Product ID:PETROLEUM ETHER MSDS Date:02/29/1996 FSC:6810 NIIN:00-584-3079 Status Code:A MSDS Number: CJCWX === Responsible Party === Company Name: HOME OIL CO Address:3511 N OHIO Box:2609 **City:WICHITA** State:KS ZIP:67201 Country:US Emergency Phone Num:1-800-633-8253 (PERS) CAGE:0A9L8 === Contractor Identification === Company Name: HOC INDUSTRIES, INC Address:3511 N. OHIO Box:2609 City:WICHITA State:KS ZIP:67219 Country:US Phone:316-838-4663 Contract Num:SP0450-98-M-CL62 CAGE:0A9L8 Ingred Name:N-PENTANE CAS:109-66-0 RTECS #:RZ9450000 = Wt:72.8 OSHA PEL:2950 MG/M3;1000 PPM ACGIH TLV:1770 MG/M3;600 PPM ACGIH STEL:2210 MG/M3;750 PPM Ingred Name:2-METHYLPENTANE CAS:107-83-5 RTECS #:SA2985000 = Wt:2.3

Ingred Name:3-METHYLPENTANE CAS:96-14-

0 = Wt:5.4

Ingred Name:CYCLOPENTANE CAS:287-92-3 RTECS #:GY2390000 = Wt:2.5 ACGIH TLV:1720 MG/M3;600 PPM

Ingred Name:2,2-DIMETHYLBUTANE CAS:75-83-2 RTECS #:EJ9300000 = Wt:3.5

Ingred Name:2,3-DIMETHYLBUTANE CAS:79-29-8 RTECS #:EJ9350000 = Wt:3.4

Ingred Name:ISOPENTANE CAS:78-78-4 RTECS #:EK4430000 = Wt:1.7

Ingred Name:CIS-2-PENTENE CAS:627-20-3 = Wt:.1

Ingred Name:N-HEXANE CAS:110-54-3 RTECS #:MN9275000 = Wt:.2 OSHA PEL:1800 MG/M3;500 PPM EPA Rpt Qty:1 LB DOT Rpt Qty:1 LB

Ingred Name:UNIDE NTIFIED = Wt:.1

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:ACUTE- EYES: MAY CAUSE SLIGHT IRRITATION INCLUDING PAIN, INFLAMMATION OF THE IRIS AND MUCOUS MEMBRANES, REDNESS, AND TEARING. SKIN: MAY CAUSE DEFATTING RESULTING IN DRYING, REDNESS, SWELLING, AND POS SIBLY BLISTERING. INHALATION: MAY CAUSECENTRAL NERVO US DEPRESSION, UNCONSCIOUSNESS

AND DEATH. INGESTION: MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION, HEMORRHAGING OF MUCOUS MEMBRANES, DIARRHEA, OR A SPIRATION OF THE LIQUID RESULTING IN CHEMICAL PNEUMOCONIOSIS. CHRONIC: MAY CAUSE NEPHROTOXIN.

Explanation of Carcinogenicity: THIS PRODUCT IS NOT CURRENTLY LIST AS A CARCINOGEN BY OSHA, IARC, OR NTP.

Effects of Overexposure:HEADACHE, DIZZINESS, DISORIENTATION, EXCITEMENT, DROWSINESS, INCOORDINATION, HYPERSENSITIVITY, TREMORS,

HYPERACTIVITY, UNCONSCIOUSNESS, COMA.

First Aid:EYES: FLUSH THOROUGHLY WITH WATER FOR AT LEAST 15 MIN. GE MEDICAL ATTENTION. SKIN: WASH EXPOSED AREA WITH SOAP AND WATER. IF IRRITATION DEVELOPS, SEEK MEDICAL ATTENTION. INGESTION: DO NOT INDUCE VOM ITING. CALL A DOCTOR IMMEDIATELY. A PHYSICIAN MAY, AT HIS DISCRETION, PERFORM GASTRIC LAVAGE USING A CUFFED ENDOTRACHEAL TUBE. INHALATION: REMOVE PATIENT TO

FRESH AIR. IF NOT BREATHING, GIVE MOUTH-TO -MOUTH ARTIFICIAL RESPIRATION. NOTE: IF ILLNESS OR ADVERSE SYMPTOMS DEVELOP, SEEK MEDICAL ATTENTION.

