

MATERIAL SAFETY DATA SHEET

EQUILON MSDS: 07998ET 11/07/99

TEXACO EXTENDED LIFE PREDILUTED 50/50 COOLANT/AF

TELEPHONE NUMBER:

24 HOUR EMERGENCY ASSISTANCE

EQUIVA SERVICES: 877-276-7283

CHEMTREC: 800-424-9300

GENERAL MSDS ASSISTANCE

877-276-7285

NAME AND ADDRESS:

EQUILON ENTERPRISES LLC

PRODUCT STEWARDSHIP

P.O. BOX 674414

HOUSTON, TX 77267-4414

LEGEND:

N.D. - NOT DETERMINED

N.A. - NOT APPLICABLE

N.T- NOT TESTED

< - LESS THAN

> - GREATER THAN

1. NAME

MATERIAL IDENTITY

Product Code and Name:

07998 TEXACO EXTENDED LIFE PREDILUTED 50/50 COOLANT/AF

Chemical Name and/or Family or Description:

Antifreeze

2. COMPOSITION/INFORMATION ON INGREDIENTS

THE CRITERIA FOR LISTING COMPONENTS IN THE COMPOSITION SECTION IS AS FOLLOWS: CARCINOGENS ARE LISTED WHEN PRESENT AT 0.1 % OR GREATER; COMPONENTS WHICH ARE OTHERWISE HAZARDOUS ACCORDING TO OSHA ARE LISTED WHEN PRESENT AT 1.0 % OR GREATER; NON-HAZARDOUS COMPONENTS ARE LISTED AT 3.0 % OR GREATER. THIS IS NOT INTENDED TO BE A COMPLETE COMPOSITIONAL DISCLOSURE. REFER TO SECTION 14 FOR APPLICABLE STATES' RIGHT TO KNOW AND OTHER REGULATORY INFORMATION.

Product and/or Component(s) Carcinogenic According to:

OSHA IARC NTP OTHER NONE

X

Composition: (Sequence Number and Chemical Name)

Seq. Chemical Name	CAS Number	Range in %
01 Water deionized	7732-18-5	50.00-64.99
02 * 1,2 ethanediol	107-21-1	35.00-49.99
03 * Hexanoic acid, 2-ethyl-, potassium salt	3164-85-0	1.00-2.99

PRODUCT IS HAZARDOUS ACCORDING TO OSHA (1910.1200).

* COMPONENT IS HAZARDOUS ACCORDING TO OSHA.

Exposure Limits referenced by Sequence Number in the Composition Section

Seq. Limit

02	50	ppm CEILING-OSHA
02	39.4	ppm CEILING-ACGIH (AEROSOL) (A4)

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Appearance:

Red liquid

Odor:

Mild odor

WARNING STATEMENT

WARNING !

HARMFUL IF SWALLOWED

MAY CAUSE DIZZINESS AND DROWSINESS

MAY CAUSE EYE IRRITATION

ASPIRATION HAZARD IF SWALLOWED -

CAN ENTER LUNGS AND CAUSE DAMAGE
FOR INDUSTRIAL USE ONLY
CAN CAUSE KIDNEY DAMAGE IF SWALLOWED
MAY CAUSE LIVER DAMAGE IF SWALLOWED BASED ON ANIMAL DATA
ATTENTION ! CONTAINS ETHYLENE GLYCOL WHICH MAY CAUSE BIRTH DEFECTS BASED
ON ANIMAL DATA
CONTAINS 2-ETHYLHEXANOIC ACID OR ITS SALT WHICH MAY CAUSE
ADVERSE REPRODUCTIVE EFFECTS AND BIRTH DEFECTS BASED ON
ANIMAL DATA

HMIS		NFPA	
Health: 2	Reactivity: 0	Health: 2	Reactivity: 0
Flammability: 1	Special : -	Flammability: 1	Special : -

POTENTIAL HEALTH EFFECTS

	EYE	SKIN	INHALATION	INGESTION
Primary Route of Exposure:	X	X	X	
EFFECTS OF OVEREXPOSURE	-	-	-	-

Acute:

Eyes:

May cause irritation, experienced as mild discomfort and seen as slight excess redness of the eye.

