



SAFETY DATA SHEET

Section 1. PRODUCT AND COMPANY IDENTIFICATION

SDS ID: SDS514

Product Name: FRAM® Spin-on Coolant Filter with Supplemental Coolant Additive DCA-4 Pellets
Product Code: PR3907, PR3909, PR3910, PR3911, FK7788

Manufacturer:

US Office:

FRAM Group Operations LLC
Perrysburg, OH 43551

Canadian Office:

FRAM Group (Canada), Inc.
Mississauga, Ontario L5L 3S6

MEDICAL EMERGENCIES AND ALL OTHER INFORMATION PHONE NUMBER:

(800)890-2075 (in the US)

(800)668-9349 (in Canada)

TRANSPORTATION EMERGENCY PHONE NUMBER (Chemical Spills and Transport Accidents only):

CHEMTREC 1-800-424-9300 (in the US)

CANUTEC (613)996-6666 (in Canada)

SDS Date of Preparation: 07/31/2014

Product Use: Cooling system filter for trucks

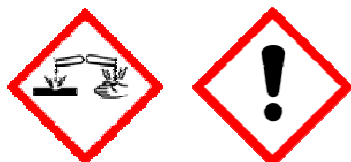
Section 2. HAZARDS IDENTIFICATION

GHS/HAZCOM 2012 Classification:

This product is a manufactured article (truck coolant filter) containing solid pellets. The filter unit is sealed so no contact with the contents occurs during normal handling or use. No adverse effects are expected with normal handling of the metal filter. Contact with the pellets may cause adverse effects and are classified as follows:

Health	Physical
Acute Oral Toxicity Category 4 Eye Corrosion Category 1 Skin Corrosion Category 1	Metal Corrosive

Label Elements





SAFETY DATA SHEET

Coolant Filter with DCA-4 PELLETS

SDS514
PR3907, PR3909, PR3910,
PR3911, FK7788

DANGER!

H290 May be corrosive to metals

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage

Prevention:

P234 Keep only in original container.

P260 Do not breathe dust.

P264 Wash exposed skin thoroughly after handling.

P270 Do not eat, drink, or smoke when using this product.

P280 Wear protective gloves, protective clothing, eye protection, and face protection.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P310 Immediately call a POISON CENTER or doctor.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P310 Immediately call a POISON CENTER or doctor.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 Immediately call a POISON CENTER or doctor.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor.

P363 Wash contaminated clothing before reuse.

P390 Absorb spillage to prevent material-damage.

Storage:

P405 Store locked up.

P406 Store in corrosive resistant container with a resistant inner liner.

Disposal:

P501 Dispose of contents and container in accordance with local and national regulations.

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount
Tetrapotassium Pyrophosphate	7320-34-5	15-40%
Sodium Nitrite	7632-00-0	10-25%
Potassium Nitrate	7757-79-1	10-15%
Sodium Molybdate	7631-95-0	7-13%
Sodium Silicate	6834-92-0	3-7%



SAFETY DATA SHEET

Coolant Filter with DCA-4 PELLETS

SDS514
PR3907, PR3909, PR3910,
PR3911, FK7788

Section 4. FIRST AID MEASURES

Eye: None expected with normal use. If contact occurs with filter pellets, immediately flush eyes with large quantities of water for at least 20 minutes, holding the eyelids apart. Get immediate medical attention.

Skin: None expected with normal use. If contact with the filter pellets occurs, remove contaminated clothing. Immediately wash skin thoroughly with soap and water for at least 15 minutes. If irritation develops or persists, get immediate medical attention. Launder clothing before re-use. (Discard contaminated shoes)

Ingestion: None expected with normal use. If filter pellets or dust is swallowed, 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.

Inhalation: None expected with normal use. If dust from the filter pellets is inhaled, immediately remove to fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Get immediate medical attention.

Most Important Symptoms: Corrosive. May cause eye and skin burns. Harmful or fatal if inhaled, ingested or absorbed through the skin. May cause nitrite poisoning. Inhalation of dust may cause respiratory irritation, coughing, nose bleeds, sore throat, shortness of breath and tightness in the chest.

Indication of Immediate Medical Attention and Special Treatment, If Needed: Seek immediate medical attention for all routes of exposures to pellets or dust.

Notes to Physicians: 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 FIGHTING MEASURES

Suitable Extinguishing Media: Use media appropriate to the surrounding materials. If filters are damaged and pellets are released, use water to extinguish fire. Do not use dry chemicals or foams. Some chemical extinguishing agents may react with this material.

Specific Hazards Arising From the Chemical: Product contains an oxidizer which may enhance combustion. If pellets are released from the filter during a fire, product may accelerate burning. Pellets that come in contact with combustibles may aid in the possibility of ignition. No hazards expected from intact metal filters. Thermal decomposition of pellets may release hydrogen gas and oxides of nitrogen, potassium, sulfur, molybdate and phosphorous. Pellets may be sensitive to mechanical impact.



