

SECTION 1: IDENTIFICATION

MSDS ID: MSDS515

PRODUCT NAME: FRAM (R) DCA-4 Liquid Supplemental Coolant Additive

PRODUCT NUMBER: SP3971

MANUFACTURER: Honeywell Consumer Products Group
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Danbury, CT 06810-5109

CANADIAN OFFICE: Honeywell Consumer Products Group
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EMERGENCY PHONE NUMBER: CHEMTREC 1-800-424-9300 (in the US)
CANUTEC (613)996-6666 (in Canada)

MSDS DATE OF PREPARATION/REVISION: 06/29/05

PRODUCT USE: Cooling system additive for trucks

NFPA RATING (NFPA 704) - FIRE: 0
HEALTH: 1
REACTIVITY: 0

SECTION 2: PRODUCT COMPONENTS

HAZARDOUS COMPONENTS	CAS#	PERCENT	EXPOSURE LIMITS
Dipotassium Phosphate	7757-11-4	5-15	None Established-OSHA PEL 5 mg/m3 TWA ACGIH TLV
Potassium Nitrate	7757-79-1	1-5	None Established-OSHA PEL None Established-ACGIH TLV
Sodium Molybdate	7631-95-0	1-5	None Established-OSHA PEL 3 mg/m3 TWA ACGIH TLV (respirable fraction)
Sodium Nitrite	7632-00-0	1-6	None Established-OSHA PEL None Established-ACGIH TLV
Adipic Acid	124-04-9	1-4	None Established-OSHA PEL 5 mg/m3 TWA ACGIH TLV

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Oxidizer. Contact with other materials may cause fire. May cause eye and skin irritation. May be absorbed through the skin in harmful amounts. Inhalation of vapors or mists may cause respiratory irritation, coughing, nose bleeds, sore throat, shortness of breath and tightness in the chest. Harmful or fatal if inhaled, ingested or absorbed through the skin. May cause nitrite poisoning.

POTENTIAL HEALTH EFFECTS:

ACUTE HAZARDS:

INHALATION: Inhalation of vapors or mists may cause respiratory irritation with symptoms of coughing, nose bleeds, sore throat, shortness of breath and tightness in the chest. Overexposure to sodium nitrite may occur with symptoms similar to those listed under ingestion.

SKIN CONTACT: Contact may cause irritation with redness, itching and pain. Sodium molybdate may cause a rash to occur which is difficult to heal. Sodium molybdate may be absorbed through the skin causing cramping, vomiting hypertension and anemia.

EYE CONTACT: Contact may cause irritation with redness, tearing and pain.

INGESTION: Ingestion may cause gastrointestinal irritation, dizziness, nausea, vomiting, bloody diarrhea, low blood pressure, convulsions, increase in urine output, and collapse. Overexposure to sodium nitrite may cause nitrite poisoning with symptoms including nausea, dizziness, vertigo, vomiting, collapse, cyanosis, abdominal pain, methemoglobinemia, rapid heart beat, irregular breathing, coma, convulsions, circulatory collapse and death.

CHRONIC EFFECTS: Prolonged or repeated exposure may cause mild gastroenteritis, dermatitis, eczema, headache, mental impairment, loss of hair, bronchitis, laryngitis, conjunctivitis, kidney and liver damage and anemia. . Sodium molybdate and potassium nitrate have been found to cause adverse reproductive effects and/or birth defects in studies with laboratory animals. Sodium molybdate and potassium nitrate have tested positive for mutagenicity in some test systems.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Employees with pre-existing skin, respiratory and kidney disease may be at increased risk from exposure.

CARCINOGEN: None of the components of these products is listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.

SECTION 4: FIRST AID MEASURES

INHALATION: Immediately remove to fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Get medical attention.

SKIN CONTACT: Remove contaminated clothing. Immediately wash skin thoroughly with soap and water. If irritation develops or persists, get medical attention. Launder clothing before re-use. (Discard contaminated shoes).

EYE CONTACT: Immediately flush eyes with large quantities of water for at least 15 minutes, holding the eyelids apart. Get medical attention.

