Product ID: ETHYL ACETATE 99% MSDS Date:09/02/1998 FSC:6810 NIIN:00-062-6954 Status Code:A MSDS Number: CJDVF === Responsible Party === Company Name: ASHLAND CHEMICAL CO DIV OF ASHLAND OIL INC Address:3849 FISHER RD Box:2219 City:COLUMBUS State:OH ZIP:43216 Country:US Info Phone Nu m:800-274-5263/5147983333 Emergency Phone Num:800-274-5263 Resp. Party Other MSDS Num.:301.0003715-001.001 CAGE:7L600 === Contractor Identification === Company Name: ASHLAND CHEMICAL CO DIV OF ASHLAND OIL INC Address:3849 FISHER RD Box:2219 City:COLUMBUS State:OH ZIP:43216 Country:US Phone:614-790-3333 / 800-325-3751 Contract Num:SP045099M0374 CAGE:7L600 Company Name: LOS ANGELES CHEMICAL CO Address:4545 ARDINE ST Box:1987 **City:SOUTH GATE** State:CA ZIP:90280 Country:US Phone:213-562-9500 CAGE:75656

Ingred Name:ETHYL ACETATE CAS:141-78-6 RTECS #:AH5425000 Minumum % Wt:98. Maxumum % Wt:100. OSHA PEL:1400 MG/M3;400 PPM ACGIH TLV:1440 MG/M3;400 PPM EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:EYE:MAY CAUSE MILD IRRI T.SKIN:MAY

CAUSE MILD IRRIT.PROL/REP CNTACT MAY DRY SKIN.PASSAGE OF MATL INTO BODY THRU SKIN POSSIBLE,BUT UNLIKELY THAT THIS WOULD RESULT IN HARMFUL EFFECTS DURING SAF HNDLG/USE .INGEST:SMALL AMTS DURING NORMAL HNDLG NOT LIKELY TO CAUSE HARMFUL EFFECTS.LG AMTS MAY BE HARMFUL.INHAL:BREATH VAP/MIST POSSIBLE.SM AMTS DURING NORMAL HNDLG NOT LIKELY TO CAUSE HARMFUL EFFECTS.BREATH LG AMTS MAY BE HARMFUL. Explanation of Carcinogenicity:THERES NO INFO AVAI.THE CHANCE THIS MATL

CAUSING CANC IS UNK.MATL NOT LISTED AS CARC BY IARC/NTP/OSHA. Effects of

Overexposure:EYE:STINGING,TEARING,REDNESS.SKIN:REDNESS,BURNING,DRYI KNG,CRACKING.SIGN/SYMPT OF EXPO THRU BREATH/INGEST/PASSAGE OF MATL THRU SKIN MAY INCLUDE:STOMACH OR INTESTINAL

UPSET(NAU, VOMIT, DIARR), IRRIT(NOSE, THROAT, AIRWAYS), CENTRAL NERV SYST DEPRESS(DIZZ, DROWS,

WEAKNESS, FATIGUE, NAU, HEADACHE, UNCONSCIOUSNESS).

Medical Cond Aggravated by Exposure: TARGET ORGANS: OVEREXPO HAS BEEN SUGGESTED AS

CAUSE OF FOLLOWING EFFECTS IN LABORATORY ANIMALS:BLOOD ABNORMALITIES,MALE REPRODUCTIVE EFFECTS.

