Section 1 PRODUCT AND COMPANY IDENTIFICATION

Product Number: NAPA 4206, 4075, 4112, 4370

Trade Name and Synonyms: NAPA Coolant Filters / Conditioners

Chemical Name and Synonyms: Pyrophosphate-nitrite-nitrate-molybdate corrosion inhibitor

Chemical Family: Industrial water treatment

Product Use: Vehicle coolant treatment

Restrictions on use: Use only as directed

MSDS Date of Preparation: April 30, 2015

Manufacturer
Wix Filtration Products Division, Affinia Group
PO Box 1967
Gastonia, NC 28053

Telephone Numbers
Product Information: (704) 869-3869
Emergency Phone: (800) 424-9300 Chemtrec

2. HAZARD(S) IDENTIFICATION

Classification:

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

<table>
<thead>
<tr>
<th>Physical</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrosive to Metals Category 1</td>
<td>Acute Toxicity Category</td>
</tr>
<tr>
<td></td>
<td>Skin Corrosion Category 1</td>
</tr>
<tr>
<td></td>
<td>Eye Damage Category 1</td>
</tr>
</tbody>
</table>

Labeling:

Danger!

Hazard statement(s)

May be corrosive to metals
Harmful if swallowed.
Causes severe skin burns and eye damage

Precautionary statement(s)

Prevention

Keep only in original container.
Do not breathe dust.
Wash exposed skin thoroughly after handling.
Do not eat, drink, or smoke when using this product.
Wear protective gloves, protective clothing, eye protection,
and face protection.

Response
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Wash contaminated clothing before reuse.

Storage & Disposal
P405 Store locked up.
P406 Store in corrosive resistant container with a resistant inner liner.
P501 Dispose of contents and container in accordance with local and national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrapotassium pyrophosphate</td>
<td>7320-34-5</td>
<td>25-35%</td>
</tr>
<tr>
<td>Sodium Nitrite</td>
<td>7632-00-0</td>
<td>15-25%</td>
</tr>
<tr>
<td>Potassium Nitrate</td>
<td>7757-79-1</td>
<td>10-20%</td>
</tr>
<tr>
<td>Sodium Molybdate</td>
<td>7631-95-0</td>
<td>5-15%</td>
</tr>
<tr>
<td>Sodium Metasilicate</td>
<td>6834-92-0</td>
<td>5-15%</td>
</tr>
<tr>
<td>Benzotriazole</td>
<td>95-14-7</td>
<td>1-10%</td>
</tr>
</tbody>
</table>

The specific identity and/or exact concentration has been withheld as a trade secret.

4. FIRST-AID MEASURES

Eye: None expected under normal handling and 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 contact: None expected with normal use. If contact with the filter pellets occurs, remove contaminated clothing. Wash skin with soap and water. Get medical attention if irritation develops.

Inhalation: None expected with normal use. If dust from tablet is inhaled, remove to fresh air. If irritation develops or if breathing is difficult, get medical attention.

Ingestion: None expected with normal use. If filter pellets, or dust is swallowed, do not induce vomiting. If conscious, rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.
Most important symptoms/effects, acute and delayed: None expected under normal conditions of use. The following applies to contact with the table if the coolant filter is broken and the tablet is exposed: Eye and skin contact may cause severe irritation or burns. Permanent eye damage may occur. Inhalation of dust may cause mucous membrane and respiratory tract irritation. Swallowing may cause burns to the digestive tract, central nervous system effects, cyanosis, convulsions and collapse.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide to extinguish.

Specific hazards arising from the chemical: The tablet is not flammable or combustible. The tablet contains potassium nitrate and sodium nitrite which are oxidizers and can enhance the burning of other materials. Combustion may produce oxides of carbon, nitrogen, molybdenum, phosphorus and sodium.

Special protective equipment and precautions for fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire exposed containers and structures with water. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Use appropriate protective clothing and equipment during clean-up.

Environmental hazards: Avoid release into the environment. Report spill as required by local and federal regulations.

Methods and materials for containment and cleaning up: If filter is not damaged, pick up and keep for use. If the filter is damaged and the tablet is released, collect in a manner that minimizes the generation of airborne dust. Place collected material into suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling: Handle filters in a manner that minimizes the risk of damage and release of contents. In handling damaged filters, avoid generating and breathing dusts. Prevent contact with eyes. Avoid contact with skin and clothing.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry, well-ventilated area away from combustible materials, acids and other incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Exposure Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrapotassium pyrophosphate</td>
<td>None Established</td>
</tr>
<tr>
<td>Sodium nitrite</td>
<td>None Established</td>
</tr>
<tr>
<td>Potassium Nitrate</td>
<td>None Established</td>
</tr>
<tr>
<td>Sodium Molybdate (as soluble Mo)</td>
<td>0.5 mg/m3 respirable TWA ACGIH TLV</td>
</tr>
</tbody>
</table>

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Appropriate engineering controls: No special engineering controls are required for handling undamaged filters.