Skin:

Brief contact is not irritating. Prolonged contact, as with clothing wetted with material, may cause defatting of skin or irritation, seen as local redness with possible mild discomfort.

Other than the potential skin irritation effects noted above, acute (short term) adverse effects are not expected from brief skin contact; see other effects, below, and Section 11 for information regarding potential long term effects.

Inhalation:

Vapors or mist, in excess of permissible concentrations, or in unusually high concentrations generated from spraying, heating the material or as from exposure in poorly ventilated areas or confined spaces, may cause irritation of the nose and throat, headache, nausea, and drowsiness.

Prolonged or repeated overexposure may result in the absorption of potentially harmful amounts of material.

Ingestion:

Contains ethylene glycol and/or diethylene glycol, which are toxic when swallowed. A lethal dose for an adult is 1-2 ml per kilogram, or about 4 ounces (one-half cup). Symptoms include headache, weakness, confusion, dizziness, staggering, slurred speech, loss of coordination, faintness, nausea and vomiting, increased heart rate, decreased blood pressure, difficulty breathing and seeing, pulmonary edema, unconsciousness, convulsions, collapse, and coma. Symptoms may be delayed. Decreased urine output and kidney failure may also occur. Severe poisoning may cause death.

Aspiration may occur during swallowing or vomiting, resulting in lung damage.

Sensitization Properties:

Unknown.

Chronic:

Repeated ingestion may cause kidney damage.

Medical Conditions Aggravated by Exposure:

Repeated overexposure may aggravate existing kidney disease.

Other Remarks:

None

4. FIRST AID MEASURES

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Get medical attention.

Skin:

Wash skin with plenty of soap and water until all traces of material are

removed. Remove and clean contaminated clothing (See Other Instructions). Destroy non-resistant footwear. Get medical attention if skin irritation persists or contact has been prolonged.

Ingestion:

If person is conscious and can swallow, immediately give two glasses (i.e., 16 oz.) of water but do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious or convulsing person.

Inhalation:

If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or respiratory irritation persists.

Other Instructions:

Ethylene glycol (EG) and diethylene glycol (DEG) intoxication may initially produce behavioral changes, drowsiness, vomiting, diarrhea, thirst, and convulsions. EG and DEG are nephrotoxic. End stages of poisoning may include renal damage or failure with acidosis. Supportive measures, supplemented with hemodialysis if indicated, may limit the progression and severity of toxic effects.

FOR ETHYLENE GLYCOL POISONING intravenous ethanol is a recognized antidotal treatment; other antidotal treatments also exist for EG poisoning.

FOR DIETHYLENE GLYCOL POISONING the role of intravenous ethanol in the treatment is unclear but it may be of benefit in view of structural and toxicological similarities to ethylene glycol. Contact a Poison Center for further treatment information.

Aspiration of this product during induced emesis may result in severe lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a Poison Center for additional treatment information.

5. FIRE-FIGHTING MEASURES

Ignition Temperature - AIT (degrees F):

Not determined.

Flash Point (degrees F):

Not applicable.

Flammable Limits (%):

Lower: Not determined.

Upper: Not determined.

Recommended Fire Extinguishing Agents And Special Procedures:

Use water spray, dry chemical, foam, or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

Unusual or Explosive Hazards:

None

Extinguishing Media Which Must Not Be Used:

Not determined.

Special Protective Equipment for Firefighters:

Wear full protective clothing and positive pressure breathing apparatus.

Approach fire from upwind to avoid hazardous vapors and toxic decomposition products.

6. ACCIDENTAL RELEASE MEASURES (Transportation Spills: CHEMTREC (800)424-9300)

Procedures in Case of Accidental Release, Breakage or Leakage:

Ventilate area. Avoid breathing vapor. Wear appropriate personal protective equipment, including appropriate respiratory protection. Contain spill if possible. Wipe up or absorb on suitable material and shovel up. Prevent entry into sewers and waterways. Avoid contact with skin, eyes or clothing.

If more than 10,859 pounds of product is spilled, then report spill according to SARA 304 and/or CERCLA 102(a) requirements, unless product qualifies for the petroleum exemption (CERCLA Section 101(14)).

