

EQUILON ENTERPRISES LLC -- MEROPA 68, 02319 -- 9150-00-023-5249

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Product Identification  
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Product ID:MEROPA 68, 02319

MSDS Date:01/04/1999

FSC:9150

NIIN:00-023-5249

MSDS Number: CJTVT

=== Responsible Party ===

Company Name:EQUILON ENTERPRISES LLC

Box:674414

City:HOUSTON

State:TX

ZIP:77267-4414

Country:US

Info Phone Num:877-276-7285

Emergency Phone Num:877-276-7283

Resp. Party Other MSDS

Num.:GEN05ET

Chemtrec Ind/Phone:(800)424-9300

CAGE:1D3L3

==== Contractor Identification ====

Company Name:EQUILON ENTERPRISES LLC

Address:1100 LOUISIANA SUITE 2200

Box:City:HOUSTON

State:TX

ZIP:77002

Country:US

Phone:614-886-7508

CAGE:1D3L3

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Composition/Information on Ingredients  
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Ingred Name:PRODUCTS REPRESENTED BY MSDS MAY CONTAIN ONE OR MORE OF  
INGREDIENTS 2-6 IN THE CONCENTRATION RANGES LISTED

Ingred Name:MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HE  
AVY

PARAFFINIC (SEVERE SOLVENT-REFINING AND/OR HYDROTREATMENT);  
(SOLVENT-DEWAXED HEAVY PARAFFINIC PETROLEUM DISTILLATES)

CAS:64742-65-0

RTECS #:PY8038501

Minumum % Wt:49.99

Maxumum % Wt:79.99

Ingred Name:RESIDUAL OILS (PETROLEUM), HYDROTREATED

CAS:64742-57-0

Minumum % Wt:10.

Maxumum % Wt:99.99

Ingred Name:SOLVENT DEASPHALTED RESIDUAL OIL (PETROLEUM)

CAS:64741-95-3

Minumum % Wt:20.

Maxumum % Wt:79.99

Ingred Name:MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATMENT (SEVERE)  
HEAVY PAR

AFFINIC; (HYDROTREATED HEAVY PARAFFINIC PETROLEUM  
DISTILLATES)

CAS:64742-54-7

RTECS #:PY8035501

Minimum % Wt:20.

Maximum % Wt:34.99

ACGIH TLV:5 MG/M3

Ingredient Name:ASPHALT

CAS:8052-42-4

RTECS #:CI9900000

Minimum % Wt:35.

Maximum % Wt:49.99

OSHA PEL:see Table Z-2

ACGIH TLV:5 MG/M3

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingredient Name:TOLUENE

CAS:108-88-3

RTECS #:XS5250000

Minimum % Wt:.01

Maximum % Wt:.09

OSHA PEL:see Table Z-2

ACGIH TLV:188 MG/M3;50 PPM

Ingredient Name:ISOPROPYL ALCOHOL

CAS:67-

63-0

RTECS #:NT8050000

OSHA PEL:980 MG/M3;400 PPM

ACGIH TLV:983 MG/M3;400 PPM

ACGIH STEL:1230 MG/M3;500 PPM

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

LD50 LC50 Mixture:LD50: (ORAL, RAT) >5 G/KG (SIMILAR PROD)

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:ACUTE: EYES:MAY CAUSE MINIMAL IRRIT,  
EXPERIENCED AS TEMPORARY DISCOMFORT. SKIN: BRIEF CONTACT IS NOT  
IRRIT. PRLN

GD CONTACT, AS W/CLTHG WETTED W/MATL, MAY CAUSE DEFAT OF SKIN OR IRRIT, SEEN AS LOCAL REDNESS W/POSS MILD DISCOMFORT. OTHER THAN POTNTL SKIN IRRIT EFTS NOTED ABOVE, ACUTE (SHORT TERM) ADVERSE EFTS ARE NOT EXPECTED FROM BRIEF SKIN CONTACT; SEE OTHER EFTS, BELOW & SECTION 11 FOR INFO REGARDING POTNTL LONG TERM EFTS. INHAL: VAPS/MIST, IN EXCESS OF PERMISSIBLE CONCS, OR IN UNUSUALLY HIGH CONCS GENERATED FROM SPRAYING, HEATING MATL OR AS FROM EXPOS IN POORLY VENTD AREAS

OR CONFINED SPACES, MAY CAUSE IRRIT OF (EFTS OF OVEREXP)