INGESTION: DO NOT INDUCE VOMITING. If conscious, give one glass of water or milk. Never give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

NOTES TO PHYSICIAN: The principal toxic effects of sodium nitrite poisoning are vasodilation and/or methemoglobinemia. Hypotension with syncope and tachycardia are common findings. Coronary vasospasm due to acute withdrawal may be seen. Paradoxical bradycardia may occur rarely. Coronary ischemia and cerebrovascular disease can occur due to severe hypotension. Immediate life support measures should be provided because of associated hypotension, seizures, and methemoglobinemia-induced anoxia. Immediately contact a poison center or hospital emergency department for treatment advice. The specific antidote for nitric induced methemoglobinemia is methylene blue.

SECTION 5: FIRE AND EXPLOSION DATA

FLASH POINT: None

FLAMMABILITY LIMITS LEL: Not applicable UEL: Not applicable

AUTOIGNITION TEMPERATURE: Not available

EXTINGUISHING MEDIA: Use water to extinguish fire. Do not use dry chemicals or foams.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Fight fire from maximum distance or use unmanned hose holders. Do not allow run-off from fire fighting to enter drains or water courses. Runoff may cause pollution.

UNUSUAL FIRE HAZARDS: Product may accelerate burning or decompose explosively. Liquid that comes in contact with combustibles may cause ignition.

HAZARDOUS COMBUSTION PRODUCTS: Thermal decomposition may release oxides of carbon, nitrogen, potassium, molybdate and phosphorous.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Evacuate spill area and keep unprotected personnel away. Remove all combustible or flammable materials from spill area if it is safe to do so. Wear appropriate protective clothing as described in Section 8. Collect liquid with an inert absorbent and place into container. Do not use combustible absorbents or towels. Report releases as required by local, state and federal authorities.

SECTION 7: HANDLING AND STORAGE

DANGER: Poison. Oxidizer.
Contains Sodium Nitrite and Potassium Nitrate.

Avoid contact with the eyes, skin and clothing.
Avoid breathing vapors or mists.
Wear protective clothing and equipment.
Wash thoroughly with soap and water after handling.
Keep away from all flammable or combustible materials such as solvents, oil, paper, cloth rags, etc.
Store in a dry, well ventilated area away from excessive heat and sources of ignition.
Avoid storage on wooden floors.

Do not reuse containers. Empty containers retain product residues that can be hazardous. Follow all MSDS precautions when handling empty containers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Use with adequate general or local exhaust ventilation to maintain exposures below the occupational exposure limits.

RESPIRATORY PROTECTION: If exposure limits are exceeded a NIOSH approved particulate respirator (N95 or better filters) may be worn. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

GLOVES: Wear impervious gloves such as rubber to prevent contact.

EYE PROTECTION: Chemical safety goggles are recommended.

OTHER PROTECTIVE EQUIPMENT/CLOTHING: Wear impervious clothing as needed to prevent contact. A safety shower and eyewash should be available in the immediate work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Blue liquid

pH: 10-11
BOILING POINT (F): 212 F
FREEZING POINT (F): Not available
SOLUBILITY IN WATER: 100%
PERCENT VOLATILE: Not determined
COEFFICIENT OF WATER/OIL DISTRIBUTION: Not determined

SPECIFIC GRAVITY: 1.13-1.15
VAPOR PRESSURE: 760 mm Hg @ 100 C
VAPOR DENSITY: Not applicable
EVAPORATION RATE: Not determined
VISCOSITY: Non Determined

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under normal storage and handling conditions.
CONDITIONS TO AVOID: None known
INCOMPATIBILITY: Strong acids, reducing agents, cyanides, alkali metals, interhalogens and metallic salts. The liquid may ignite on contact with organic materials.
HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may release oxides of carbon, nitrogen, potassium, molybdate and phosphorous.
HAZARDOUS POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID: None known.

