Product ID:PETROLEUM ETHER(LIGROINE) MSDS Date:08/27/1989 FSC:6810 NIIN:00-051-5872 MSDS Number: BHJLT === Responsible Party === Company Name: VAN WATERS AND ROGERS INC Address:2600 CAMPUS DRIVE Box:5932 **City:SAN MATEO** State:CA ZIP:94403-2522 Country:US Info Phone Num:415-573-8000 OR 714-864-2310(DIST) Emergency Phone Num:415-573-8000 OR 408-435-8700 Preparer's Name:NOT PROVIDED CAGE:0AN91 === Contractor Identification === Company Name: CHEMICAL COMMODITIES AGENCY, INC. Address:27447 PACIFIC STREET Box:City:HIGHLAND State:CA ZIP:92346-2640 Country:US Phone:909-864-2310 CAGE:60777 Company Name: VAN WATERS AND ROGERS Address:2256 JUNCTION AVE **City:SAN JOSE** State:CA ZIP:95131 Country:US Phone:408-435-8700/800-424-9300(CHEMTREC) CAGE:0AN91

======== Composition/Information on I

Ingred Name:PENTANE CAS:109-66-0 RTECS #:RZ9450000 Fraction by Wt: 72.8% OSHA PEL:1000 PPM/750 STEL ACGIH TLV:600 PPM/750STEL;9293

Ingred Name:2-METHYL PENTANE CAS:107-83-5 RTECS #:SA2995000 Fraction by Wt: 2.3% OSHA PEL:500 PPM/1000 STEL ACGIH TLV:500 PPM/1000STEL8990

Ingred Name:3-METHYL PENTANE CAS:96-14-0 RTECS #:SA2995500 Fraction by Wt: 5.4% OSHA PEL:500 PPM/1000 STEL ACGIH TLV:500 PPM/1000STEL8990

Ingred Name:CYCLOPENTANE CAS:287-92-3 RTECS #:GY2390000 Fracti on by Wt: 2.5% OSHA PEL:600 PPM ACGIH TLV:600 PPM; 9192

Ingred Name:2,2-DIMETHYL BUTANE CAS:75-83-2 RTECS #:EJ9300000 Fraction by Wt: 3.5% OSHA PEL:500 PPM/1000 STEL ACGIH TLV:500 PPM/1000STEL8990

Ingred Name:2,3-DIMETHYL BUTANE CAS:79-29-8 RTECS #:EJ9350000 Fraction by Wt: 3.4% OSHA PEL:500 PPM/1000 STEL ACGIH TLV:500 PPM/1000STEL8990

Ingred Name:ISOPENTANE CAS:78-78-4 RTECS #:EK4430000 Fraction by Wt: 1.7%

Ingred Name:CIS-2-PENTENE CAS:627-20-3 Fraction by Wt: 0.1%

Ingred Name: HEXANE (N-H

EXANE) CAS:110-54-3 RTECS #:MN9275000 Fraction by Wt: 0.2% **OSHA PEL:500 PPM** ACGIH TLV:50 PPM; 9293 EPA Rpt Qty:1 LB DOT Rpt Qty:1 LB Ingred Name: OTHER COMPONENTS (TYPE NOT SPECIFIED) Fraction by Wt: 0.1% LD50 LC50 Mixture:LD50 (ORAL RAT) :28,700 MG/KG Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:ACUTE:IRRITATION OF EYES, SKIN ,RESPIRATORY OR G.I.TRACTS;CNS EFFECTS LIKE HEADACHE, DIZZINESS, NAUSEA, VOMITING AND POSSIBLE UNCONSCIOUSNESS; CHRONIC: DRYING OF SKIN, DEFATTING OR DERMATITIS POSSIBLE CNS DAM AGE OR KIDNEY FAILURE. Explanation of Carcinogenicity:DATA PER MSDS Effects of Overexposure: SEE HEALTH HAZARDS DATA. Medical Cond Aggravated by Exposure:NONE SPECIFIED;PERSONS WITH A HISTORY OF AILMENTS OR WITH A PRE-EXISTING DISEASE INVOLVING THE EYES, SKIN, OR RESPIRATORY TRACT MAY BE AT INCREASED RISK FR OM EXPOSURE. First Aid:INHALATION:REMOVE TO FRESH AIR. RESUSCITATE IF NOT BREATHING. GET MEDICAL ATTENTION. EYES: IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR 15 MINUTES HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN:REMOVE CONTAMINATED CLOTHING. WASH WITH SOAP AND WATER. IF IRRITATION PERSISTS, GET MEDICAL ADVICE. INGESTION:DO NOT INDUCE VOMITING, GIVE NOTHING BY MOUTH IF UNCONSCIOUS, GET IMMEDIATE MEDICAL ATTENTION. Flash Point Method:TCC Flash Point:=-45.4C, -50.F Lower Limits:1.1 Upper Limits:5.9 Extinguishing Media: USE CARBON DIOXIDE, FOAM, DRY CHEMICAL DO NOT USE WATER. Fire Fighting Procedures: FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE. Unusual Fire/Explosion Hazard: VAPORS MAY EXPLOD