Flash Point Method:TCC

Flash Point:=-45.6C, -50.F

Lower Limits:1.1

Upper Limits:5.9

Extinguishing Media:USE DRY CHEMICAL, FOAM, OR CARBON DIOXIDE. WATER FOG OR SPRAY SHOULD BE USED TO KEEP FIRE-EXPOSED CONTAINERS COOL. DO NOT SPRAY WATER DIRECTLY ON FIRE.

Fire Fightin

g Procedures: PRODUCT WILL FLOAT AND COULD BE REIGNITED ON SURFACE OF WATER. PROVIDE PROPER PROTECTION FOR THE PERSONS ATTEMPTING TO STOP THE LEAK AND/OR FIRE.

Unusual Fire/Explosion Hazard:EXTREMELY FLAMMABLE! KEEP CONTAINERS TIGHTLY CLOSED. EXPLOSIVE AIR-VAPORS MIXTURES MAY OCCUR. HIGHLY FLAMMABLE VAPORS WHICH ARE HEAVIER THAN AIR MAY ACCUMULATE IN LOW AREAS AND/OR SPREAD ALONG GROUND AWAY FROM HANDLING SITE TO SOURCES OF IGNITION AND THEN FLASH BACK.

Spill Release Procedures: ELIMINATE ALL IGNITION SOURCES INCLUDING INTERNAL COMBUSTION ENGINES AND POWER TOOLS. VENTILATE AREA. AVOID BREATHING VAPOR. USE SUPPLIED-AIR MASK FOR LARGE SPILLS OR IN CONFINED AREAS. CONTAIN SPILL. REMOVE WITH DRY, INERT ABSORBENT. AVOIDCONTACT WITH EYES. AVOID ALLOWING PRODUCT FROM ENTERING STREAMS OR SEWERS.

Handling and Stor

age Precautions: FLAMMABLE. KEEP AWAY FROM HEAT,

SPARKS, AND FLAME. KEEP CONTAINER CLOSED. AVOID CONTACT WITH EYES AND PROLONGED CONTACT WITH SKIN. USE ONLY IN WELL VENTILATED AREAS. AVOID PROLONGED BREATHING OF VAPO R OR MIST. KEEP HEAD AWAY FROM CONTAINERWHEN OPENING OR DISPENSING. DO NOT MIX WITH OXIDIZERS. Other Precautions:DANGER! FLAMMABLE. CAUSES MILD IRRITATION TO THE EYES. MAY CAUSE IRRITATION TO SKIN.

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

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Respiratory Protection: IF VAPOR, MIST OR DUST IS GENERATED IN EXCESS OF PERMISSIBLE CONCENTRATIONS USE RESPIRATOR APPROVED BY MSHA OR NIOSH.

Ventilation:LOCAL EXHAUST VENTILATION RECOMMENDED. Protective Gloves:USE GLOVES IMPERVIOUS TO THE MATERIAL BEING USED. Eye Protection:CHEMICAL TYPE GOGGLES. DO NOT WEAR CONTACT LENSES. Other Protective Equipment:DO SPECIAL GARMENTS REQUIRED. Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING. Supplemental Safety and Health NONE

HCC:F2 Boiling Pt:B.P. Text:99-133F Vapor Pres:13.8 PSI AT 100 DEGREE Vapor Density:2.5 Spec Gravity:0.643 @ 60 DEGREE F pH:N.A. Viscosity:N.E. Evaporation Rate & amp; Reference:(BU-ACETRATE =1) >1 Solubility in Water:NEGLIGIBLE Appearance and Odor:CLEAR, MILD GASOLINE ODOR Percent Volatiles by Volume:100

Hazardous Decomposition Products: CARBON OXIDES AND VARIOUS HYDRO

CARBONS MAY BE FORMED ON BURNING.

Waste Disposal Methods:INCINERATE OR OTHERWISE MANAGE IN RCRA PERMITTED WASTE MANAGEMENT FACILITY.

Transport Information:TRANSPORT, HANDLE, AND STORE IN ACCORDANCE WITH OSHA REGULATION 1910.106 AND APPLICABLE DOT REGULATIONS. GROUND AND ELECTRICALLY INTERCONNECT CONTAINERS FOR TRANSFER. USE SPARK PROOF T

OOLS.

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