

EQUILON ENTERPRISES LLC -- 07994 HAVOLINE DEX-COOL EXTENDED LIFE
ANTIFREEZE/COOLANT -- 6850-01-433-8823

===== Product Identification =====

Product ID:07994 HAVOLINE DEX-COOL EXTENDED LIFE ANTIFREEZE/COOLANT

MSDS Date:03/25/1999

FSC:6850

NIIN:01-433-8823

MSDS Number: CJRXY

=== Responsible Party ===

Company Name:EQUILON ENTERPRISES LLC

Address:PRODUCT STEWARDSHIP

Box:674414

City:HOUSTON

State:TX

ZI

P:77267-4414

Country:US

Info Phone Num:877-276-7285

Emergency Phone Num:877-276-7285

Resp. Party Other MSDS Num.:07994ET

Chemtrec Ind/Phone:(800)424-9300

CAGE:3N254

=== Contractor Identification ===

Company Name:EQUILON ENTERPRISES LLC PRODUCT STEWARDSHIP

Address:1111 BAGBY RD RM 4325D

Box:674414

City:HOUSTON

State:TX

ZIP:77267-4414

Country:US

Phone:877-276-7285

CAGE:3N254

Company Name:GIGA INC.

Address:2448 INDUSTRIAL PARK DRIVE

Box:4265

City:MACON

State:GA

ZIP:31208

Country:US

Phone:912-788-24

48

Contract Num:SP0450-99-MNH30

CAGE:8S706

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

Ingred Name:1,2-ETHANEDIOL

CAS:107-21-1

RTECS #:KW2975000

Minumum % Wt:80.

Maxumum % Wt:94.99

ACGIH STEL:C127 MG/M3;C50 PPM

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

Ingred Name:2-ETHYL HEXANOIC ACID

CAS:149-57-5

RTECS #:MO7700000

Minumum % Wt:3.

Maxumum % Wt:9.99

Ingred Name:POTASSIUM HYDROXIDE

CAS:1310-58-3

RTECS #:TT2100000

Minumum % Wt:1.

Maxumum % Wt:2.99

ACGIH STEL:C2 MG/M3

EPA Rpt Q

ty:1000 LBS

DOT Rpt Qty:1000 LBS

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

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

Health Hazards Acute and Chronic:HARMFUL IF SWALLOWED; MAY CAUSE DEATH.

ASPIRATION HAZARD IF SWALLOWED. CAN ENTER LUNGS AND CAUSE DAMAGE.

CAN CAUSE KIDNEY DAMAGE IF SWALLOWED. MAY CAUSE LIVER DAMAGE IF

SWALLOWED. CONTAINS ETHYLENE GL YCOL WHICH MAY CAUSE BIRTH

DEFECTS. CONTAI

NS 2-ETHYLHEXANOIC ACID OR ITS SALT WHICH MAY CAUSE ADVERSE REPRODUCTIVE EFFECTS AND BIRTH DEFECTS. MAY CAUSE EYE IRRITATION. MAY CAUSE SLIGH SKIN IRRITATIO N ON CONTACT. INHALATION OF VAPORS OR MIST MAY CAUSE IRRITATION OF THE NOSE AND THROAT. CHRONIC: REPEATED INGESTION MAY CAUSE KIDNEY DAMAGE.

Explanation of Carcinogenicity:NONE.

Effects of Overexposure:INHALATION: IRRITATION OF NOSE & THROAT, HEADACHE, NAUSEA, DROWSINESS. INGESTION: HEADACHE, WEAKNESS, CONFUSION, DIZ

ZINESS, STAGGERING, SLURRED SPEECH, LOSS OF COORDINATION, FAINTNESS, NAUSEA, VOMITIN G, INCREASED HEART RATE, DECREASED BLOOD PRESSURE, DIFFICULTY BREATHING & SEEING, PULMONARY EDEMA, UNCONSCIOUSNESS, CONVULSIONS, COLLAPSE, COMA. EYES: MILD DISCOMFORT, SLIGHT EXCESS REDNESS. SKIN: DISC OMFORT, LOCAL REDNESS, SWELLING.

Medical Cond Aggravated by Exposure:REPEATED OVEREXPOSURE MAY AGGRAVATE EXISTING KIDNEY DISEASE. BECAUSE OF ITS IRRITATING PROPERTIES, REPEATED SKIN CONT ACT MAY AGGRAVATE AN EXISTING DERMATITIS.