E OR IGNITE;FIRE OR EXCESSIVE HEAT MAY CAUSE PRODUCTION OF HAZARDOUS DECOMPOSITION PRODUCTS.AVOID OPEN FLAMES OR SPARKS.

Spill Release Procedures:USE PROPER PERSONAL PROTECTION;REMOVE ALL IGNITION SOURCES;CONTAIN FREE MATERIAL IF POSSIBLE;USE SUITABLE INERT ABSORBENT MATERIAL AND RECOVER FOR PROPER DISPOSAL IN AN APPROVED CONTAINER.MATERIAL IS HIGHLY FLAMMABLE,USE NECESSARY PRECAUTIONS. Neutralizing Ag ent:NOT APPLICABLE.

Handling and Storage Precautions:STORE IN A COOL, DRY, WELL VENTILATED AREA. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. PROTECT CONTAINERS FROM PHYSICAL DAMAGE.

Other Precautions:DO NOT TAKE INTERNALLY. DO NOT BREATHE MIST. AVOID PROLONGED OR REPEATED BREATHING OF VAPOR. AVOID CONTACT WITH EYES. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING.DO NOT CUT,WELD OR G RIND/

DRILL.

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

Respiratory Protection: USE NIOSH/MSHA APPROVED RESPIRATOR FOR ORGANIC VAPORS/MIST AS REQUIRED IF ABOVE PEL/TLV OR SCBA IN AN ENCLOSED AREA.

Ventilation:LOCAL/GENERAL TO MAINTAIN PEL/TLV.

Protective Gloves: NEOPRENE, NITRILE, OR NATURAL RUBBER

Eye Protection: SAFETY GOGGLES WITH OPTIONAL FACE SHIELD

Other Protective Equipment: EYE WASH STATION AND SAFETY SHOWER, WORK

CLOTHING AND APRON 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 PROLONGED OR REPEATED EXPOSURE. DO NOT GET ON SKIN OR IN EYES. DO NOT BREATHE VAPORS OR MISTS.EMPTY CONTAINERS MAY CONTAIN SOME RESIDUE, HANDLE CAREFULLY AS HIGHLY FLAMMABLE.

HCC:F2 NRC/State Lic Num:NOT RELEVANT Boiling Pt:=36.1C, 97.F Vapor Pres:760 MMHG Vapor Density:2.5 Spec Gravity:O.64 Evaporation Rate & amp; Reference:>1.0(N-BUTYL ACETATE = 1) Solubility in Water:NEGLIGIBLE Appearance and Odor:COLORLESS LIQUID

Stability Indicator/Materials to Avoid:YES ACIDS,STRONG OXIDIZING AGENTS,OXYGEN. Stability Condition to Avoid:HIGH TEMPERATURES, SPARKS, AND OPEN FLAMES Hazardous Decomposition Products:CARBON MONOXIDE AND CARBON DIOXIDE.

Waste Disposal Methods:CONSULT LOCAL AUTHORITIES.DISPOSAL MUST BE MADE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

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