Product ID:AA 3-007 MSDS Date:01/26/1998

FSC:8010

NIIN:01-441-5938 Status Code:A

MSDS Number: CLMHP === Responsible Party ===

Company Name: ASHLAND CHEMICAL CO

Box:2219

City:COLUMBUS

State:OH

ZIP:43216-2219

Country:US

Info Phone Num:614-790-3333/800-274-5263

Emergency Phone Num:1-800-274-5263

Preparer's Name: ERNE

ST CARTER

Chemtrec Ind/Phone:(800)424-9300

CAGE:34897

=== Contractor Identification ===

Company Name: ASHLAND CHEMICAL CO

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Country:US

Phone:614-790-3333/800-274-5263

CAGE:34897

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

Ingred Name: ALIPHATIC PETROLEUM DISTILLATES

CAS:64742-89-8

Code:F

Minumum % Wt:54. Maxumum % Wt:58.

Ingred Name: ISOBUTYL ISOBUTYRATE

CAS:97-85-8

RTECS #:NQ5250000 Minumum % Wt:18. Maxumum % Wt:22.

Ingred N

ame:ISOPROPANOL CAS:67-63-0 RTECS #:NT8050000 Minumum % Wt:18. Maxumum % Wt:22.

OSHA PEL:980 MG/M3;400 PPM ACGIH TLV:983 MG/M3;400 PPM ACGIH STEL:1230 MG/M3;500 PPM

Ingred Name: ETHYL ACETATE

CAS:141-78-6

RTECS #:AH5425000

Minumum % Wt:2.3

Maxumum % Wt:6.

OSHA PEL:1400 MG/M3;400 PPM ACGIH TLV:1440 MG/M3;400 PPM

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

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Health Hazards Ac

ute and Chronic:EYE: SYMPTOMS INCLUDE STINGING,

TEARING, REDNESS, AND SWELLING OF EYES. SKIN: SYMPTOMS MAY INCLUDE REDNESS, BURNING, DRYING AND CRACKING OF SKIN, AND SKIN BURNS. SWALLOWING: LARGE AMOUNTS MAY BE HAR MFUL. THIS MATERIAL CAN GET INTO THE LUNGS DURING SWALLOWING OR VOMITING. INHALATION: BREATHING LARGE AMOUNTS MAY BE HARMFUL. SYMPTOMS USUALLY OCCUR AT AIR CONCENTRATIONS HIGHER THAN THE RECOMMENDED EXPOSURE LIMITS.

Effects of Overexposure:SIGNS AND SYMPTO

MS OF EXPOSURE TO THIS MATERIAL

THROUGH BREATHING, SWALLOWING, AND/OR PASSAGE OF THIS MATERIAL THROUGH THE SKIN MAY INCLUDE: STOMACH OR INTESTINAL UPSET, NAUSEA, VOMITING, DIARRHEA, IR RITATION, (NOSE, THROAT, AIRWAYS), CENTRAL NERVOUS SYSTEM DEPRESSION (DIZZINESS, DROWSINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE, UNCONSCIOUSNESS), LOW BLOOD PRESSURE, MILD TEMPORARY CHANGES IN THE LI VER, EFFECTS ON HEART RATE, RESPIRATORY DEPRESSION, (SLOWING OF BREATHING), LOSS OF

- COORDINATION, CONFUSION, LUNG EDEMA (FLUID BUILDUP IN THE LUNG TISSUE) KIDNEY DAMAGE AND COMA.
- Medical Cond Aggravated by Exposure:MATERIAL IS ASPIRATION HAZARD.

 DANGER FROM ASPIRATION MUST BE WEIGHED AGAINST ORAL TOXICITY WHEN DECIDING WHETHER TO INDUCE VOMITING.

- First Aid:EYES: MOVE PERSON AWAY TO FRESH AIR. FLUSH GENTLY WITH WATER AT LEAST 15 MINUTES WHILE HOLDING EYELIDS APART. SKIN: REMOVE CONTAMINA
- TED CLOTHING. WASH EXPOSED AREA WITH SOAP AND WATER.
 LAUNDER CLOTHIN G. SWALLOWING: IF INDIVIDUAL IS DROWSY OR
 UNCONSCIOUS, DO NOT GIVE ANYTHING BY MOUTH. PLACE PERSON ON LEFT
 SIDE WITH THE HEAD DOWN. INHALATION: MOVE PERSON INTO FRESH AIR. IF
 BREATHING IS DIFFICULT, A DMINISTER OXYGEN. KEEP PERSON WARM AND
 QUIET.