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

First Aid:EYE: IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. HOLD LIDS APART. GET MEDICAL ATTENTION. SKIN: WASH WITH PLENTY OF SOAP & WATER. REMOVE & CLEAN CONTAMINATED CLOTHING. GET MEDICAL ATTENTION IF IRRITATION PERISTS. INGESTION: IF PERSON IS CONSCIOUS & CAN SWALLOW, IMMEDIATELY GIVE 2 GLASSES WATER BUT DO NOT INDUCE VOMITING. GET IMMEDIAT

E MEDICAL ATTENTION. INHALATION:

IF HEADACHE , NAUSEA OR DROWSINESS OCCURS, RREMOVE TO FRESH AIR. GET MEDICAL ATTENTION IF BREATHING BECOMES DIFFICULT OR RESPIRATORY IRRITATION PERSISTS.

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

Flash Point Method:PMCC

Flash Point:=126.7C, 260.F

Autoignition Temp:Autoignition Temp Text:N/D

Lower Limits:N/D

Upper Limits:N/D

Extinguishing Media:WATER SPRAY, DRY CHEMICAL, FOAM, OR CARBON DIOXIDE.

Fire Fighting Procedures:WEAR

FULL PROTECTIVE CLOTHING AND POSITIVE
PRESSURE BREATHING APPARATUS. APPROACH FROM UPWIND TO AVOID VAPORS
AND HAZARDOUS DECOMPOSITION PRODUCTS. USE WATER TO COOL
FIRE-EXPOSED CONTAINERS. WATER OR FOAM MAY CAUSE FROTHING.
Unusual Fire/Explosion Hazard: NONE.

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

Spill Release Procedures: VENTILATE AREA. AVOID BREATHING VAPOR. WEAR
APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT, INCLUDING RESPIRATORY
PROTECTION. CONTAIN SPILL IF POSSIBLE. WIPE UP OR ABSORB ON
SUITABLE MATERIAL & SHOVEL UP. PREVENT ENTRY INTO SEWERS &
WATERWAYS. AVOID CONTACT WITH SKIN EYES OR CLOTHING. IF MORE THAN
5400 LBS IS SPILLED, REPORT SPILL IN ACCORDANCE WITH SARA 304
AND/OR CERCLA 102(A).
Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions: MINIMUM FEASIBLE HANDLING TEMPERATURES
SHOULD BE MINIMIZED. WATER CONTAMINATION SHOULD BE AVOIDED.
STORAGE: PERIODS OF EXPOSURE TO HIGH TEMPERATURES SHOULD BE
MINIMIZED. WATER CONTAMINATION SHOULD BE AVOIDED.
Other Precautions: NONE SPECIFIED BY MANUFACTURER.

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

Respiratory Protection: IF VAPOR/MIST/DUST GENERATED AND OCCUPATIONAL
EXPOSURE LIMIT IS EXCEEDED USE APPROPRIATE NIOSH/MSHA APPROVED AIR
PURIFYING OR AIR SUPPLIED WHICH RESPIRATOR SHOULD ALWAYS BE WORN
WHEN AIRBORNE CONCENTRATION OF CONTAMINANT OR OXYGEN CONTENT IS
UNKNOWN.
Ventilation: ADEQUATE TO MEET COMPONENT OCCUPATIONAL EXPOSURE LIMITS.
Protective Gloves: CHEMICAL RESISTANT GLOVES.
Eye Protection: SAFETY GLASSES, CHEMICAL TYPE GOGGLES, FACE SHIELD.
Other Protective Equipment: COVERALLS OR LAB COATS; BOOTS RESISTANT TO
CHEMICALS AND PETROLEUM DISTILLATES.
Work Hygienic Practices: LAUNDER OR DRY CLEAN WHEN SOILED.
Supplemental Safety and Health
NONE SPECIFIED BY MANUFACTURER.

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

Properties =====

HCC:V5
Boiling Pt:=108.9C, 228.F
Vapor Pres:N/DETERMINED
Vapor Density:2.1(AIR=1)
Spec Gravity:1.13
pH:~99.9
Viscosity:8CST@40C
Solubility in Water:>10
Appearance and Odor:ORANGE LIQUID WITH MILD ODOR

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

Stability Indicator/Materials to Avoid:YES
NONE SPECIFIED BY MANUFACTURER.
Stability Condition to Avoid:NONE.
Hazardous Decomposition Products:TOXIC LEVELS OF VARBON MONOXIDE,CARBON
DIOXIDE,IR
RITATING ALDEHYDES AND KETONES,AND COMBUSTION PRODUCTS OR
COMPOUNDS OF POTASSIUM.

