,000 PPM CAN CAUSE Explanation of Carcinogenicity:1.4 DIOTANE IS LISTED BY NTP & IARC AS

AN ANIMAL CARCINOGEN. Effects of Overexposure: UNCONSCIOUSNESS/DEATH/BLOOD PRESS DEPR

ESS/CARDIAC SENSITITZATION/VENTRICULAR ARRHYTHMIAS. IN CONFINED/POORLY VENT AREAS, VAPORS CAN CAUSE UNCONSCIOUSNESS/DEATH. AEROSOL FORM IS MORE TOXIC THAN VAPOR. INGEST: SINGLE DOSE ORAL TOXICITY IS LOW. ASPIR OF MATL INTO LUNGS REPAIDLY ABSORBED CAN CAUSE CHEM PNEUMONITIS-FATAL.

First Aid:SKIN: WASH W/SOAP & WTR. RMV CONTAM CLOTH/LAUNDER BEFORE REUSE. DISCARD SHOES. EYE: FLUSH W/LG AMTS WTR, LIFT LIDS-GE

T MED

AID. INGEST: DO NOT INDUCE VOMITING. IMMED DRINK 2 GLASSES WTR. NEVER GIVE AN YTHING BY MOUTH TO UNCONSCIOUS PERSON. CALL DR/TAKE TO EMERGENCY ROOM. INHAL: MOVE TO FRESH AIR. IF BREATH DIFFICULT-ADMIN OXYGEN, IF STOPPED-ARTIF RESP. KEEP WARM/QUIET-GET MED AID. DO NOT GIVE+

Flash Point Method:TCC Flash Point:NONE Lower Limits:7.5 Upper Limits:15 Extinguishing Media:WATER FOG Fire Fighting Procedures:W

EAR SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WHEN FIGHTING FIRES. Unusual Fire/Explosion Hazard:NEVER USE WELD/CUT TORCH ON/NEAR DRUM (EVEN EMPTY) AS PROD (EVEN RESIDUE) CAN IGNITE EXPLOSIVELY. VAPORS CONC IN A CONFINED/POORLY VENT AREA CAN BE IGNTITED*
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Spill Release Procedures:SM: ABSORB LIQ ON PAPER/VERMICULITE/FLOOR ABSORB/OTHER ABSORB MATL-TR ANS TO HOOD. LG: EVAC AREA-UNPROTECT PEOPLE UNTIL CLEANUP COMPLETE. STOP SPILL AT SOURCE/DIKE AREA TO PREVENT SPREAD/PUMP LIQ TO SA LVAGE TANK. REMAIN LIQ MAY BE TAKEN UP ON SAND/++
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Handling and Storage Precautions: AVOID PROLONG CONTACT (PLASTIC, RUBBER EQUIP, PROTECT CLOTH, CNTNRS). ADD CHLORINATED SOLVENT (FLASH PT SUPPRESSANT) IN SUFF QTY OR MIX MAY HAVE FLASH*** Other Precautions:***PT LWR THAN FLAMM COMPO NENT. DONT PUT 1,1,1-TRICHLOROETHANE PRODUCTS IN ALUM OR ALLOY AEROSOL CANS. AVOID FINELY DIVIDED ALUM. CONTACT W/ALUM PARTS IN PRESS FLUID SYS MAY CAUSE VIOLENT REACTIONS. E MPTY CNTNRS (RETAIN PRODUCT RESIDUE)%
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 Respiratory Protection:NIOSH/MSHA AIR SUPPLD RESP (ABSENCE OF PROPER ENVIRON CNTRL). OSHA REG PERMITS OTHER NIOSH/MSHA RESP (NEG PRESS TYPE) UNDER SPECIFIED CONDITIONS (SEE EQUIP SUPPLIER). ENG INEERING/ADMIN CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE Ventilation:PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S). Protective Gloves:POLYVINYL ALCOHOL, POLYETHYLENE Eye Protection:CHEM SPLSH GOGGLES/SAFETY GLASSES Other Protective Equipment:WEAR IMPERVIOUS CLOTHING & BOOTS. ++CLAY/EARTH/FLOOR ABSORB/ETC-SHOVEL INTO CNTNRS. PREVENT RUN-OFF TO SEWERS/WATER+++ Work Hygienic Practices:N/K +++BODIES. IF RUN-OFF

OCCURS, NOTIFY AUTHORITIES AS REQ, THAT A SPILL HAS OCCURRED. Supplemental Safety and Health %MAY BE HAZARDOUS.

HCC:T4 Boiling Pt:B.P. Text:162F,79C Melt/Freeze Pt:M.P/F.P Text:36.0F,2.2C Vapor Pres:100 MM/HG Spec Gravity:1.3 Viscosity:(WATER=1) .86 Evaporation Rate & amp; Reference:ETHYL ETHER =1 / 2.60 Solubility in Water:MODERATE Appearance and Odor:COLORLESS, CLEAR LIQUID, MILDLY SWEET ODOR Percent Volatiles by Volume :100 Corrosion Rate:NOT CORR

Stability Indicator/Materials to Avoid:YES
WATER/REACTIVE METALS (ALUMINUM/MAGNESIUM)/OPEN FLAME/WELDING ARCS/RESISTANCE HEATERS, ETC WHICH CAN RESULT IN THERMAL**
Stability Condition to Avoid:N/K *BY HIGH ENERGY SPARK/FLAME, ETC. VAPORS ARE HEAVIER THAN AIR/WILL COLLECT IN LOW AREAS.
Hazardous Decomposition Products:LIQUID OXYGEN OR OTHER STRONG OXIDANTS MAY FORM EXPLOSIVE MIXTURES
WITH 1,1,1-TRICHLOROETHANE.

 Waste Disposal Methods:DISPOSE OF IN ACCORD W/ALL LOCAL/STATE/FEDERAL GOVERNMENT. @HUMANS: CARDIAC/LIVER ABNORMALITIES/KIDNEY DAMAGE.
 +STIMULANTS. EPINEPHRINE OR EPHEDRINE MAY ADVERSELY AFFECT THE HEART WITH FATAL R ESULTS.

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