CSD INC. -- DENATURED ALCOHOL -- 6810-00-205-6786 ============ Product Identification ========================= Product ID:DENATURED ALCOHOL MSDS Date:01/15/1991 FSC:6810 NIIN:00-205-6786 MSDS Number: BLFDS === 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 Ind/Phone:(800)424-9300 CAGE:JO933 === Contractor Identification === Company Name: CHEMICAL SPECIALISTS AND DEVELOPMENT IN C Address:2210 HACKBERRY LN Box:687 City:CONROE State:TX ZIP:77305 Country:US Phone: 409-756-1065 CAGE:4N760 Company Name: CSD INC. Address: 5 HACKBERRY LANE Box:687 City:CONROE State:TX ZIP:77305 Country:US Phone: 409-756-1065 CAGE:JO933 ======= Composition/Information on Ingredients ========

Ingred Name:ETHYL ALCOHOL (ETHANOL)

CAS:64-17-5

RTECS #:KQ6300000 Fraction by Wt: 89%

Other REC Limits: NONE SPECIFIED

OSHA PEL:1000 PPM

ACGIH TLV:1000 PPM; 9192

Ingred Name: ETHYL ACETATE (SARA

III)

CAS:141-78-6

RTECS #:AH5425000 Fraction by Wt: 5%

Other REC Limits: NONE SPECIFIED

OSHA PEL:400 PPM

ACGIH TLV:400 PPM; 9192

EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Ingred Name:METHYL ALCOHOL (METHANOL) (SARA III)

CAS:67-56-1

RTECS #:PC1400000 Fraction by Wt: 4%

Other REC Limits:NONE SPECIFIED OSHA PEL:S,200PPM/250STEL ACGIH TLV:S,200PPM/250STEL; 93

EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Ingred Name: N-HEPTANE

CAS:142-82-5

RTECS #:MI7700000 Fraction by Wt: 1%

Other REC Limits: NONE SPE

**CIFIED** 

OSHA PEL:500 PPM/500 STEL

ACGIH TLV:400 PPM/500STEL;9293

Ingred Name: METHYL ISOBUTYL KETONE (SARA III)

CAS:108-10-1

RTECS #:SA9275000 Fraction by Wt: 1%

Other REC Limits: NONE SPECIFIED

OSHA PEL:100 PPM/75 STEL

ACGIH TLV:50 PPM/75 STEL; 9293

EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

============== Hazards Identification =======================

LD50 LC50 Mixture:LD50 (ORAL RAT) IS 7060 MG/KG (ETHANOL)

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenic

ity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:ACUTE: INHALE-HIGH VAPOR

CONCENTRATIONS MAY CAUSE UPPER RESPIRATORY TRACT IRRITATION & NARCOSIS. EYE-LIQUID & VAPOR CAUSES IRRITATION. SKIN-LOW HAZARD FOR USUAL INDUSTRIAL HANDLING. CHRONIC: OVEREXPOS URE TO THIS MATERIAL CAUSES LIVER ABNORMALITIES & EYE DAMAGE IN HUMANS.

Explanation of Carcinogenicity: NONE OF THE COMPOUNDS IN THIS PRODUCT IS LISTED BY IARC, NTP, OR OSHA AS A CARCINOGEN.

Effects of Overexposure:IN

HALE-SLEEPINESS, DIZZINESS, ETC.

Medical Cond Aggravated by Exposure: PERSONS WITH A HISTORY OF AILMENTS OR WITH A PRE-EXISTING DISEASE INVOLVING THE SKIN, EYE, RESPIRATORY TRACT, LIVER OR KIDNEY MAY BE AT INCREASED RISK FROM EXPOSURE.

First Aid:INHAE-REMOVE TO FRESH AIR. IF HARD TO BREATH GIVE OXYGEN. IF NOT BREATHING, GIVE CPR. KEEP WARM, QUIET & GET A PHYSICIAN. EYES-IMMEDIATELY FLUSH WITH PLENTY OF WATER FO

R 15 MINUTES. GET A

PHYSICIAN IF SYMPTOMS ARE PRESENT AFTER WASHING.

