



# SAFETY DATA SHEET

## Section 1. PRODUCT AND COMPANY IDENTIFICATION

**SDS ID: SDS512**

**Product Name: FRAM® Spin-on Coolant Filter with Supplemental Coolant Additive DCA-2 Pellets**

**Product Code: PR3414; PR3753**

**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 Skin Sensitizer Category 1	Metal Corrosive

Label Elements



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### DANGER!

H290 May be corrosive to metals  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage  
H317 May cause an allergic skin reaction

### 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.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
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
Sodium Nitrite	7632-00-0	20-40%
Tin calconite; Disodium tetraborate pentahydrate	12045-88-4	15-40%
Sodium Nitrate	7631-99-4	7-13%
Sodium Silicate	6834-92-0	7-13%
Mercaptobenzothiazole	149-30-4	5-10%



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Benzotriazole	95-14-7	1-5%
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### 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 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 carbon, nitrogen and sulfur oxide, nitrous oxide, sodium ions, silicic acid and hydrogen gas. Pellets may be sensitive to mechanical impact.



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**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, sources of ignition and combustible materials. Avoid storage on wooden floors.

NFPA CLASSIFICATION: None

#### Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### Exposure Guidelines:

Sodium Nitrite	None Established
Tin calconite; Disodium tetraborate Pentahydrate (As borate compound)	2 mg/m <sup>3</sup> TWA ACGIH TLV (inhalable) 6 mg/m <sup>3</sup> STEL ACGIH TLV (inhalable)
Sodium Nitrate	None Established
Sodium Silicate	None Established
Mercaptobenzothiazole	5 mg/m <sup>3</sup> TWA skin AIHA WEEL
Benzotriazole	None Established

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



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### Personal Protective Equipment

**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.

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



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**Incompatibility Materials:** The pellets are incompatible with strong acids, reducing agents, cyanides, alkaloids, metallic salts, fluorine, and acids. Pellets may aid in ignition in contact with organic materials.

**Hazardous Decomposition Products:** Thermal decomposition of pellets may release carbon, nitrogen and sulfur oxide, nitrous oxide, sodium ions, silicic acid and hydrogen.

#### 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 eye burns or damage, and severe irritation with redness, tearing and pain.

**Skin Contact:** None expected under normal use conditions. Contact with pellets may cause burns and severe irritation with redness, itching and pain. Sodium nitrite and disodium tetraborate may be absorbed through the skin causing effects similar to those described under inhalation and ingestion. May cause skin sensitization.

**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 tetraborate, sodium nitrate, mercaptobenzothiazole 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: 412 mg/kg  
  ATE Skin: >5000 mg/kg  
  ATE Inhalation: >5 mg/L/4hr.

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



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Tin calconite; Disodium Tetraborate Pentahydrate (As Sodium Tetraborate):	Oral Rat LD50 - 2660 mg/kg Skin Rabbit LD50 - >1055 mg/kg Inhalation Rat LC50 - >2 mg/L/4hr
Sodium Nitrate:	Oral Rat LD50 - 3430 mg/kg Skin Rabbit LD50 - >5000 mg/kg
Sodium Silicate:	Oral Rat LD50 - 1153 mg/kg Skin Rabbit LD50 - >5000 mg/kg Inhalation Rat LC50 - >2.06 mg/L/4hr
Mercaptobenzothiazole:	Oral Rat LD50 - 3800 mg/kg Inhalation Rat LC50 - > 1270 mg/L/4hr Skin Rabbit LD50 - >7940 mg/kg
Benzotriazole:	Oral Rat LD50 - 560 mg/kg Inhalation Rat LC50 - > 6.0 mg/L Skin Rabbit LD50 - >2000 mg/kg

### Section 12. ECOLOGICAL INFORMATION

#### Ecotoxicity:

Sodium Nitrite:	LC50: Western mosquitofish, female 1.5 mg/L/ 96 hr. LC50: Daphnia magna 8.3 mg/L /96 hr.
Tin calconite; Disodium Tetraborate Pentahydrate (As Sodium Tetraborate):	LC50 Gambusia affinis (Western mosquitofish) 104 mg/L/96 hr. LC50 Daphnia magna (Water flea, neonate) 141 mg /L/48 hr.
Sodium Nitrate:	LC50 Oncorhynchus my kiss (Rainbow trout) 1658 mg/L/96 hr. LC50 Daphnia magna (Water flea) 3581 mg/L /48 hr.
Sodium Silica:	LC50: Brachydanio rerio 210 mg/L/96 hr.
Mercaptobenzothiazole:	LC50 Oncorhynchus mykiss (Rainbow trout) 0.73 mg/L/96 hr EC50: Daphnia Magna: > 0.71 mg/L/48 hr
Benzotriazole:	LC50 Trout: 39 mg/L/96 hr. LC50 Daphnia Magna: 141.6 mg/L/48 hr. EC50 Algae: 15.4 mg/L/96 hr.



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#### Persistence and Degradability:

Sodium Nitrite:	Does not volatilize and is likely to remain in water until consumed by plants or other organisms.
Tin calconite; Disodium Tetraborate Pentahydrate (As Sodium Tetraborate):	Inorganic natural mineral.
Sodium Nitrate:	Does not volatilize and is likely to remain in water until consumed by plants or other organisms.
Mercaptobenzothiazole:	Is not inherently biodegradable.
Benzotriazole:	Biodegradation is not expected to be an important fate process for this compound.

#### Bio accumulative Potential:

Tin calconite; Disodium Tetraborate Pentahydrate (As Sodium Tetraborate):	BCF 121 this BCF suggests the potential for bio concentration in aquatic organisms is low.
Mercaptobenzothiazole:	Is not bioaccumulative.
Benzotriazole:	BCF 2.5 suggests the potential for bio concentration in aquatic organisms is low.

#### Mobility in Soil:

Tin calconite; Disodium Tetraborate Pentahydrate (As Sodium Tetraborate):	Absorbed by mineral portion of soil. Slowly leached.
Mercaptobenzothiazole:	Medium to low.
Benzotriazole:	Highly mobile in soil.

**Other Adverse Effects:** None known

### Section 13. DISPOSAL CONSIDERATIONS

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





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## Section 14. TRANSPORT INFORMATION

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

Note: Packages that contain 250 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 250 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):** Pellets: Acute Health

**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	20-40%
Nitrate Compounds (Sodium Nitrate)	7631-99-4	7-13%
Mercaptobenzothiazole	149-30-4	5-10%

**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

**Canadian Environmental Protection Act:** All of the ingredients are listed on the Canadian Domestic Substances List. (DSL)

**European Inventory of Existing Commercial Chemical Substances (EINECS):** All of the ingredients are listed on the EINECS inventory.



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### Section 16. OTHER INFORMATION

#### Ratings for filter contents:

**NFPA Rating:** Health = 3      Fire = 0      Instability = 0  
**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 any 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.