



Material Safety Data Sheet

Product Name: Diesel Cooling System Additive
FIR No. 028397
Version Number: US-US-2

Level: 1
Release Date: 2005-01-26

1. Product and Company Identification

Product Name: Diesel Cooling System Additive
Product Code: See Attachment
Application: Antifreeze/Coolant Additive (Reinhibitor) For Use In Diesel Engine Cooling Systems
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
POTASSIUM HYDROXIDE	1310-58-3	>10-30	HAZCOM MOC-ALL RQ MOC-ALL RQ HAZCOM WHMIS 1 WHMIS 1
PHOSPHORIC ACID	7664-38-2	>5-10	HAZCOM WHMIS 1 RSMSREST WHMIS 1 HAZCOM RQ MOC-ALL RQ MOC-ALL
ADIPIC ACID	124-04-9	1-5	HAZCOM RQ WHMIS 1 HAZCOM RQ WHMIS 1
SODIUM MOLYBDATE	7631-95-0	1-5	HAZCOM



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				RSMSREST
				WHMIS 1
				HAZCOM
				WHMIS 1
SODIUM NITRITE	7632-00-0	1-5		RQ
				SARA 313
				WHMIS 1
				RQ
				SARA 313
				WHMIS 1
POTASSIUM NITRATE	7757-79-1	1-5		SARA 313
				SARA 313

3. Hazards Identification

CAUTION

Health: This product is harmful by inhalation and if it is swallowed. Ingestion of this product may cause nausea, vomiting and diarrhea. If ingested, this product may cause gastrointestinal irritation. May cause skin, eye and respiratory tract irritation. This product may cause methemoglobinemia (the presence of methemoglobin--an abnormal form of hemoglobin--in the blood).

Physical and Chemical Hazards: This product is essentially non-flammable.

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

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 and seek medical advice.

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

5. Fire-Fighting Measures

Extinguishing Media: Water



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Specific Hazards: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

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 vapor, fumes, dust and/or mist from the spilled material.
Wear appropriate protective equipment and clothing during clean-up.

Environmental Precautions: Do not allow this material to drain into sewers/water supplies.

Methods for Cleaning Up: Absorb the spilled material with an inert absorbent (nonflammable) material.
Neutralize the spilled material before disposal.

7. Handling and Storage

Handling:

Technical Measures: Do not allow the product to freeze.

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: No special precautions.

Storage Conditions: Store this product in a cool, dry, well-ventilated place.
Do not store this material in open or unlabeled containers.
This is an oxidizing agent - avoid bringing it into contact with an organic material.



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8. Exposure Controls/Personal Protection

Engineering Measures:

Use general ventilation.
Local exhaust is suggested for use, where possible, in enclosed or confined spaces.
Eyewash and emergency showers are recommended.

Exposure Limits:

Chemical Name	TWA 8 hr	STEL/C	References
ADIPIC ACID	5(mg/m3)		ACGIH OSHA
POTASSIUM HYDROXIDE		C 2(mg/m3)	ACGIH OSHA
PHOSPHORIC ACID	1(mg/m3)	3(mg/m3)	ACGIH
		1(ppm)	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:

Use impervious gloves.

Eye Protection:

Wear chemical goggles; face shield (if splashing is possible).

Skin and Body Protection:

Use of impervious apron and boots are recommended.



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9. Physical and Chemical Properties

Specific Gravity: 1.13-1.15
Physical State: LIQUID
Odor: N.AV
Color: BLUE
pH: 10-11
Temperature Range During which Changes in Physical State Occur:
 Boiling Point: +100 C
Flash Point: N.AV
Auto-ignition Temperature: N.AV
Explosion Properties:
 UEL: N.AV
 LEL: N.AV
Vapor Pressure: 760@100C mmHg
Vapor Density: N.AV
Solubility: COMPLETE IN WATER
Evaporation Rate: ND

10. Stability and Reactivity

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

Conditions and Materials to Avoid: Do not mix this product with material which contain AMINES. NITROSAMINE may be formed. NITROSAMINE formation is possible due to the presence of NITRITE(S) and AMINES This may also occur if NITRATE is present instead of nitrite. The nitrate is is converted to nitrite by certain microorganisms that can be found in soil, water, and/or sewage. This product is an OXIDIZING AGENT - avoid contact with organic material.

Hazardous Decomposition Products: Decomposition of this product may yield oxides of sulfur and nitrogen. Irritating and toxic gases or fumes may be released during a fire.

11. Toxicological Information

12. Ecological Information

No specific aquatic data available for this product.



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13. Disposal Considerations

Waste from Residues:

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulation.

Contaminated Packaging:

No consideration given when disposed of according to local, state, and Federal regulations.



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14. 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 Schedule II

This product is not regulated as a dangerous good.

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.

15. Regulatory Information

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.

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).

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.

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.

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

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-8	16 fl oz (473 mL)		