

CSD INC. -- 1,1,1-TRICHLOROETHANE -- 6810-00-664-0387

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

Product ID:1,1,1-TRICHLOROETHANE

MSDS Date:08/01/1990

FSC:6810

NIIN:00-664-0387

MSDS Number: BNTJZ

=== Responsible Party ===

Company Name:CSD INC.

Address:#5 HACKBERRY LANE

City:CUT & SHOOT

State:TX

ZIP:77303

Country:US

Emergency Phone Num:800-424-9300(CHEMTREC)

CAGE:JO933

=== Contractor Identification ===

Co

Company Name:CSD INC.

Address:5 HACKBERRY LANE

Box:687

City:CONROE

State:TX

ZIP:77305

Country:US

Phone:409-756-1065

CAGE:JO933

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

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

Ingred Name:1,1,1-TRICHLOROETHANE (SARA 313)

CAS:71-55-6

RTECS #:KJ2975000

Fraction by Wt: >95%

Other REC Limits:NONE SPECIFIED

OSHA PEL:350

PPM  
ACGIH TLV:350 PPM  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS  
Ozone Depleting Chemical:1

Ingred Name:CONTAINS A PROPRIETARY INHIBITOR PKG-INCLUDES DIETHYLENE  
ETHER (1.4 DIOXANE) CAS 123-91-1, AT A LEVEL OF 2.5% (SARA 313)  
RTECS #:9999999ZZ  
Other REC Limits:NONE SPECIFIED

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===== Hazards Identification =====  
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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 Chronic: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 DIOXANE IS LISTED BY NTP AS AN  
ANIMAL CARCINOGEN.

Effects of Overexposure:UNCONSCIOUSNESS  
/DEATH/BLOOD PRESS DEPRESS/  
CARDIAC SENSITIZATION/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 RAPIDLY ABSORBED CAN CAUSE CHEM  
PNEUMONITIS-FATAL.

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===== First Aid Measures =====  
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First Aid:SKIN: WASH W/SOAP & WTR. RMV CONTAM CLOTH/ LAUNDRER BEFORE  
REUSE. DISCARD SHOES. EYE: FLUSH  
W/LG AMTS WTR, LIFT LIDS- GET MED  
AID. INGEST: DO NOT INDUCE VOMITING. IMMED DRINK 2 GLASSES WTR.  
NEVER GIVE ANYTHING 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+

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===== Fire Fighting Measures =====  
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Flash Point Method:TCC  
Flash Point:NONE  
Lower Limits:7.5  
Upper Limits:15  
Extinguishing Media:WATER FO

G

Fire Fighting Procedures:WEAR 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

===== Accidental Release Measures =====

Spill Release Procedures:SM: ABSORB LIQ ON PAPER/VERMICULITE/FLOOR

ABSORB/OTHER ABSORB MATL-TRANS TO HOOD. LG: EVAC AREA-UNPROTECT PEOPLE UNTIL CLEANUP COMPLETE. STOP SPILL AT SOURCE/DIKE AREA TO PREVENT SPREAD/ PUMP LIQ TO S ALVAGE TANK. REMAIN LIQ MAY BE TAKEN UPON SAND/++

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

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:P

T LWR THAN FLAMM COMPONENT. DONT PUT 1,1,1-TRICHLOROETHANE PRODUCTS IN ALUM AEROSOL OR ALLOY CANS. AVOID FINELY DIVIDED ALUM. CONTACT W/ALUM PARTS IN PRESS FLUID SYS MAY CAUSE VIOLENT REACTIONS. EMP TY CNTNRS (RETAIN PRODUCT RESIDUE)##

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

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).

ENGINEERING/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.

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

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 & Reference:ETHYL ETHER =1 / 2.60

Solubility in Water:MODERATE

Appearance and Odor:COLORLESS, CLEAR LIQUID, MILDLY SWEET ODOR

Perc

ent Volatiles by Volume:100

Corrosion Rate:NOT CORR

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

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 EX

PLOSIVE MIXTURES WITH 1,1,1-TRICHLOROETHANE.

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

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 RESULTS.

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