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

Toxicological Information:ORAL: ANIMAL DATA DOES NOT REFLECT HUMAN
TOXICITY. INHALATION: NOT DETERMINED. DERMAL: LD50 BELIEVED TO BE
>1.00-2.00 G/KG (RABBIT) SLIGHTLY TOXIC. IRRITATION INDEX: SKIN:
DRAIZE, BELIEVED TO BE 0.5 0-3.00/8.0 (RABBIT) SLIGHTLY
IRRITATING. EYES: DRAIZE, BELIEVED TO BE 15.00-25.00/100 (RABBITZ)
SL
IGHTLY IRRITATING. SENSITIZATION: NOT DETERMINED. OTHER: ORAL
ADMINISTRATION OF ETHYLENE GLYCOL TO PRE GNANT EXPERMIMENTAL
ANIMALS HAS BEEN SHOWN TO CAUSE BIRTH DEFECTS IN OFFSPRING.
CONTINUOUS INGESTION OF 1%-2% ETHYLENE GLYCOL FOR 2 YEARS PRODUCED
LIVER & KIDNEY DAMAGE.

===== Ecological Information =====

Ecological:AQUATIC TOXICITY: NOT DETERMINED. MOBILITY: NOT DETERMINED.
PERSISTENCE & BIODEGRADABILITY: THIS PRODUCT IS ESTIMATED TO HAVE

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MODERATE (>=30%) RATE OF BIODEGRADATION IN A TEST FOR READY BIODEGRADATION. POTENTIAL FOR BIOACCUMULATION: THIS PRODUCT IS ESTIMATED TO HAVE A LOW POTENTIAL TO BIOCONCENTRATE. NOTE: TO PREVENT CONTAMINATION OF DRINKING WATER SUPPLIES & POISONING OF CHILDREN, AQUATIC LIFE, WILDLIFE, FARM & DOMESTIC ANIMALS, ETHYLENE GLYCOL PRODUCTS SUCH AS USED TO ANTIFREEZE SOLUTION SHOULD NEVER BE DISCARDED ONTO THE GROUND, INTO SURFACE WATERS OR INTO STORM SEWERS.

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===== Disposal Considerations =====

Waste Disposal Methods:THIS PRODUCT HAS BEEN EVALUATED FOR RCRA CHARACTERISTICS AND DOES NOT MEET THE CRITERIA OF A HAZARDOUS WASTE IF DISCARDED IN ITS PURCHASED FORM. UNDER RCRA IT IS THE PRODUCT USER'S RESPONSIBILITY TO DETERMINE AT THE TIME OF DISPOSAL, WHETHER THE PRODUCT MEETS RCRA CRITERIA FOR HAZARDOUS WASTE.

===== MSDS Transport Information =====

Transport Information:US DOT: NOT REGULATED. IMDG: NOT REGULATED. ICAO: NOT REGULATED.

===== Regulatory Information =====

SARA Title III Information:SECTION 302/304 EXTREMELY HAZARDOUS SUBSTANCE: NONE. SECTION 311 HAZARDOUS CATAGORIZATION: ACUTE, CHRONIC. SECTION 313 TOXIC CHEMICAL: 1,2 ETHANEDIOL, CAS# 107-21-1, 80%-94.99%.

Federal Regulatory Information:CERCLA 102(A) HAZARDOUS SUBSTANCES (ALSO US DOT HAZARDOUS SUBSTANCES): 1,2 ETHANEDIOL, CAS# 107-21-1, 80-94.99%, D

OT RQ=5000 LBS; POTASSIUM HYDROXIDE, CAS# 1310-58-3, 1-2.99%, US DOT RQ=1000 LBS; SODIUM HYDROXIDE, CAS# 1310-73-2, 0.01-0.09%, US DOT RQ=1000 LBS. TSCA INVENTORY: THIS PRODUCT, OR ITS COMPONENTS, ARE LISTED ON OR ARE EXEMPT FROM THE TOXIC SUBSTANCE CONTROL ACT (TSCA) CHEMICAL SUBSTANCE INVENTORY. THIS PRODUCT MAY BE SUBJECT TO TSCA SECTION 12(B); CONTAINS: DIETHYLENE GLYCOL MONOBUTYL ETHER.

State Regulatory Information:CALIFORNIA PROPOSITION 65: NONE.

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===== Other Information =====

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