7. HANDLING AND STORAGE

Precautions to be Taken in

Handling:

Minimum feasible handling temperatures should be maintained.

Storage:

Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective Equipment (Type)

Eye/Face Protection:

Safety glasses, chemical type goggles, or face shield recommended to prevent eye contact.

Skin Protection:

Protective clothing such as coveralls or lab coats should be worn. Launder or dry-clean when soiled. Gloves and boots resistant to chemicals and petroleum distillates required.

Respiratory Protection:

Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

Ventilation:

Adequate to meet component occupational exposure limits (see Section 2).

Exposure Limit for Total Product:

None established for product; refer to Section 2 for component exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Red liquid

Odor:

Mild odor

Boiling Point (degrees F):

228

Melting/Freezing point (degrees F):

Not applicable.

Specific Gravity (water=1):

1.07

pH of undiluted product:

8.3

Vapor Pressure:

Not determined.

Viscosity:

< 20 cSt at 40.0 C

VOC Content:

Not determined.

Vapor Density (air=1):

2.1

Solubility in Water (%):

> 10

Other: None

10. STABILITY AND REACTIVITY

This Material Reacts Violently With:

(If Others is checked below, see comments for details)

Air Water Heat Strong Oxidizers Others None of These

Comments: - - - - -

None

Products Evolved When Subjected to Heat or Combustion:

Toxic levels of carbon monoxide, carbon dioxide, irritating aldehydes and ketones, and combustion products or compounds of potassium.

Hazardous Polymerizations: DO NOT OCCUR

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION (ANIMAL TOXICITY DATA)

Median Lethal Dose

Oral:

Animal data does not reflect human toxicity; see Sections 3 & 11

Inhalation:

Not determined.

Dermal:

LD50 Believed to be > 1.00 - 2.00 g/kg (rabbit) slightly toxic

Irritation Index, Estimation of Irritation (Species)

Skin:

(Draize) Believed to be < .50 /8.0 (rabbit) no appreciable effect

Eyes:

(Draize) Believed to be > 15.00 - 25.00 /110 (rabbit) slightly irritating

Sensitization:

Not determined.

Other:

Oral administration of ethylene glycol to pregnant experimental animals has been shown to cause birth defects in the offspring. These effects were not seen when ethylene glycol was administered by dermal application or by inhalation.

Continuous ingestion of a diet containing 1% or 2% ethylene glycol for two years produced liver and kidney damage, and bladder stones in rats.

2-ethylhexanoic acid (2-EXA) caused an increase in liver size and enzyme levels when repeatedly administered to rats via the diet. When administered to pregnant rats by gavage or in drinking water, 2-EXA caused teratogenicity (birth defects) and delayed postnatal development of the pups. Additionally, 2-EXA impaired female fertility in rats. Birth defects were seen in the offspring of mice who were administered sodium 2-ethylhexanoate via intraperitoneal injection during pregnancy.

12. 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 responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

Remarks

To prevent contamination of drinking water supplies, and poisoning of children, aquatic life, wildlife, and farm and domestic animals, ethylene glycol products such as used antifreeze solution, regardless of quantity, should never be discarded onto the ground, into surface waters, or into storm sewers.

13. TRANSPORT INFORMATION

Transportation

DOT:

Proper Shipping Name:

Not regulated

This product contains a DOT Hazardous Substance or Substances, listed in Section 14 of the MSDS. If the product's shipping container holds at least 10,859 lbs, then the DOT information must be accompanied with RQ notation, or, an otherwise 'Not Regulated' product will be classified as Environmentally Hazardous (solid/liquid) N.O.S., Class 9, unless the product qualifies for the petroleum exemption (49 CFR 171.8).