First Aid:EYE:SYMPT DVLP MOVE TO FRESH AIR.FLUSH GENTLY W/H2O,EYELIDS APART.SYMPT PERSIST/VISUAL DIFF GET MED ATTN.SKIN:REMOVE CONTAM CLOTH.WASH W/SOAP/H2O.SYMPT PERSIST GET MED ATTN. INGEST:GET MED ATTN.DROWSY /UNCONSC DONT GIVE ANYTHING BY MOUTH.PLACE ON LEFT SIDE,HEAD DOWN.CALL DR/MED FAC/POIS CNTRL CNTR FOR ADVICE ABOUT

WHETHER TO INDUCE VOMIT.IF POSSIBLE DONT LEAVE UNATTN.INHAL:SYMPT DVLP MOVE TO FRESH AIR.SYMPT PERSIST GET MED ATTN. BREATH DIFF GIVE OXY.KEEP WARM/QUIET.GET IMMED MED ATTN.NOTE TO DR:PRE-EXISTING DISORDERS OF FOLLOWING ORGANS(ORGAN SYST)MAY BE AGGRAV BY EXPO TO MATL:SKIN,LUNG(FOR EX ASTHMA-LIKE CONDITIONS),BLOOD FORM SYS

Flash Point Method:TCC Flash Point:=-4.4C, 24.1F Autoignition Temp:=485 .C. 905.F Lower Limits:2.2 Upper Limits:10.7 Extinguishing Media: ALCOHOL FOAM, CARBON DIOXIDE, DRY CHEMICAL Fire Fighting Procedures: H2O MAYBE INEFFECTIVE. H20 MAY BE USED TO KEEP FIRE-EXPO CNTNR COOL UNTIL FIRE IS OUT. WEAR SCBA W/FULL FACEPIECE **OPERATED IN POSITIVE PRESSURE DEMAND MODE W/APPRO TURN-OUT GEAR &** CHEM RESISTANT PERSO NAL PROTECTIVE EQMPT. REFER TO PERSONAL PROTECT EQMPT SECT OF MSDS. Unusual Fire/Explosion Hazard: VAPORS ARE HEAVIER THAN AIR & MAY TRAVEL ALONG T HE GROUND OR MAY BE MOVED BY VENTILATION & IGNITED BY PIOLT LIGHTS, OTHER FLAMES, SPARKS, HEATERS, SMOKING, ELECTRIC MOTORS,

LIGHTS, OTHER FLAMES, SPARKS, HEATERS, SMOKING, ELECTRIC MOTORS, STATIC DISCHARGE, OR OTHER I GNITION SOURCES @ LOCATIONS DISTANT FROM MATERIAL HANDLING POINT. SEE OTHER

Spill Release Procedures:SM-ABSORB LIQ ON VERMIC,FLR ABSORB,OTHER ABSORB.LG-REMOVEIGN SOURCE.NOT WEARING PROT EQPMT EXCLUDE FRM SPILL AREA TIL CLEANUP COMPLETE.STOP SPILL @SOURCE. P REVENT ENTER DRAIN,

SEWER, STREAM, BODIES OF H 20. PREVENT SPREAD. RUNOFF OCCURS NOTIFY AUTHOR. PUMP/VAC TRANSF SPILL TO CLEAN CNTNR FOR RECOVERY. ABSORB UNRECOVERABLE PROD TRANSF CONTAM ABSORB, SOIL, MATL TO CNTNR FOR DISPO. (SEE OTHER INFOR).

Handling and Storage Precautions: EMPTY CNTNR MAY BE HAZ.SINCE EMPTY CNTNR RETAIN PROD RESIDUE(VAP,LIQ,&/OR SOLID)ALL HAZ PRECAUT GIVE IN MSDS MUST BE OBSERVED.ALL 5-GALL PAILS/LGER METAL CNTNR INCLUDE

TANK CARS & TANK TRUCKS SHOULD BE GROUNDED &/OR BONDED WHEN MATL TRANSF.WARNING:SUDDEN RELEASE OF HOT ORG CHEM VAP/MIST(SEE SUPPLEM)

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

Respiratory Protection:WORKPLACE EXPO LIMIT EXCEEDED NIOSH/MSHA APPROV AIR SUPPL RSP ADVISED IN ABSENCE OF PROPER ENVIRO CNTRL.OSHA REG ALSO PERMIT OTHER NIOSH/MSHA RESP(NEG PRESS TYP)UNDER SPEC CONDITIONS(SEE YOUR INDUST H YGIENIST).ENGINEERING /ADMIN CNTRL

SHOULD BE IMPLEMENTED TO RED EXPO.

