Product ID:ALCOHOL USP, ETHYL ALCOHOL, 190 PROOF MSDS Date:01/01/1996 FSC:6505 NIIN:01-276-6152 MSDS Number: CDLQK === Responsible Party === Company Name: AAPER ALCOHOL AND CHEMICAL CO Address:1101 ISAAC SHELBY DR Box:339 City:SHELBYVILLE State:KY ZIP:40066-0339 Country:US Info Phone Num:502-633-0650 Emergency Phone Num:800-424-9300(CHEM TREC) CAGE:61305 === Contractor Identification === Company Name: AAPER ALCOHOL AND CHEMICAL CO Address:1101 ISAAC SHELBY DR Box:339 City:SHELBYVILLE State:KY ZIP:40066-0339 Country:US Phone:502-633-0650 CAGE:61305 Ingred Name: ETHYL ALCOHOL; (ETHANOL) CAS:64-17-5 RTECS #:KQ6300000

Fraction by Wt: 92.42% OSHA PEL:1000 PPM ACGIH TLV:1000 PPM

Ingred Name:WATER CAS:7732-18-5 RTECS #:ZC0110000 Fraction by Wt: 7.58% OSHA PEL:N/K AC

GIH TLV:N/K

Ingred Name:SUPDAT:CNTNRS. WHERE NEC, COLLECT USING ABSORB MEDIA. IN EVENT OF UNCONTROLLED RELS OF MATLS, USER SHOULD (ING 4) RTECS #:9999999ZZ

Ingred Name:ING 3:DETERMINE IF RELEASE IS REPORTABLE UNDER APPLICABLE LAWS & REGULATIONS. RTECS #:99999992Z

Ingred Name:OTHER PREC:LEAKAGE INSPECTIONS SHOULD BE DONE. AUTOMATIC SPRINKLER SYS SHOULD BE PROVIDED. ISOLATE FROM (ING 6) RTECS #:9999999ZZ

Ingred Name:ING 5:OXIDIZERS, CHEMS CAPABLE OF SPONT HEATING, MATLS REACTI

NG W/AIR OR MOISTURE TO LIBERATE HEAT, IGNIT SOURCES(ING 7) RTECS #:99999992Z

Ingred Name:ING 6:& EXPLOS. CONSULT LOC FIRE CODES FOR ADDNL STOR INFO. WHEN CONTENTS ARE BEING TRANSFERRED, METALLIC CNTNR (ING 8) RTECS #:99999992Z

Ingred Name:ING 7:MUST BE BONDED TO RECEIVING CNTNR & GROUNDED TO AVOID STATIC DISCHARGES. NEVER USE PRESS TO EMPTY. REPLACE (ING 9) RTECS #:9999999ZZ

Ingred Name:ING 8:CLOSURE SECURELY AFTER EACH OPENING. KEEP MATL PACKAGED IN DRUMS/BOTTLES OUT OF SUN & AW AY FROM HEAT. (ING 10) RTECS #:9999999ZZ

Ingred Name:ING 9:REMOVE CLOSURE CAREFULLY; INTERNAL PRESS MAY BE PRESENT. KEEP CLOSURE ON TO PVNT LEAKAGE. CNTNR HAZ WHEN (ING 11) RTECS #:9999999ZZ

Ingred Name:ING 10:EMPTY. SINCE EMPTIED CNTNRS RETAIN RESIDUAL PROD (VAP & LIQ), ALL PRECS DESCRIBED ON THIS MSDS MUST BE (ING 12) RTECS #:9999999ZZ

Ingred Name:ING 11:OBSERVED. CAUTION:FOR MANUFACTURING, PROCESSING, REPACKAGING OR INDUSTRIAL USE. NOT FOR HOUSEHOLD USE. RTECS #:9999999ZZ

Ingr

ed Name:OTHER PROT EQUIP:OF THE ANTICIPATED EXPOSURE IF THERE IS POTENTIAL FOR PROLONGED OR REPEATED SKIN CONTACT. RTECS #:9999999ZZ

LD50 LC50 Mixture: NONE SPECIFIED BY MANUFACTURER. Routes of Entry: Inhalation: YES Skin: YES Ingestion: YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic: INHALATION: EXPOSURE TO >1000 PPM MAY CAUSE HEADACHE, DROWSINESS AND LASSITUDE, LOSS OF APPETITE AND INABILITY TO CONCENTRATE. IRRITATION OF THROAT. INGESTION:CAN CAUSE DEPRESSION OF CENTRAL NERVOUS SY STEM, NAUSEA, VOMITING, DIARRHEA. EYE CONTACT: LIQUID OR VAPOR MAY CAUSE IRRITATION. SKIN CONTACT: MAY (EFTS OF OVEREXP) Explanation of Carcinogenicity:NOT RELEVANT Effects of Overexposure: HLTH HAZ: CAUSE IRRITATION AND DEFATTING ON PROLONGED CONTACT. ETHYL ALCOHOL: FLAMMABLE/NERVOUS SYSTEM DEPRESSANT. Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER. First Aid:INGEST:IF VICTIM IS CONSCIOUS & ABLE TO SWALLOW, HAVE VICTIM DRINK WATER/MILK TO DILUTE. NEVER GIVE ANYTHING BY MOUTH IF VICTIM IS UNCON/HAVING CONVLS. CALL MD/CHEMTREC (POIS CTL) IMMED. INDUCE VOMIT ONLY IF ADVISED BY MD/CHEM (POIS CTL). INHAL: IMMED REMOVE VICTIM TO FRESH AIR. IF VICTIM HAS STOPPED BRTHG, GIVE ARTF RESP, PREF MOUTH-TO-MOUTH. GET MED ATTN IMMED. SKIN: IMMED FLUSH AFFECTED (SUP DAT) Flash Point Method:TCC Flash Point:56.0F,13.3C Lower Limits: 3.3% Upper Limits:19%