Effects of Overexposure:HLTH HAZS: NOSE & THROAT, HDCH, NAUS & DROW. INGEST: IF MORE THAN SEVERAL MOUTHFULS SWALLOWED, ABDOMINAL DISCOMFORT, NAUS & DIARR MAY OCCUR. SENSIT PROPERTIES: UNKNOWN. TOLUENE APPEARS ON THE NAVY LIST OF OCCUP CHEM REPRO HAZS. SEEK CONSULTATION FROM APPROP HEALTH PROFESSIONALS CONCERNING LATEST HAZ LIST INFO & SAFE HNDLG & EXPOS INFO. NO ADVERSE EFTS DOCUMENTED IN HUMANS AS RSLT OF C

HRONIC EXPOS. SECTION 11 MAY CONTAIN APPLIC ANIMAL DATA. OTHER REMARKS: WHEN OVERHEATED, PROD MAY RELEASE HYDROGEN SULFIDE (H<sub>2</sub>S) GAS. H<sub>2</sub>S CONCS ABOVE PERMISSIBLE CONCS CAN CAUSE IRRIT OF EYES & RESP TRACT, HDCH, DIZZ, NAUS, VOMIT, (SUPDAT)

Medical Cond Aggravated by Exposure:BECAUSE OF ITS DEFATTING PROPERTIES, PROLONGED AND REPEATED SKIN CONTACT MAY AGGRAVATE AN EXISTING DERMATITIS (SKIN CONDITION).

===== First Aid Measures =====

First Aid:EYES: FLUSH EYES W/PLENTY OF WATER FOR AT LEAST 15 MINUTES. GET MED ATTN IF EYE IRRIT PERSISTS. SKIN: WASH SKIN W/PLENTY OF SOAP & WATER FOR SEVERAL MINUTES. GET MED ATTN IF SKIN IRRIT DEVELOPS OR PERSISTS. INGEST: IF MORE THAN SEVERAL MOUTHFULS OF THIS MATERIAL ARE SWALLOWED, GIVE TWO GLASSES OF WATER (16 OZ). GET MED ATTN. INHAL: IF IRRIT, HDCH, NAUS OR DROW OCCURS, REMOVE TO FRESH AIR. GET MED ATTN IF BRTHG BECOMES DFCLT OR RESP IRRIT PERSISTS. OTHER INSTRUCTIONS: REMOVE & DRY-CLEAN OR LAUNDRER CLTHG SOAKED OR SOILED W/THIS MATL BEFORE REUSE. DRY CLEANING OF CONTAM CLTHG MAY BE (SUPDAT)

===== Fire Fighting Measures =====

Flash Point Method:COC  
Flash Point:=212.8C, 415.F  
415-480F  
Lower Limits:NOT DETERM  
Upper Limits:NOT DETERM  
Extinguishing Media:USE WATER SPRAY, DRY CHEMICAL, FOAM OR CARBON DIOXIDE TO EXTINGUISH FLAMES.  
Fire Fighting Procedures:USE NIOSH APPROVED SCBA AND FULL PROTECTIVE EQUIP

MENT . USE WATER SPRAY TO COOL FIRE-EXPOSED CONTAINERS. WATER OR FOAM MAY CAUSE FROTHING.

Unusual Fire/Explosion Hazard:HYDROGEN SULFIDE (H2S) MAY BE RELEASED IF OVERHEATED.

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

Spill Release Procedures:(TRANSPORTATION SPILLS: CHEMTREC 800-424-9300) VENT AREA. AVOID BRTHG VAPOR. WEAR APPROP PERSONAL PROT EQUIP INCLUDING APPROP NIOSH APPRVD RESP PROT. CONTAIN SPILL IF POSS. WIPE UP OR ABSORB ON SUITABLE MATL & SHOVEL UP. PREVENT ENTRY INTO SEWERS & WATERWAYS. AVOID CONTACT W/SKIN, EYES OR CLTHG. IF MORE THAN 5,208,333 LBS OF PROD IS SPILLED, THEN REPORT SPILL (OTHER INFO)

===== Handling and Storage =====

Handling and Storage Precautions:MINIMUM FEASIBLE HANDLING TEMPERATURES SHOULD BE MAINTAINED. PERIODS OF EXPOSURE TO HIGH TEMPERATURES SHOULD BE MINIMIZED. WATER CONTAMINATION SHOULD BE AVOIDED.