SAFETY DATA SHEET

Coolant Filter with DCA-4 PELLETS

SDS514
PR3907, PR3909, PR3910,
PR3911, FK7788

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 firefighting to enter drains or water courses.

Section 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: If filters are damaged and pellets are released, 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.

Methods and Materials for Containment / Cleanup: Collect damaged filters and place into appropriate container for disposal. Pick up pellets and place into container. Vacuum up remaining dust. Do not use combustible absorbents or towels. If spill occurs outdoors, cover the spill to prevent wind from spreading dust to the surrounding area. Report releases as required by local, state and federal authorities.

Section 7. HANDLING AND STORAGE

Precautions for Safe Handling: Wash thoroughly with soap and water after handling. Protect filters against physical damage.

If filters are damaged and pellets are released, prevent contact with the eyes, skin and clothing. Avoid breathing dusts. Wear protective clothing and equipment. Wash thoroughly with soap and water after handling. Keep pellets or dust away from all flammable or combustible materials such as solvents, oil, paper, cloth rags, etc.

Conditions for Safe Storage, Including Any Incompatibilities: Store filters in a dry, well ventilated area away from excessive heat and sources of ignition. Avoid storage on wooden floors.

NFPA CLASSIFICATION: None

Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Tetrapotassium Pyrophosphate	None Established
Sodium Nitrite	None Established
Potassium Nitrate	None Established
Sodium Molybdate (As Molybdenum and soluble compounds)	0.5 mg/m ³ TWA ACGIH TLV (respirable) 5 mg/kg TWA OSHA PEL (Total dust)
Sodium Silicate	None Established

Appropriate Engineering Controls: General ventilation is adequate for normal use.

Personal Protective Equipment



SAFETY DATA SHEET

SDS514
PR3907, PR3909, PR3910,
PR3911, FK7788

Coolant Filter with DCA-4 PELLETS

Respiratory Protection: None needed for normal use. In situations where contact with the pellets is likely and the 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.

Skin Protection: None needed for normal use. In situations where contact with the pellets is possible, wear impervious gloves such as rubber.

Eye Protection: None needed for normal use. In situations where contact with the pellets is possible, chemical safety goggles are recommended.

Other Protective Equipment / Clothing: None needed for normal use. In situations where contact with the pellets is possible, 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

The following physical characteristics are for the pellets only.

Appearance: White pellets.	Odor: Slight
Odor Threshold: Not Determined	pH: Not applicable
Melting/Freezing Point: Not applicable	Boiling Point/Range: Not applicable
Flashpoint: None	Evaporation Rate: Not applicable
Flammability (Solid, Gas): Not applicable	Flammable Limits: LEL: Not applicable UEL: Not applicable
Vapor Pressure: Not applicable	Vapor Density (Air = 1): Not applicable
Relative Density: Not determined	Solubility In Water: Soluble
Partition Coefficient (n-octanol/water): Not determined	Autoignition Temperature: Not available
Decomposition Temperature: Not determined	Viscosity: Not applicable

Section 10. STABILITY AND REACTIVITY

Reactivity: Pellets may aid in ignition in contact with organic materials.

Chemical Stability: Stable under normal storage and handling conditions. Pellets may be sensitive to mechanical impact.

Possibility of Hazardous Reactions: None expected under normal use conditions.

Conditions to Avoid: High temperatures, and organic materials.

Incompatibility Materials: Thermal decomposition of pellets may release hydrogen gas and oxides of nitrogen, potassium, sulfur, molybdate and phosphorous.



SAFETY DATA SHEET

Coolant Filter with DCA-4 PELLETS

SDS514
PR3907, PR3909, PR3910,
PR3911, FK7788

Section 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Acute Hazards:

Ingestion: None expected under normal use conditions. Ingestion of pellets 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.

Inhalation: None expected under normal use conditions. Inhalation of pellet dust 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.

Eye Contact: None expected under normal use conditions. Contact with pellets may cause irritation with redness, tearing, blurred vision, corrosive damage and pain.

Skin Contact: None expected under normal use conditions. Contact with pellets may cause irritation with redness, itching and pain. Prolonged contact may produce chemical burns to affected skin areas. 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.

Chronic Effects: None expected under normal use conditions. Prolonged or repeated exposure to pellets may cause mild gastroenteritis, dermatitis, eczema, headache, mental impairment, loss of hair, bronchitis, laryngitis, conjunctivitis, kidney and liver damage and anemia. Sodium molybdate, potassium nitrate, and sodium silicate have been found to cause adverse reproductive effects and/or birth defects in studies with laboratory animals.

Carcinogenicity Listing: None of the components is listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, or OSHA.

Acute Toxicity Values:

Calculated ATE for Product: ATE Oral: 689 mg/kg
 ATE Skin: >5000 mg/kg
 ATE Inhalation: >5 mg/L/4hr.

