



Material Safety Data Sheet

FIR No.: 161635
Version Number: US-US-4

Level: 3
Release Date: 2006-05-01

1. Product and Company Identification

Product Name: Premium Gold Engine Coolant with Bittering Agent
Product Code: See Attachment
Application: Engine antifreeze / coolant
Supplier: Ford Motor Company
 Attention: MSDS Information, P.O. Box 1899
 Dearborn, Michigan 48121
 1-800-392-3673

Emergency Telephone: Poison Control Center: 1-800-959-3673
 CHEMTREC: U.S. and Canada: 1-800-424-9300
 CHEMTREC: International: 1-703-527-3887

2. Composition/Information on Ingredients

This chemical product is a preparation.

Chemical Name	CAS Number	Percent Concentration	Hazard Classification
ETHYLENE GLYCOL	107-21-1	>90	CAA-HAP HAZCOM MOC-ALL RQ SARA 313 WHMIS 1
SODIUM TETRABORATE	1330-43-4	1-5	

3. Hazards Identification

WARNING

Health: Harmful or fatal if swallowed.
 Aspiration hazard if swallowed; can enter lungs and cause damage.
 May cause skin, eye and respiratory tract irritation.
 If ingested, this product may cause gastrointestinal irritation.
 Excessive inhalation of this material causes headache, dizziness, nausea and incoordination.
 Exposure may increase myocardial irritability.
 Overexposure may cause central nervous system effects.
 Overexposure may cause liver and kidney damage.
 Prolonged and/or repeated skin contact with this product may cause irritation/dermatitis.
 This product may be absorbed through the skin in harmful amounts.
 This product may cause delayed neurotoxicity.

Environment: Material contains a chemical which is a Hazardous Air Pollutant (HAP), regulated by the United States Clean Air Act.



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4. First-Aid Measures

Inhalation: If gas/fume/vapor/dust/mist from the material is inhaled, remove the affected person immediately to fresh air. If irritation persists, get medical attention.

Skin Contact: For skin contact, wash immediately with soap and water. If irritation persists, get medical attention.

Eye Contact: In case of contact with eyes, rinse immediately with plenty of water for at least 15 minutes and seek medical attention.

Ingestion: If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting.

Most Important Symptoms Effects: Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Notes to a Physician: This material, if aspirated into the lungs, may cause chemical pneumonitis; treat the affected person appropriately.

5. Fire-Fighting Measures

Extinguishing Media: Dry chemical, foam, carbon dioxide.

Specific Methods: Use water to cool fire-exposed containers, structures, and to protect personnel.

Specific Hazards: Empty containers may retain product residue including Flammable or Explosive vapors. Do not cut, drill, grind, or weld near full, partially full, or empty product containers.

Protection of Firefighters: Fire fighters should be equipped with NIOSH-approved, self-contained breathing apparatus (SCBA) and full protective clothing.

6. Accidental Release Measures

Personal Precautions: Ventilate the contaminated area. Avoid inhalation of vapors and contact with skin and eyes. Wear appropriate protective equipment and clothing during clean-up.

Environmental Precautions: No available information.

Methods for Cleaning Up: Contain the discharged material. Absorb the spilled material and scrape it up.



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7. Handling and Storage

Handling:

Technical Measures: Keep this product from heat, sparks, or open flame.

Precautions and Advice for Safe Handling: Use this product with adequate ventilation.
 Do not breathe gas/fumes/vapor/spray.
 Do not get this material in your eyes, on your skin, or on your clothing.

Storage: Technical Measures: Do not reuse the empty container.

Storage Conditions: Do not store this material in open or unlabeled containers.
 Keep the container tightly closed and dry.
 Keep this material in a cool, well-ventilated place.

8. Exposure Controls/Personal Protection

Engineering Measures: Use adequate ventilation to control airborne concentrations below the exposure limits/guidelines. If user operations generate a vapor, dust, and/or mist, use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits/guidelines.

Exposure Limits:		References
Chemical Name	TWA 8 hr	
ETHYLENE GLYCOL	10(ppm)	ACGIH
SODIUM TETRABORATE	1(mg/m3)	OSHA ACGIH
		OSHA

Personal Protective Equipment:

Respiratory Protection: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection Standard 29 CFR 1910.134 and/or Canadian Standard CSA Z94.4.

Hand Protection: Wear solvent-resistant gloves made of neoprene, vinyl or rubber.

Eye Protection: Wear chemical goggles.