Personal Protective Equipment
Respiratory protection: None required under normal conditions of use. For operations where exposures are excessive or irritation is experienced, a NIOSH approved respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134 and good Industrial Hygiene practice.
Skin protection: None required under normal conditions of use. Wear rubber or other impervious gloves when handling damaged filters or tablets.
Eye protection: None required under normal conditions of use. Safety goggles required for handling damaged filters or tablets.

9. PHYSICAL AND CHEMICAL PROPERTIES

The following physical characteristics are for the pellets only.

Appearance (physical state, color, etc.): White briquette inside a coolant filter
Odor: Mild ester odor.

<table>
<thead>
<tr>
<th>Odor threshold:</th>
<th>Not available</th>
<th>pH:</th>
<th>Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/freezing point:</td>
<td>Not available</td>
<td>Boiling point/Range:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point:</td>
<td>Not applicable</td>
<td>Evaporation rate:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>Not flammable</td>
<td>Flammable limits:</td>
<td>LEL: Not applicable</td>
</tr>
<tr>
<td>Flammable limits:</td>
<td>LEL: Not applicable</td>
<td>UEL:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor pressure:</td>
<td>Not applicable</td>
<td>Vapor density:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative density:</td>
<td>Not available</td>
<td>Solubility(ies):</td>
<td>Completely soluble in water</td>
</tr>
<tr>
<td>Partition coefficient: n-ctanol/water:</td>
<td>Not applicable</td>
<td>Auto-ignition temperature:</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Not available</td>
<td>Viscosity:</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity: Pellets may ignite in contact with organic materials.
Chemical stability: Stable under normal storage and handling conditions.
Possibility of hazardous reactions: None expected under normal use conditions.
Conditions to avoid: Avoid extreme heat.
Incompatible materials: Incompatible with oxidizing materials, reducing agents, organic materials, acids and moisture
Hazardous decomposition products: Thermal decomposition will generate oxides of carbon and nitrogen and metal oxides.

11. TOXICOLOGICAL INFORMATION
Potential Health Effects: Handling undamaged filters will not result in adverse effects. The following information pertains to exposure to the coolant treatment tablets.

Eye contact: May cause severe irritation or burns with redness, tearing and pain. Permanent damage can occur.

Skin contact: May cause severe irritation or burns. Sodium nitrite may be harmful if absorbed through the skin.

Inhalation: Dust may cause irritation of the mucous membranes and upper respiratory tract. Absorption may cause effects similar to those described under ingestion.

Ingestion: Toxic if swallowed. May cause burns to the mouth and throat, dizziness, nausea, vomiting, low blood pressure, cyanosis, rapid heartbeat, convulsions and collapse.

Chronic effects: Prolonged or repeated exposure may cause nervous system effects, liver damage, kidney damage and effects on the blood.

Reproductive Toxicity: None of the components have been shown to cause reproductive toxicity.

Carcinogenicity: Molybdenum compounds have been shown to cause cancer in laboratory animals. In a two year study in mice, molybdenum trioxide showed some evidence of carcinogenic activity in male and female mice based on increased incidences of alveolar/bronchiolar carcinoma and adenoma or carcinoma. A two year study showed equivocal evidence of carcinogenic activity in male rats based on a marginally significant positive trend of alveolar/bronchiolar adenoma or carcinoma (combined). There was no evidence of carcinogenic activity of molybdenum trioxide in female rats. Soluble molybdenum compounds are classified by ACGIH as A3 (confirmed animal carcinogen with unknown relevance to humans). None of the other components of this product present at 0.1% or greater are listed as carcinogens by ACGIH, IARC, NTP or OSHA.

