Motorcraft

MATERIAL SAFETY DATA SHEET

Ford Internal Reference Number(Tox No. : 159650)

Print Date : 09/25/03

Language: English

Part Type and Number	Part name
Motorcraft - U.S. VC-7-A	MOTORCRAFT PREMIUM GOLD ENGINE COOLANT (1 U.S. GALLON (3.78 L))
NOT FOR USE IN CALIFORNIA AND OREGON Motorcraft - U.S. VC-7-C	MOTORCRAFT PREMIUM GOLD ENGINE COOLANT (55 GALLONS (208 L))
NOT FOR USE IN OREGON	

This material has not been identified against a material Specification.

CHEMICAL AND PHYSICAL PROPERTIES

Appearance :	Physical State	LIQUID
	Form	-
	Color	YELLOW
Specific Gravity (Relative Density)		1.136
Boiling Point		+165.556 °C (330 F)
Flash Point		+121.111 °C (+249 F) (UNKNOWN)
pH full strength		-
pH diluted		8.1 at 33.3%
Odor		-
Odor Threshold		-
Viscosity		-
Vapor Density		Not Determined
Vapor Pressure		1.8 mmHg at 20C
Evaporation Rate		-
Melting Point		Not Determined
Freezing Point		-
Explosion Properties :	UEL	Not Determined
	LEL	Not Determined
Auto-ignition Temperature		Not Determined
Solubility		-
Partition Coefficient		-

HAZARDOUS AND OTHER DISCLOSED INGREDIENTS

Percent Range	Exposure Limits - TWA ACGIH/OSHA(where est.)	CAS number	Chemical Name
>60	C 50/C 50 Vapor ppm	107-21-1	ETHYLENE GLYCOL
1-5	None Established	111-46-6	DIETHYLENE GLYCOL
1-5	1-5/10 mg/m3	1330-43-4	SODIUM TETRABORATE

Exposure Limit Abbreviations

159650

TWA=Time Weighted Average C=Ceiling
S=Short Term Exposure Sk=Skin
Sol=Soluble Compounds Fu=Fumes
Insol=Insoluble Compounds Du=Dust I=IARC Resp=Respirable

REGULATORY INFORMATION

This product contains an ingredient present on the WHMIS (0.1%) Ingredient Disclosure List.
This product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.
The supplier of this product did not provide information concerning the classification of this product under the Canadian Controlled Products Act.
The information provided here is based on the MSDS required under the U.S. Hazard Communication Standard.
This product contains an ingredient(s) considered to be an environmental hazardous substance(s) by the State of New Jersey.
This product contains an ingredients(s) considered to be a hazardous substance(s) by the State of New Jersey.
This product contains an ingredient(s) considered to be a hazardous substance by the State of Pennsylvania (Pennsylvania Worker and Community Right to Know Act).

HEALTH HAZARD INFORMATION

(A) HAZARDS

This product is harmful if swallowed.
This product is irritating to the respiratory system and skin.
This product may be fatal if it is swallowed.
Excessive inhalation of this material causes headache, dizziness, nausea and incoordination.
This product may cause irritation to the eyes.

(B) TARGET ORGANS AND MEDICAL CONDITIONS

Overexposure to some hazardous ingredients in this product has been found to affect certain body organs and systems in experimental animals and/or humans. These include:
Central Nervous System
Kidney
Liver
Skin, Eyes, and Respiratory System
Cardiovascular System

(C) ACUTE TOXICITY INFORMATION

Acute Toxicity for the product, as supplied by the manufacturer:
Based on the composition of the product identified by the supplier, selected portions of the acute toxicity information from RTECS are as follows:

107-21-1 ETHYLENE GLYCOL
Oral, adult rat, LD50 = 4700 mg/kg
Skin, adult rabbit, LD50 = 9530 mg/kg
111-46-6 DIETHYLENE GLYCOL
Oral, adult rat, LD50 = 12565 mg/kg
Skin, adult rabbit, LD50 = 11890 mg/kg

159650

532-32-1 SODIUM BENZOATE
Oral, adult rat, LD50 = 4070 mg/kg
9003-11-6 POLYETHYLENE-POLYPROPYLENE GLYCOL
Oral, adult rat, LD50 = 9380 mg/kg

FIRE AND EXPLOSION INFORMATION

This product is combustible at high temperatures.
EXTINGUISHER INFORMATION: Dry chemical, foam, carbon dioxide, water fog.
Wear self-contained breathing apparatus.
Water may be used to flush spills away from sources of ignition.
Water or foam may cause frothing if the product is heated above 93 degrees C (200 degrees F).
Water may be used to cool exposed containers to prevent pressure build-up and explosion when exposed to extreme heat.