SECTION 11: TOXICOLOGICAL INFORMATION

Dipotassium Phosphate: No data available
Potassium Nitrate: Oral Rat LD50 - 3,750 mg/kg
Sodium Molybdate: Oral Rat LD50 - 4 g/kg
Inhalation Rat LC50 - > 2,080 mg/m3
Sodium Nitrite: Oral Rat LD50 - 180 mg/kg
Adipic Acid: Oral Rat LD50 - >11 g/kg

SECTION 12: ECOLOGICAL INFORMATION

Dipotassium Phosphate: No data available
Potassium Nitrate: No data available
Sodium Molybdate: No data available
Sodium Nitrite: LC50/96 hour minnow: >100 mg/L
Adipic Acid: LC50/96 hour minnow: 96 mg/L

SECTION 13: DISPOSAL INFORMATION

Dispose of product in accordance with all local, state/provincial and federal regulations.

SECTION 14: TRANSPORT INFORMATION

U.S. DOT HAZARD CLASSIFICATION (For Ground Shipments Only)

Containers Not Over 5 Liter:
PROPER SHIPPING NAME: Consumer Commodity
TECHNICAL NAME: None
UN NUMBER: None
HAZARD CLASS/PACKING GROUP: ORM-D

LABELS REQUIRED: None

Containers Over 5 Liter:

PROPER SHIPPING NAME: Oxidizing, liquid, n.o.s. (Sodium Nitrite,
Potassium Nitrate)

TECHNICAL NAME: None

UN NUMBER: UN3139

HAZARD CLASS/PACKING GROUP: 5.1, PG III

LABELS REQUIRED: Oxidize

DOT MARINE POLLUTANTS: This product does not contain Marine
Pollutants as defined in 49 CFR 171.8.

IMDG CODE SHIPPING CLASSIFICATION

Containers Not Over 5 L, package not over 30 kg:

DESCRIPTION: Oxidizing, liquid, n.o.s. (Sodium Nitrite,
Potassium Nitrate), 5.1, UN3139, PG III, Limited Quantities

ID NUMBER: UN3139

HAZARD CLASS: 5.1

PACKING GROUP: PG III

LABELS REQUIRED: None, Mark UN3139

PLACARDS REQUIRED: Limited Quantities on Cargo Transport Container

CANADIAN TDG CLASSIFICATION (For Ground Shipments Only)

Containers Not Over 5 Liter:

PROPER SHIPPING NAME: Consumer Commodity (Limited Quantity)

TECHNICAL NAME: NONE

UN NUMBER: NONE

HAZARD CLASS: NONE

PACKING GROUP: NONE

SECTION 15: REGULATORY INFORMATION

EPA SARA 311/312 HAZARD CLASSIFICATION: Acute health, chronic
health

EPA SARA 313: This Product Contains the Following Chemicals
Subject to Annual Release Reporting Requirements Under SARA Title
111, Section 313 (40 CFR 372):

Sodium Nitrite	7632-00-0	1-5%
Nitrate Compounds (Potassium Nitrate)	7757-79-1	1-5%

PROTECTION OF STRATOSPHERIC OZONE: This product is not known to
contain or to have been manufactured with ozone depleting
substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

CERCLA SECTION 103: Spills of this product over the RQ (reportable
quantity) must be reported to the National Response Center. The RQ
for the product, based on the RQ for Sodium Nitrite (5% maximum)

of 100 lbs, is 2,000 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

EPA TSCA INVENTORY: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CANADIAN WHMIS CLASSIFICATION: Class C (Oxidizing Material);
Class D - Division 2 - Subdivision B - (A toxic material causing other chronic effects)

CANADIAN WHIMIS HAZARD SYMBOLS: Toxic - Division 2, Oxidizer

This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

SECTION 16: OTHER INFORMATION

REVISION SUMMARY: Section 14, IMDG Information

This MSDS is directed to professional users and bulk handlers of the product. Consumer products are labeled in accordance with Federal Hazardous Substances Act regulations.

While Prestone Products Corporation believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of tests conducted, the data are not to be taken as a warranty or representation for which Prestone Products Corporation assumes legal responsibility. They are offered for your consideration, investigation and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

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