Acute Toxicity Values:
Acute Toxicity Estimate for the Product: Oral: 318.5 mg/kg, dermal >2000 mg/kg
Tetrapotassium pyrophosphate: Oral rat LD50 4260 mg/kg, Dermal rat LD50 >5000 mg/kg, Inhalation rat LC50 >1.1 mg/L/4 hr. (maximum attainable concentration)
Sodium Nitrite: Oral rat LD50 85 mg/kg
Potassium Nitrate: Oral rat LD50 >2000 mg/kg, Inhalation rat LC50 >0.527 mg/L/4 hr (maximum attainable concentration), Dermal rat LD50 >5000 mg/kg
Sodium Molybdate: Oral rat LD50 3178 mg/kg, Inhalation rat LC50 >3.92 mg/L/4 hr (maximum attainable concentration), Dermal rat LD50 >2000 mg/kg
Sodium Metasilicate: Oral rat LD50 1890 mg/kg, Inhalation rat LC50 >2.06 mg/L/4 hr (no deaths occurred), Dermal rat LD50 >5000 mg/kg.
Benzotriazole: Oral rat LD50 500 mg/kg, Dermal rabbit LD50 >2000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:
Tetrapotassium pyrophosphate: 96 hr LC50 Oncorhynchus mykiss > 100 mg/L, 8 he EC50 daphnia magna >100 mg/L, 720 hr EC50 Desmodesmus subspicatus >100 mg/L
Sodium Nitrite: 96 hr LD50 Oncorhynchus mykiss 0.54 mg/L, 48 hr EC50 daphnia magna 15.4 mg/L, 72 hr EC50 Desmodesmus subspicatus >100 mg/L
Potassium Nitrate: 96 hr LC50 Poecilia reticulata 1378 mg/L, 48 hr EC50 daphnia magna 490 mg/L
Sodium Molybdate: 96 hr LC50 Pimephales promelas 609.1 mg/L, 48 hr LC50 daphnia magna 2729.4 mg/L
Sodium Metasilicate: 96 hr LC50 Gambusia affinis 2350 mg/kg, 48 hr EC50 daphnia magna 1700 mg/L, 72 hr EC50 Desmodesmus subspicatus 207 mg/L
Benzotriazole: 96 hr LC50 Danio rerio 180 mg/L, 48 hr EC50 Daphnia galeata 15.8 mg/L, 72 hr EC50 Selenastrum capricornutum 75 mg/L

**Persistence and degradability:** Biodegradation is not applicable to inorganic substances.
**Bioaccumulative potential:** No data available.
**Mobility in soil:** No data available.
**Other adverse effects:** None known.

### 13. DISPOSAL CONSIDERATIONS

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

### 14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>DOT (containers &lt;500 lbs)</th>
<th>UN Number</th>
<th>Proper shipping name</th>
<th>Hazard Class</th>
<th>Packing Group</th>
<th>Environmental Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
<td>RQ 400 lbs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DOT (containing &gt;500 lbs)</th>
<th>UN3077</th>
<th>Environmentally Hazardous Substance, solid, n.o.s. (Sodium Nitrite)</th>
<th>9</th>
<th>PGIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDG</td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMDG</td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Not applicable – product is transported only in packaged form.

**Special precautions:** None known

### 15. REGULATORY INFORMATION

Safety, health, and environmental regulations specific for the product in question.

**CERCLA 103 Reportable Quantity:** The tablets have a reportable quantity of 400 lbs based on 25% sodium nitrite with an RQ of 100 lbs. Many states have more stringent reporting requirements. Report releases as required by all federal, state and local authorities.

**SARA TITLE III:**

**Hazard Category for Section 311/312:** Acute health

**SARA 313:** This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements:

- Sodium nitrite 7632-0-0 15-25%
- Sodium Nitrate 7631-99-4 10-20%
(nitrate compound)

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

California Proposition 65: This product is not known to contain regulated chemicals.

CANADA:
Canadian CEPA Status: All of the components are on the Canadian DSL.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA Rating</th>
<th>Flammability</th>
<th>Instability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health = 3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS Rating</th>
<th>Flammability</th>
<th>Physical Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health = 3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

SDS Revision History: Converted to GHS format – All sections revised

Date of preparation: April 30, 2015

Date of last revision: July 1, 2013

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## Revision History

<table>
<thead>
<tr>
<th>Product</th>
<th>Type</th>
<th>Chemical Name</th>
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<tbody>
<tr>
<td>W1008</td>
<td>Coolant Filters / Conditioners</td>
<td>Pyrophosphate-nitrite-nitrate-molybdate corrosion inhibitor</td>
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<table>
<thead>
<tr>
<th>Revision</th>
<th>Description</th>
<th>Effective Date</th>
<th>Signed</th>
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<tbody>
<tr>
<td>A</td>
<td>Added 4370 &amp; changed chemistry.</td>
<td>6/1/13</td>
<td>Carmen Reich</td>
</tr>
<tr>
<td>B</td>
<td>Revised phone number.</td>
<td>2/3/14</td>
<td>Carmen Reich</td>
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<tr>
<td>C</td>
<td>Converted to GHS Format</td>
<td>4/30/15</td>
<td>Angela Rath</td>
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