Thermal decomposition products include: carbon monoxide, carbon dioxide, ammonia, organic vapors and nitrogen containing compounds.

REACTIVITY DATA

This is a stable material.
Instability caused by heat, flame and sparks.
This product may react with strong acids.
Hazardous polymerization will not occur.
This product may react with strong alkalies.
This product may react with strong oxidizing agents (bleach- sodium hypochlorite, calcium hypochlorite, hydrogen peroxide, permanganate, nitric acid, concentrated OXYGEN, perchlorates).

PREVENTIVE MEASURES

(A) SAFE HANDLING AND STORAGE

Do not breathe gas/fumes/vapor/spray.
Keep the container tightly closed and dry.
When using this material, do not eat, drink or smoke.
Do not allow the product to freeze.
Do not store this material in open or unlabeled containers.
Do not get this material in your eyes, on your skin, or on your clothing.
Keep this product from heat, sparks, or open flame.
Store this product in a cool, dry, well-ventilated place.
Use this product with adequate ventilation.
Store this product away from strong oxidizing agents.
Empty containers may contain hazardous residues (vapors, liquid, and/or solid). Do not reuse the empty container without commercial cleaning or reconditioning.

(B) PROTECTIVE MEASURES

Use impervious gloves.
If exhaust ventilation is needed, and not available, contact Corporate Industrial Hygiene for specific details.
Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.
Use of protective coveralls and long sleeves is recommended.
Wear safety glasses with side shields; chemical goggles (if splashing is possible).
Use NIOSH approved respirator in compliance with OSHA Respiratory Standard 29CFR 1910.134 or Canadian Z94.4 for the particular hazard or airborne

concentration to be encountered in the work environment. U.S. plants should consult OSHA 29CFR 1910.134 for selection of proper respirator(s). Canadian plants should consult CSA Standard Z94.4-96

SPILLS, LEAKS AND DISPOSAL

Wear appropriate protective equipment and clothing during clean-up.
Attempt to reclaim the free product, if this is possible.
Stop the flow of material, if this is without risk.
Ventilate the contaminated area.
Absorb the spilled material with an inert absorbent (nonflammable) material.
Avoid inhalation of vapor, fumes, dust and/or mist from the spilled material.
Dike the spilled material, where this is possible.
Do not allow the spilled product to enter public drainage system or open water courses.
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulation.
In case of large spills, follow all facility Emergency Response Procedures.

FIRST AID TREATMENT

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Remove contaminated clothing and wash before reuse.
If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting.
If gas/fume/vapor/dust/mist from the material is inhaled, remove the affected person immediately to fresh air.
For skin contact, wash immediately with soap and water.
If irritation persists, get medical attention.
Give one to two glasses of water or milk.
Do not give anything by mouth to an unconscious or convulsing person.

NOTES TO PHYSICIANS

If the affected person is not breathing, apply artificial respiration.
This material, if aspirated into the lungs, may cause chemical pneumonitis; treat the affected person appropriately.

ENVIRONMENTAL INFORMATION: ECOLOGY

Material contains a chemical which is a Ford Motor Company Material of Concern. Use and release of this material should be minimized to the greatest extent possible.
This product contains a chemical which is restricted at any concentration by the Ford Motor Company Restricted Substance Management Standard (RSMS), WSS-M99P9999-A1. Consult the RSMS for restricted applications. If used in a restricted application, prior notification to and acknowledgement from Ford Motor Company is required.
Material contains a chemical which is a Hazardous Air Pollutant (HAP), regulated by the United States Clean Air Act.

Transport Information

U.S. Department of Transportation (DOT) 49 - CFR 172.101
This product is not regulated as a dangerous good.

Canadian Transportation of Dangerous Goods (T.D.G.) -TDGR
This product is not regulated as a dangerous good.

159650

Secretary of Communication and Transportation (SCT) - NOM-002-SCT2/1994 (Mexico)
This product is not regulated as a dangerous good.

International and Domestic Air Transportation - ICAO & IATA Section 4.2
This product is not regulated as a dangerous good.

International Water Transportation - IMDG Code Amendment 31-02
This product is not regulated as a dangerous good.

========== PREPARATION INFORMATION ==========

Health and safety information has been evaluated by:

Occupational & Environmental Health Sciences Department
Ford Motor Company
Central Laboratory Building - Rm S-120
15000 Century Drive
Dearborn, Michigan 48120

For 24 hour emergency information dial 1-800-959-3673.

This is the last page of this MSDS.

Date of Preparation: 02/07/02