Tetrapotassium Pyrophosphate: Oral Rat LD50 - 2440 mg/kg
 Skin Rabbit LD50 - >2000 mg/kg
 Inhalation Rat LC50 - >1.1mg/L/4hr

Sodium Nitrite: Oral Rat LD50 - 180 mg/kg
 Inhalation Rat LC50 - 5.5 mg/L /4hr



SAFETY DATA SHEET

SDS514
PR3907, PR3909, PR3910,
PR3911, FK7788

Coolant Filter with DCA-4 PELLETS

Potassium Nitrate:	Oral Rat LD50 – 3015 mg/kg
Sodium Molybdate:	Oral Rat LD50 – 4000 mg/kg Inhalation Rat LC50 - > 2,080 mg/m ³ /4hr
Sodium Silicate:	Oral Rat LD50 - 1153 mg/kg Skin Rabbit LD50 - >5000 mg/kg Inhalation Rat LC50 - >2.06 mg/L/4hr

Section 12. ECOLOGICAL INFORMATION

Ecotoxicity:

Tetrapotassium Pyrophosphate: LC50 Oncorhynchus mykiss (Rainbow trout) >100 mg/L/96 hr.
EC50: Daphnia Magna: >100 mg/L/48 hr.
EC50: Desmodesmus subspicatus (Algae) >100 mg/L/96hr

Sodium Nitrite: LC50: Western mosquitofish, female 1.5 mg/L/ 96 hr.
LC50: Daphnia magna 8.3 mg/L /96 hr.

Potassium Nitrate: LC50 Gambusia affinis (Western mosquitofish) 22.5 mg/L/96 hr.
EC50 Species: Daphnia magna (Water flea) 490 mg/L / 48 hr

Sodium Molybdate: No data available

Sodium Silica: LC50: Brachydanio rerio 210 mg/L/96 hr.

Persistence and Degradability:

Sodium Nitrite: Does not volatilize, and is likely to remain in water until consumed by plants or other organisms.

Bioaccumulative Potential:

No data available

Mobility in Soil:

No data available

Other Adverse Effects: None known



SAFETY DATA SHEET

Coolant Filter with DCA-4 PELLETS

SDS514
PR3907, PR3909, PR3910,
PR3911, FK7788

Section 13. DISPOSAL CONSIDERATIONS

Dispose in accordance with local, state and federal environmental regulations.

Section 14. TRANSPORT INFORMATION

U.S. DOT HAZARD CLASSIFICATION (For Ground Shipments Only): Not Regulated

Note: Packages that contain 400 lbs. or more of pellets are subject to RQ provisions and must be shipped under the following shipping description: Environmentally Hazardous Substance, solid, n.o.s. (Sodium Nitrite), UN3077, 9, PG III RQ

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

IMDG CODE SHIPPING CLASSIFICATION: Environmentally Hazardous Substance, solid, n.o.s. (Sodium Nitrite), UN3077, 9, PG III

CANADIAN TDG CLASSIFICATION (For Ground Shipments Only): Not Regulated

Section 15. REGULATORY INFORMATION

CERCLA: This product has a Reportable Quantity (RQ) of 400 lbs. based on the RQ for Sodium Nitrite of 100 lbs. Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Not applicable

SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Sodium Nitrite	7632-00-0	10-25%
Nitrate Compounds (Potassium Nitrate)	7757-79-1	10-15%

EPA TSCA Inventory: All of the ingredients in this product are listed on the EPA TSCA Inventory.

CANADA:

This product has been classified under the CPR and this SDS discloses information elements required by the CPR.

Canadian WHMIS Classification: Manufactured article

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS):

All of the ingredients are listed on the EINECS inventory.

AUSTRALIA: All of the ingredients of this product are listed on the Australian Inventory of Chemical



SAFETY DATA SHEET

SDS514
PR3907, PR3909, PR3910,
PR3911, FK7788

Coolant Filter with DCA-4 PELLETS

Substances.

JAPAN: All of the ingredients of this product are listed on the Japanese Existing and New Chemical Substances (METI) List.

KOREA: All of the ingredients of this product are listed on the Korean Existing Chemical List (KECL).

PHILIPPINES: All of the ingredients of this product are listed on the Philippine Inventory of Chemical and Chemical Substance (PICCS)

CHINA: All of the ingredients of this product are listed on the Inventory of Existing Chemical Substance in China (IECSC).

Section 16. OTHER INFORMATION

NFPA Rating: Health = 3 Fire = 0 Instability = 1
HMIS Rating: Health = 3 Fire = 0 Physical Hazards = 1

Revision Summary: All Sections – conversion to Hazcom 2012 classification and labeling and format.

SDS Date of Preparation/Revision: July 31, 2014

Disclaimer of Liability:

The information contained herein is based on the data available to us and, is to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we assume no liability for damages incurred by use of this material. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that may exist. Users of this product should satisfy themselves that the conditions and methods of use assure the product is used safely. No representations or warranties, either expressed or implied, or any nature are made hereunder with respect to the information contained within. It is the responsibility of the user to comply with and all federal, state or local laws and regulations that may exist. Nothing contained herein is to be construed as a recommendation for use in violation of any applicable laws or regulations.

Consult Fram Group 1-800-890-2075 for further information.