INGEST-IMMEDIATELY DRINK 2 GLASSES OF WATER & INDUCE VOMITING (GIVE IPECAC SYRUP OR PUT FINGER DOWN THROAT). GIVE NOTHING BY MOUTH IF UNCONSCIOUS & SEE A PHYSICIAN

========== Fire Fighting Measures ===============

Flash Point Method:TCC Flash Point:=13.C, 55.4F

Autoignition Temp:>403.9C, 759.F

Lower Limits:3.53 Upper Limits:21.2

Extinguishing Media:USE WATER SPRAY, CARBON DIOXIDE, ALCOHOL F OAM, OR

DRY CHEMICAL.

Fire Fighting Procedures:WEAR PROTECTIVE CLOTHING & SELF CONTAINED BREATHING APPARATUS. WATER MAY BE INEFFECTIVE IN FIGHTING FIRE. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard:FLAMMABLE LIQUID & VAPOR. VAPORS ARE HEAVIER THAN AIR, MAY TRAVEL ALONG THE GROUND OR MOVE BY VENTILATION TO AN AUTOIGNITION SOURCE AND MAY FLASH BACK.

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

Spill Release Procedures: ABS

ORB LIQUID ON PAPER, VERMICULITE, FLOOR ABSORBANT, OR OTHER ABSORBANT MATERIAL. PLACE SPILLED MATERIAL IN A CONTAINER FOR DISPOSAL. Neutralizing Agent: NOT APPLICABLE. ============= Handling and Storage ========================== Handling and Storage Precautions: STORE IN A FLAMMABLE LIQUID STORAGE ROOM OR CABINET. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. PROTECT CONTAINERS FROM PHYSICAL DAMAGE. Other Precautions: CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES, OBSERVE HAZARDOUS PRECAUTIONS. ===== Exposure Controls/Personal Protection ======== Respiratory Protection: IF WORKPLACE EXPOSURE LIMITS OF THIS PRODUCT IS EXCEEDED, A NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROLS. OSHA ALSO PERMITS (NRGATIVE PRESSURE TYP E) RESPIRATOR UNDER SPECIFIC CONDITIONS. Ventilation: PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR L **OCAL** EXHAUST) VENTILATION TO MAINTAIN EXPOSURE LIMITS BELOW TLV'S. Protective Gloves: NEOPRENE, NITRILE, PVC OR NATURAL RUBBER Eye Protection: SAFETY GOGGLES WITH OPTIONAL FACE SHIELD Other Protective Equipment: EYE WASH STATION AND SAFETY SHOWER. WEAR IMPERVIOS TYPE WORK CLOTHING AND BOOTS AS REQUIRED. Work Hygienic Practices: OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR FOOTWEAR. Supplemental Safety and Health **AVOID PROLON** NOT BREATHE VAPORS OR MISTS. CAUTION: FOR MANUFACTURING, PROCESSING, REPACKING OR INDUSTRIAL USE. NOT FOR HOUSHOLD USE. CONTAINE R HAZARDOUS WHEN EMPTY. EMPTIED CONTAINERS RETAIN RESIDUAL

GED OR REPEATED EXPOSURE. DO NOT GET ON SKIN OR IN EYES. DO LIQUID AND VAPOR. FOLLOW PRECAUTIONS ON LABEL AND IN MSDS.

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

HCC:F5 NRC/State Lic Num: NOT RELEVANT Boiling Pt:=77.8C, 172.F Vapor Pres:40 Vapor Density:1.59 Spec Gravi

ty:0.79 Evaporation Rate & Description (BUAC=1) Solubility in Water: APPRECIABLE Appearance and Odor: CLEAR, LITTLE IF ANY COLOR; CHARACTERISTIC ODOR. Percent Volatiles by Volume: 100 Corrosion Rate: NOT COR.
======== Stability and Reactivity Data =========
Stability Indicator/Materials to Avoid:YES STRONG OXIDIZING AGENTS. Stability Condition to Avoid:HIGH HEAT, OPEN FLAMES AND OTHER SOURCES OF IGNITION.
Hazardous Decomposition Products: NONE SPECIFIED BY MANUFACTURER

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

Waste Disposal Methods:ALL RECOVERED MATERIAL SHOULD BE PACKAGED, LABELED, TRANSPORTED, AND DISPOSED OR RECLAIMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS AND IN CONFORMANCE WITH GOOD ENGINEERING PRACTICES.

Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense. The United S tates of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.