Flash Point Method:TCC Flash Point:=10.C, 50.F Lower Limits:1.0% Upper Limits:12.0%

Extinguis

hing Media: REGULAR FOAM, CARBON DIOXIDE, DRY CHEMICAL.

- Fire Fighting Procedures:WEAR A SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WITH APPROPRIATE TURN-OUT GEAR AND CHEMICAL RESISTANT PERSONAL PROTECTIVE EQUIPMENT.
- Unusual Fire/Explosion Hazard: VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND OR MAY BE MOVED BY VENTILATION AND IGNITED BY PILOT LIGHTS, OTHER FLAMES, SPARKS, HEATERS, SMOKING, ELECTRIC M
- OTORS, STATIC DISCHARGE, OR OT HER IGNITION SOURCES AT LOCATIONS.

 NEVER USE WELDING TORCH NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT CAN IGNITE EXPLOSIVELY

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

Spill Release Procedures: ABSORB LIQUID ON VERMICULITE, FLOOR ABSORBENT. LARGE SPILL: ELIMINATE IGNITION SOURCES (FLARES, FLAMES INCLUDING PILOT LIGHTS, ELECTRICAL SPARKS). PERSONS NOT WEARING PROTECTIVE EQUIPMENT SHOULD BE EX CLUDED FROM AREA OF SPILL UNTIL

CLEAN-UP HAS BEEN COMPLETED. STOP SPILL AT SOURCE. PREVENT FROM ENTERING DRAINS, SEWERS, STREAMS, OR OTHER WATER BODIES. PREVENT FROM SPREADING. ABSORB UNRECOVERABLE PR
=========== Handling and Storage ============
Handling and Storage Precautions:CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES (VAPOR, LIQUID, AND/OR SOLID), ALL HAZARD PRECAUTIONS GIVEN IN THE DATA SHEET MUST BE OBSERV ED. ALL 5 GALLON PAILS AND LARGER METAL CONTAINERS, INCLUDING TANK CARS AND TANK TRUCKS SHOULD BE GR
====== Exposure Controls/Personal Protection ========
Respiratory Protection:IF WORKPLACE EXPOSURE LIMITS OF PRODUCT OR ANY COMPONENT IS EXCEEDED (SEE EXPOSURE GUIDELINES) A NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED. Ventilation:PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV?S. Protective Gloves: WEAR RESISTANT GLOVES. Eye Protection:CHEMICAL SPLASH GOGGLES IN COMPLIANCE WITH OSHA REGULATIONS ARE ADVISED) Other Protective Equipment:IMPREVIOUS CLOTHING AND BOOTS. Supplemental Safety and Health
========== Physical/Chemical Properties ==========
Boiling Pt:=75.6C, 168.F Vapor Pres:76.000 MMHG @ 58.00 F Vapor Density:.1, AIR=1 Spec Gravity:.782@77.00 F

VOC Pounds/Gallon:782 VOC Grams/Liter:6.51

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Evaporation Rate & Department Reference: SLOWER THAN ETHYL

Stability Indicator/Materials to Avoid:YES ACETALDEHYDE, ACIDS, CHLORINE, ETHYLENE OXIDE ISOCYANATES, STRONG ALKALIES, STRONG OXIDIZING AGENTS. Stability Condition to Avoid:DO NOT USE WITH ALUMINUM EQUIPMENT AT TEMPERATURES ABOVE 120 F Hazardous Decomposition Products:CARBON DIOXIDE AND CARBON MONOXIDE, VARIOUS HYDROCARBONS.
========== Toxicological Information ===========
Toxicological Information:SILICON: LD50 (ORA
L, RAT) 3160 MG/KG. MANGANESE: LD50 (ORAL, RAT) 9,000 MG/KG. IRON: INTRAPERITONEAL RABBIT LDL0: 20 MG/KG - NO TOXIC EFFECT NOTED.
========= Ecological Information ============
Ecological:NOT AVAILABLE
======= Disposal Considerations ==========
Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.
======== MSDS Transport Information ==========
Transport Information: NOT REGULATED.
Transport Infor

ENTORY. CERCLA HAZARDOUS SUBSTANCES: BERYLLIUM, CHROMIUM, CHROMIUM COMPOUNDS, COPPER, LEAD, MANGANESE, NICKEL, ZINC.

State Regulatory Information:PENNSYLVANIA "SPECIAL HAZARDOUS SUBSTANCE": BERYLLIUM, NICKEL, CHROMIUM COMPOUNDS, HEXAVALENT.

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