



SAFETY DATA SHEET

Section 1. PRODUCT AND COMPANY IDENTIFICATION

SDS ID: SDS516

Product Name: FRAM® Spin-on Coolant Filter with Supplemental Coolant Additive ES Coated Tablet
Product Code: PR8692

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 beige tablets that are an oxidizer. 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 tablets may cause the following adverse effects:

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

Label Elements



DANGER!

H290 May be corrosive to metals



SAFETY DATA SHEET

Spin-On Coolant Filter with ES Coated Tablet

SDS516
PR8692

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.
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:

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%
Sodium Silicate	6834-92-0	15-30%
Sodium Tetraborate	1303-96-4	3-7%

The exact concentrations are a trade secret.

Section 4. FIRST AID MEASURES

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



SAFETY DATA SHEET

SDS516
PR8692

Spin-On Coolant Filter with ES Coated Tablet

Skin: None expected with normal use. If contact with the filter tablets occurs, remove contaminated clothing. Immediately wash skin thoroughly for 15 minutes with soap and water. 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 tablets 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 tablets 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 tablets 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 tablets may release carbon and nitrogen oxides and hydrogen gas. Tablets may be sensitive to mechanical impact.

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.



SAFETY DATA SHEET

Spin-On Coolant Filter with ES Coated Tablet

SDS516
PR8692

Section 6. ACCIDENTAL RELEASE MEASURES

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

Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Sodium Nitrite	None Established
Sodium Silicate	None Established
Sodium Tetraborate (As borate compound)	2 mg/m ³ TWA ACGIH TLV (inhalable) 6 mg/m ³ STEL ACGIH TLV (inhalable)

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

Personal Protective Equipment

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



SAFETY DATA SHEET

Spin-On Coolant Filter with ES Coated Tablet

SDS516
PR8692

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

Other: None needed for normal use. In situations where contact with the tablets 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 tablets only.

Appearance: Beige tablets.	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: 83%
Partition Coefficient (n-octanol/water): Not determined	Autoignition Temperature: Not available
Decomposition Temperature: Not determined	Viscosity: Not applicable

Section 10. STABILITY AND REACTIVITY

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

Chemical Stability: Stable under normal storage and handling conditions. Tablets 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: The tablets are incompatible with strong acids, reducing agents, cyanides, ammonium salt and metallic salts. Tablets may aid in ignition in contact with organic materials.

Hazardous Decomposition Products: Thermal decomposition of tablets may release carbon and nitrogen oxides and hydrogen gas.



SAFETY DATA SHEET

Spin-On Coolant Filter with ES Coated Tablet

SDS516
PR8692

Section 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Acute Hazards:

Ingestion: None expected under normal use conditions. Ingestion of tablets 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 tablet 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 tablets may cause irritation with redness, tearing and pain.

Skin Contact: None expected under normal use conditions. Contact with tablets may cause irritation with redness, itching and pain. Sodium nitrite and sodium tetraborate may be absorbed through the skin causing effects similar to those described under inhalation and ingestion.

Chronic Effects: None expected under normal use conditions. Prolonged or repeated exposure to filter contents may cause mild gastroenteritis, dermatitis, eczema, headache, mental impairment, loss of hair, bronchitis, laryngitis, conjunctivitis, kidney and liver damage and anemia. Sodium tetraborate 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: 402 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
Sodium Silicate:	Oral Rat LD50 - 1153 mg/kg Skin Rabbit LD50 - >5000 mg/kg Inhalation Rat LC50 - >2.06 mg/L/4hr



SAFETY DATA SHEET

Spin-On Coolant Filter with ES Coated Tablet

SDS516
PR8692

Sodium Tetraborate: Oral Rat LD50 - 2660 mg/kg
Skin Rabbit LD50 - >1055 mg/kg
Inhalation Rat LC50 - >2 mg/L/4hr

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.

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

Sodium Tetraborate: LC50 Gambusia affinis (Western mosquitofish) 104 mg/L/96 hr.
LC50 Daphnia magna (Water flea, neonate) 141 mg /L/48 hr.

Persistence and Degradability:

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

Sodium Tetraborate: Inorganic natural mineral.

Bio accumulative Potential:

Sodium Tetraborate: BCF 121 this BCF suggests the potential for bio concentration in aquatic organisms is low.

Mobility in Soil:

Sodium Tetraborate: Absorbed by mineral portion of soil. Slowly leached.

Other Adverse Effects: None known

Section 13. DISPOSAL CONSIDERATIONS

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



SAFETY DATA SHEET

Spin-On Coolant Filter with ES Coated Tablet

SDS516
PR8692

Section 14. TRANSPORT INFORMATION

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

Note: if a shipment of a reportable quantity (250 lbs.) in a single package is involved, the following information applies:

PROPER SHIPPING NAME: RQ, Environmentally Hazardous Substance, Solid, n.o.s. (Sodium nitrite)

UN NUMBER: UN3077

PACKING GROUP: PG III

LABELS REQUIRED: Class 9

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): 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	20-40%
----------------	-----------	--------

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.



SAFETY DATA SHEET

Spin-On Coolant Filter with ES Coated Tablet

SDS516
PR8692

Section 16. OTHER INFORMATION

Ratings for filter contents:

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.