IMDG:

Proper Shipping Name:
Not regulated

ICAO:

Proper Shipping Name:
Not regulated

TDG:

Proper Shipping Name:
Not regulated

14. REGULATORY INFORMATION

Federal Regulations:

SARA Title III:

Section 302/304 Extremely Hazardous Substances

Seq. Chemical Name	CAS Number	Range in %
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None

Section 302/304 Extremely Hazardous Substances (CONT)

Seq. TPQ	RQ
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None

Section 311 Hazardous Categorization:

Acute	Chronic	Fire	Pressure	Reactive	N/A
X	X				

Section 313 Toxic Chemical

Chemical Name	CAS Number	Concentration
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1,2 ethanediol	107-21-1	35.00-49.99
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CERCLA 102(a)/DOT Hazardous Substances: (+ indicates DOT Hazardous Substance)

Seq. Chemical Name	CAS Number	Range in %
01+ 1,2 ethanediol	107-21-1	35.00-49.99
02+ Sodium nitrite	7632-00-0	0.10-0.99

CERCLA/DOT Hazardous Substances (Sequence Numbers and RQ's):

Seq. RQ

01+	5000
02+	100

TSCA Inventory Status:

This product, or its components, are listed on or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

Other:

None.

State Regulations:

California Proposition 65:

The following detectable components of this product are substances, or belong to classes of substances, known to the State of California to cause cancer and/or reproductive toxicity.

Chemical Name	CAS Number
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None

International Regulations:

Export Notification (TSCA-12b):

This product may be subject to export notification under TSCA

section 12(b); contains:

Sodium nitrite

Diethylene glycol monobutyl ether

WHMIS Classification:

Class D, Div 1, Subdiv B: Toxic

Class D, Div 2, Subdiv A: Teratogenic

Class D, Div 2, Subdiv B: Chronic toxic effects

Canada Inventory Status:

Not determined.

EINECS Inventory Status:

Not determined.

Australia Inventory Status:

Not determined.

Japan Inventory Status:

Not determined.

15. ENVIRONMENTAL INFORMATION

Aquatic Toxicity:

Not determined.

Mobility:

Not determined.

Persistence and Biodegradability:

This product is estimated to have a moderate ($\geq 30\%$) rate of biodegradation in a test for ready biodegradation.

Potential to Bioaccumulate:

This product is estimated to have a low potential to bioconcentrate.

Remarks:

None

16. OTHER INFORMATION

Acute or chronic oral consumption of products containing ethylene glycol can produce significant adverse health effects, including death, in humans and animals. Keep out of reach of children and pets. Such products should not be used in potable (drinking) water systems or other systems where contamination of potable water supplies is possible (e.g., recreational vehicles, winterizing potable water systems).

It is recommended that all exposures to this product be minimized by strictly adhering to recommended occupational controls procedures to avoid any potential adverse health effects.

THE INFORMATION CONTAINED IN THIS DATA SHEET IS BASED ON THE DATA AVAILABLE TO US AT THIS TIME, AND IS BELIEVED TO BE ACCURATE BASED UPON THAT DATA. IT IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT, FOR PURPOSE OF HAZARD COMMUNICATION. IT IS NOT INTENDED TO CONSTITUTE PRODUCT PERFORMANCE INFORMATION, AND NO EXPRESS OR IMPLIED WARRANTY OF ANY KIND IS MADE WITH RESPECT TO THE PRODUCT, UNDERLYING DATA OR THE INFORMATION CONTAINED HEREIN. YOU ARE URGED TO OBTAIN DATA SHEETS FOR ALL PRODUCTS YOU BUY, PROCESS, USE OR DISTRIBUTE, AND ARE ENCOURAGED TO ADVISE THOSE WHO MAY COME IN CONTACT WITH SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.

TO DETERMINE THE APPLICABILITY OR EFFECT OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT, YOU SHOULD CONSULT WITH YOUR LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENT AGENCY. WE WILL NOT PROVIDE ADVICE ON SUCH MATTERS, OR BE RESPONSIBLE FOR ANY INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN. THE UNDERLYING DATA, AND THE INFORMATION PROVIDED HEREIN AS A RESULT OF THAT DATA, IS THE PROPERTY OF EQUIVA SERVICES, LLC AND IS NOT TO BE THE SUBJECT OF SALE OR EXCHANGE WITHOUT THE EXPRESS WRITTEN CONSENT OF EQUIVA SERVICES, LLC.