Ventilation: PROVIDE SUFFICIENT MECHANICAL (GENERAL &/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPO BELOW TLV(S).

Protective Gloves: RESISTANT GLOVES (CONSULT YOUR SAF EQPMT SUPPLIER).

Eye Protection: CHEM SPLASH GOGG IAW OSHA REGS.OSHA PERMIT OTHER TYP SAF GLASSES.

Other Protective Equipment: CONSULT YOUR SAFETY RESPRESENTATIVE FOR EYE PROTECTION.

Work Hygienic Practices:LAUNDER CLOTH BEFORE REUSE.TO PREVENT REP/PROL SKIN CONTACT W

EAR IMPERVIOUS CLOTH/BOOTS.

Supplemental Safety and Health

HNDLG CONTD:FRM PROCESS EQPMT OP @HI TEMP/PRESS,SUDDEN INGRESS OF AIR INTO VAC EPQMT MAY RESULT IN IGN W/O IGN SOURCE.PUBLISHE AUTOIGN/IGN TEMP CANT BE TREATED AS SAFE OP TEMP IN CHEM PROCESS W/O ANAL YSIS OF ACTUAL PROCESS CONDTNS.ANY USE IN HI TEMP PROCESS SHOULD BE EVALUA WELL TO ESTABLI/MAINTAIN SAF OP CONDTNS.

HCC:F2 Boiling Pt:=70.C, 158.F Melt/F reeze Pt:=-82.6C, -116.9F Vapor Pres:29.300 @68F Vapor Density:3.00,AIR=1 Volatile Org Content %:100 Spec Gravity:0.902 @68F pH:NO DATA Viscosity:0.5 CPS Evaporation Rate & amp; Reference:5.20 (NBUTYLACETATE) Solubility in Water:MODERATE Appearance and Odor:CLEAR LIQUID, NEAT, COLORLESS,SWEET ESTER ODOR. Percent Volatiles by Volume:100

Stability Indicator/Materials to Avoid:YES AVOID CONTCT WITH STRONG ACIDS, STRONG ALKALIES, S

TRONG OXIDIZING AGENTS.
Hazardous Decomposition Products:MAY FORM:CARBON DIOXIDE AND CARBON MONOXIDE, VARIOUS HYDROCARBONS. HAZ PROD OF COMBUSTION:MAY FORM CARBON DIOXIDE, CARBON MONOXIDE, VARIOUS HYDROCARBONS.
Conditions to Avoid Polymerization: PRODUCT WILL NOT UNDERGO HAZARDOUS POLYMERIZATION.
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Toxicological Information:NO DATA.
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Ecological:N O DATA.
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Waste Disposal Methods: DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, FEDERAL REGULATIONS.
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Transport Information:DOT INFORMATION-49CFR 172.101:DOT DESCRIPTION:ETHYL ACETATE, 3, UN 1173, II. CNTNR/MODE:55 GALL DRUM/TRUCK PACKAGE.RQ:5000 ETHYL ACETATE.
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SARA Title III Information:SARA 302:NONE.SEC 311/312 DEALYED, FIRE.SARA 313 NONE.
Federal Regulatory Information:CERCLA RQ:5000 LBS OF ETHYL ACETATE.THE INTENTIONAL INGREDIENTS OF THIS PRODUCT ARE LISED.
State Regulatory Information:CALIFORNIA PROP 65:FOLLOWING STATEMENT IS MADE IN ORDER TO COMPLY W/CAL SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT OF 1986:THIS PRODUCT CONTAINS FOLLOWING SUBSTANCE(S) KNOWN TO STATE OF CALIFORNIA TO CAUSE
CANCER:ACÈTALDEHYDE. NEW JERSEY RTK LABE

L INFO:ETHYL ACETATE. PENNSYLVANIA RTK LABEL INFO:ACETIC ACID ETHYL ESTER.

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