Extinguishing Media:USE DRY CHEM, "ALCOHOL" FOAM/CARBON DIOXIDE; WATER MAY BE INEFT, BUT SHOULD BE USED TO KEEP FIRE-EXPOSED CNTNRS COOL. Fire Fighting Procedures:USE NIOSH APPRVD SCBA & FULL PROT EQUIP . IF LEAK/SPILL HAS NOT IGNITED, USE WATER SPRAY TO DISPERSE VAPS & TO PROT MEN ATTEMPTING TO STOP LEAK. (SUPDAT) Unusual Fire/ Explosion Hazard:NONE SPECIFIED BY MANUFACTURER.

Spill Release Procedures: AVOID UNCONTROLLED RELS OF THIS MATL. WHERE SPILLS ARE POSS, COMPREHENSIVE SPILL RESPONSE PLAN SHOULD BE DEVEL & IMPLEMENTED. WEAR APPROP NIOSH APPRVD RESP PROT & PROT CLTHG AS DESCRIBED IN EMPLOYEE P ROT SECTION. CNTN SPILLED MATL. TRANSFER (SUPDAT)

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

====== Handling and S

Handling and Storage Precautions: PROT CNTNR AGAINST PHYSICAL DMG. DETACHED/OUTSIDE STOR IS PREF. INSIDE STOR SHOULD BE IN NFPA APPRVD FLAMM LIQ STOR ROOM/CABINET.

Other Precautions: ALL IGNIT SOURCES SHOULD BE ELIM. SMOKING SHOULD BE PROHIBITED IN STOR AREAS. ELEC INSTALLATIONS SHOULD BE I/A/W ARTICLE 501 OF NEC. NFPA 30, FLAMM & COMBUST LIQ CODE, SHOULD BE FOLLOWED FOR ALL STOR & HNDLG. FREQUENT CAREFUL (ING 5)

======= Exposure Control

s/Personal Protection ========

Respiratory Protection:WHERE EXPOSURE IS LIKELY TO EXCEED ACCEPTABLE CRITERIA, USE NIOSH APPROVED RESPIRATORY PROTECTION EQUIPMENT. RESPIRATORS SHOULD BE SELECTED BASED ON THE FORM & CONCENTRATION OF CONTAMINANT IN AIR & I/ A/W OSHA (29 CFR 1910.134).

Ventilation: HANDLE IN THE PRESENCE OF ADEQUATE VENTILATION.

Protective Gloves: IMPERVIOUS GLOVES.

Eye Protection: ANSI APPROVED CHEM WORKERS GOGGS .

Other Protective Equipment: ANSI APPRVD EYE WASH FOU

NTAIN & DELUGE

SHOWER . WEAR PROT CLTHG WHICH ARE IMPERVIOUS TO PROD FOR DURATION (ING 13)

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

FIRE FIGHT PROC:WATER SPRAY MAY BE USED TO FLUSH SPILLS AWAY FROM EXPOS & TO DILUTE SPILLS TO NONFLAMM MIXT (NFPA-49 1991). FIRST AID PROC:AREA W/PLENTY OF COOL WATER. REMOVE & WASH CONTAM CLTHG BEFOR E REUSE. GET MED ATTN IMMED. EYES:SHOULD BE FLUSHED FOR AT LST 15 MINS. GET MED ATTN IMMED. SPILL PROC:TO SECURE (ING 3)

Boiling Pt:B.P. Text:173F,78C Melt/Freeze Pt:M.P/F.P Text:-173F,-114C Vapor Pres:44.6 @ 68F Vapor Density:1.59 Spec Gravity:0.8158 Solubility in Water:COMPLETE Appearance and Odor:CLEAR & ODORLESS.

Stability Indicator/Materials to Avoid:YES
CONTACT W/ACETYL CHLORIDE & WIDE RANGE OF OXIDIZING AGENTS MAY REACT VIOLENTLY.
Stability
Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.
Hazardous Decomposition Products:NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods:DISPOSAL MUST BE I/A/W FEDERAL, STATE & LOCAL REGULATIONS . ALL RECOVERED MATL SHOULD BE PACKAGED, LABELED, TRANSPORTED & DISPOSED OF/RECLAIMED IN CONFORMANCE W/APPLIC LAWS & REGS & IN CONFORMAN CE W/GOOD ENGINEERING PRACTICES.

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