Date: 1999-11-07

New

X

Revised, Supersedes: 1999-01-04

Inquiries regarding MSDS should be directed to:

EQUIVA SERVICES LLC

Manager Product Stewardship

17. PRODUCT LABEL

Label Date: 1999-11-07

READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET BEFORE HANDLING OR DISPOSING OF PRODUCT. THIS LABEL COMPLIES WITH THE REQUIREMENTS OF THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200) FOR USE IN THE WORKPLACE. THIS LABEL IS NOT INTENDED TO BE USED WITH PACKAGING INTENDED FOR SALE TO CONSUMERS AND MAY NOT CONFORM WITH THE REQUIREMENTS OF THE CONSUMER PRODUCT SAFETY ACT OR OTHER RELATED REGULATORY REQUIREMENTS.

07998 TEXACO EXTENDED LIFE PREDILUTED 50/50 COOLANT/AF

WARNING STATEMENT

WARNING !

HARMFUL IF SWALLOWED

MAY CAUSE DIZZINESS AND DROWSINESS

MAY CAUSE EYE IRRITATION

ASPIRATION HAZARD IF SWALLOWED -

CAN ENTER LUNGS AND CAUSE DAMAGE

FOR INDUSTRIAL USE ONLY

CAN CAUSE KIDNEY DAMAGE IF SWALLOWED

MAY CAUSE LIVER DAMAGE IF SWALLOWED BASED ON ANIMAL DATA

ATTENTION !

CONTAINS ETHYLENE GLYCOL WHICH MAY CAUSE BIRTH DEFECTS BASED ON ANIMAL DATA

CONTAINS 2-ETHYLHEXANOIC ACID OR ITS SALT WHICH MAY CAUSE ADVERSE REPRODUCTIVE EFFECTS AND BIRTH DEFECTS BASED ON ANIMAL DATA

PRECAUTIONARY MEASURES

- Use only with adequate ventilation.
- Avoid breathing vapor, mist, or gas.
- Avoid contact with eyes, skin, and clothing.
- Keep container closed.
- Wash thoroughly after handling.

FIRST AID

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Get medical attention.

Skin Contact:

Wash skin with plenty of soap and water until all traces of material are removed. Remove and clean contaminated clothing (See Other Instructions). Destroy non-resistant footwear. Get medical attention if skin irritation persists or contact has been prolonged.

Ingestion:

If person is conscious and can swallow, immediately give two glasses (i.e., 16 oz.) of water but do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious or convulsing person.

Inhalation:

If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or respiratory irritation persists.

Note to Physician:

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FOR DIETHYLENE GLYCOL POISONING the role of intravenous ethanol in the

treatment is unclear but it may be of benefit in view of structural and toxicological similarities to ethylene glycol. Contact a Poison Center for further treatment information.

Aspiration of this product during induced emesis may result in severe lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a Poison Center for additional treatment information.

FIRE

In case of fire, use water spray, dry chemical, foam or carbon dioxide. Water may cause frothing. Use water spray to cool fire-exposed containers. If more than 10,859 pounds of product is spilled, then report spill according to SARA 304 and/or CERCLA 102(a) requirements, unless product qualifies for the petroleum exemption (CERCLA Section 101(14)).

Chemical Name	CAS Number	Range in %
Water deionized	7732-18-5	50.00-64.99
* 1,2 ethanediol	107-21-1	35.00-49.99
* Hexanoic acid, 2-ethyl-, potassium salt	3164-85-0	1.00-2.99

PRODUCT IS HAZARDOUS ACCORDING TO OSHA (1910.1200).
* COMPONENT IS HAZARDOUS ACCORDING TO OSHA.

Pennsylvania Special Hazardous Substance(s)	CAS Number	Range in %
None		

HMIS

Health: 2 Reactivity: 0
Flammability: 1 Special : -

NFPA

Health: 2 Reactivity: 0
Flammability: 1 Special : -

Transportation

DOT:

Proper Shipping Name:

Not regulated

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CAUTION: Misuse of empty containers can be hazardous. Empty containers can be hazardous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers might cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place.

Name and Address:

Equilon Enterprises LLC

P.O. Box 674414

Houston, TX 77267-4414

TRANSPORTATION EMERGENCY: (877) 276-7283

CHEMTREC: (800) 424-9300

HEALTH EMERGENCY: (877) 276-7283