Skin and Body Protection: Light protective clothing is recommended.
 Remove contaminated clothing and wash before reuse.

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Hygiene Measures: Wash thoroughly after handling.
 When using this material, do not eat, drink or smoke.

9. Physical and Chemical Properties

Specific Gravity: 1.133
Physical State: LIQUID
Odor: N.AV
Color: CLEAR
pH: 8.1 100% V/V ASTM D1293
Temperature Range During which Changes in Physical State Occur:
 Boiling Point: 165.5 °C
Flash Point: 120.6 °C COC
Auto-ignition Temperature: N.AV
Explosion Properties:
 UEL: N.AV
 LEL: N.AV
Vapor Pressure: 1.8@20°C mmHg
Vapor Density: >1 (AIR=1)
Solubility: NA
Viscosity: 20@40°C cSt N.AP
Evaporation Rate: <1

10. Stability and Reactivity

Stability: This is a stable material.
 Hazardous polymerization will not occur.

Conditions and Materials to Avoid: This product may react with strong oxidizing agents (bleach--sodium hypochlorite, calcium hypochlorite, hydrogen peroxide, permanganate, nitric acid, concentrated OXYGEN, perchlorates).

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, and other low molecular weight hydrocarbons.



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11. Toxicological Information

- 532-32-1 SODIUM BENZOATE
Oral, adult rat, LD50 = 4070 mg/kg
- 107-21-1 ETHYLENE GLYCOL
Oral, adult rat, LD50 = 4700 mg/kg
- 107-21-1 ETHYLENE GLYCOL
Skin, adult rabbit, LD50 = 9530 mg/kg

Chronic (Long Term) Toxicity: Ethylene glycol has been fetotoxic and teratogenic in rats and mice, which has been confirmed by independent studies. The actual reproductive hazard of ethylene glycol in humans is unknown.

12. Ecological Information

No specific aquatic data available for this product.

13. Disposal Considerations

Waste from Residues: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulation. Empty containers may contain hazardous residues (vapors, liquid, and/or solid). Do not reuse the empty container without commercial cleaning or reconditioning.

Contaminated Packaging: No available information.



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14. Transport Information

U.S. Department of Transportation (DOT) 49 - CFR 172.101

Proper Shipping Name: Environmentally hazardous substances, liquid, n.o.s. (ETHYLENE GLYCOL)
 UN Number: UN3082
 Hazard Class / Division: 9
 Packing Group: III

Reportable Quantity (per packaging):

CAS	RQ	Name
7632-00-0	>100000	SODIUM NITRITE
107-21-1	5258	ETHYLENE GLYCOL
1310-73-2	>100000	SODIUM HYDROXIDE

Regulated Quantity:

Bulk	Non-Bulk	Limited Quantity
X		

Label: CLASS 9

Canadian Transportation of Dangerous Goods (T.D.G.) - TDGR Schedule II

This product has not been reviewed for this regulation.

Secretary of Communication and Transportation (SCT) - NOM-002-SCT2/1994 (Mexico)

This product has not been reviewed for this regulation.

International and Domestic Air Transportation - ICAO & IATA Section 4.2

This product has not been reviewed for this regulation.

International Water Transportation - IMDG Code Amendment 31-02

This product has not been reviewed for this regulation.

15. Regulatory Information

The components of this product are listed on the TSCA Inventory
 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.

16. Other Information

Key/Legend: N.AP = Not applicable; N.AV = Not available; ND = Not determined or No data; TLV = Threshold limit value; TWA = Time-weighted average; STEL = Short-term exposure limit; C = Ceiling limit



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Preparation Information:

The chemical identification and properties for this material were provided by the manufacturer. For Canadian locations, a manufacturer's MSDS is available upon request. Health and safety information has been evaluated by the Occupational and Environmental Health Sciences Department, Ford Motor Company, National Parts General Office, MD74, 29500 Plymouth Road, Livonia, MI 48150, USA.

Disclaimer:

The information on this data sheet represents our current data and is accurate to the best of our knowledge as to the proper handling of this product under normal conditions and in accordance with the application specified on the packaging and/or technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.



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Attachment

Product Code	Container Size	Part of Kit	Kit Product Code
VC-7-B	1 U.S. gal		
VC-7-B (Obsolete)	1 U.S. gal		
VC-7-B1	1 U.S. gal		
VC-7-D	55 U.S. gal		
VC-7-D (Obsolete)	55 U.S. gal		
VC-7-D1	55 U.S. gal		