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

Respiratory Protection:AIRBORNE CONCS SHOULD BE KEPT TO LOWEST LEVELS POSS. IF VAP, MIST OR DUST IS GENERATED & OCCUP EXPOS LIMIT OF PROD, OR ANY COMPONENT OF PROD IS EXCEEDED, USE APPROP NIOSH APPRVD AIR PURIFYING OR AIR SUPPLIED RESP AFTER DETERMINING THE AIRBORNE CONC OF THE CONTAMINANT. NIOSH APPRVD AIR SUPPLIED RESPS SHOULD ALWAYS BE WORN (OTHER INFO)

Ventilation:ADEQUATE TO MEET COMPONENT OCCUPATIONAL EXPOSURE LIMITS (SEE INGREDIENT SECTION).

Protective Gloves:IMPERVIOUS GLOVES .

Eye Protection:ANSI APPROVED CHEMICAL WORKERS GOGGLES .

Other Protective Equipment:EYE WASH & DELUGE SHOWER MEETING ANSI DESIGN CRITERIA . WORKERS SHOULD WASH EXPOSED SKIN SEVERAL TIMES DAILY W/SOAP AND WATER. SOILED WORK CLOTHING SHOULD BE LAUNDERED OR DRY-CLEANED.

Supplemental Safety and Health

EFFECTS OF OVEREXP: DIARR & PULM EDEMA. AT CONCS ABOVE 300 PPM, RESP PARALYSIS, CAUSING UNCON & DEATH CAN OCCUR. FIRST AID PROC: MORE EFFECTIVE THAN

NORMAL LAUNDERING. INFORM INDIVIDUALS RESPONSIBLE  
FOR CLEANING OF POTENTIAL HAZS ASSOC W/HNDLG CONTAM CLTHG.

===== Physical/Chemical Properties =====

Boiling Pt:B.P. Text:NOT DETERMINED  
Vapor Pres:NOT DETERMINED  
Vapor Density:NOT DETERM  
Spec Gravity:0.8833-0.9402  
Viscosity:68-3200 CST @ 40C  
Solubility in Water:NOT DETERMINED  
Appearance and Odor:RED LIQUID TO OPAQUE LIQUID WITH GREEN BLOOM; ODOR  
NOT DETERMINED.

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES  
THIS MATERIAL REACTS VIOLENTLY WITH STRONG OXIDIZERS.  
Stability Condition to Avoid:UNDER EXTREME TEMPERATURES OR EXTENDED  
STORAGE PERIODS, HYDROGEN SULFIDE GAS MAY ACCUMULATE IN THE  
HEAD-SPACE OF CONTAINER.  
Hazardous Decomposition Products:TOXIC LEVELS OF CARBON MONOXIDE,  
CARBON DIOXIDE, IRRITATING ALDEHYDES AND KETONES, AND COMBUSTION  
PRODUCT OR COMPOUNDS OF SULFUR (MAY INCLUDE HYDROGEN SULFIDE).

===== Toxicological Information =====

Toxicological Information:ANIMAL TOXICITY DATA: MEDIAN LETHAL DOSE -  
ORAL: LD50 SIMILAR PRODUCT >5 G/KG (RAT) PRACTICALLY NON-TOXIC.  
INHALATION: NOT DETERMINED. DERMAL: LD50 SIMILAR PRODUCT >3 G/KG  
(RABBIT) PRACTICALLY NON-TOX IC. IRRITATION INDEX, ESTIMATION OF  
IRRITATION (SPECIES). SKIN: (DRAIZE) SIMILAR PRODUCT 1000 MG/L  
(RAINBOW TROUT) PRACTICALLY NON-TOXIC. EC50-48 HR SIMILAR PROD  
>1000 MG/L (DAPHNIA MAGNA) PRACTIC  
ALLY NON-TOXIC. EC50-96 HR  
SIMILAR PROD 25 MG/L S ELENASTRUM (CELL DENS.) SLIGHTLY TOXIC.  
LC50-96 HR SIMILAR PROD >1000 MG/L MYSID SHRIMP (MARINE).  
PRACTICALLY NON-TOXIC. LC50-96 HR SIMILAR PROD >1000 MG/L  
SHEEPSHEAD MINNOW (MARINE) PRACTICALLY NON-T OXIC. MOBILITY: NOT  
DETERMINED. PERSISTENCE & BIODEGRADABILITY: THIS PROD IS ESTIMATED  
TO HAVE SLOW (