SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture
Product Name: Sodium Nitrite, Free-Flowing Grades
Alternate Names: Sodium Nitrite, Granular Free-Flowing Food Grade; Sodium Nitrite, Granular Free-Flowing Technical Grade

Intended Use of the Product

Name, Address, and Telephone of the Responsible Party

Manufacturer
CHEMTRADE LOGISTICS INC.
155 Gordon Baker Road
Suite 300
Toronto, Ontario M2H 3N5
For SDS Info: (416) 496-5856
www.chemtradelogistics.com

Emergency Telephone Number

Emergency Number : Canada: CANUTEC +1-613-996-6666 / US: CHEMTREC +1-800-424-9300
Chemtrade Emergency Contact: (866) 416-4404
For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS-US classification
- Comb. Dust: Ox. Sol. 2 H272
- Acute Tox. 3 (Oral) H301
- Eye Irrit. 2A H319
- Aquatic Acute 1 H400

Full text of H-phrases: see section 16

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US):

Signal Word (GHS-US): Danger
Hazard Statements (GHS-US):
- May form combustible dust concentrations in air
  H272 - May intensify fire; oxidizer
  H301 - Toxic if swallowed
  H319 - Causes serious eye irritation
  H400 - Very toxic to aquatic life

Precautionary Statements (GHS-US):
- P210 - Keep away from extremely high or low temperatures, ignition sources, and incompatible materials. - No smoking.
- P220 - Keep/Store away from combustible material, oxidizable materials, and incompatible materials.
- P221 - Take any precaution to avoid mixing with combustible material, oxidizable materials, and incompatible materials.
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P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves, protective clothing, and eye protection.  
P301+P310 - If swallowed: 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.  
P321 - Specific treatment (see section 4 on this SDS).  
P330 - Rinse mouth.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P370+P378 - In case of fire: Use appropriate media (see section 5) to extinguish.  
P391 - Collect spillage.  
P405 - Store locked up.  
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

### Other Hazards

**Other Hazards Not Contributing to the Classification**: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Exposure of nitrates via ingestion that result in endogenous nitrosation are classified by IARC as a Group 2A - probable human carcinogen. This product is not anticipated to be available for oral exposure which would result in endogenous nitrosation under normal conditions of use or foreseeable emergencies, and is therefore not classified as a carcinogen. Ingestion may cause methemoglobinemia. Initial manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucous membranes, with skin color being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia. Signs and symptoms of nitrite poisoning include methemoglobinemia, nausea, dizziness, increased heart rate, hypotension, fainting and, possibly shock.

**Unknown Acute Toxicity (GHS-US)** Not available

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>% (w/w)</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium nitrite</td>
<td>(CAS No) 7632-00-0</td>
<td>90 - 100</td>
<td>Ox. Sol. 2, H272, Acute Tox. 3 (Oral), H301, Eye Irrit. 2A, H319, Aquatic Acute 1, H400</td>
</tr>
<tr>
<td>Sodium sulfate</td>
<td>(CAS No) 7757-82-6</td>
<td>&lt; 0.1</td>
<td>Not classified</td>
</tr>
<tr>
<td>Water</td>
<td>(CAS No) 7732-18-5</td>
<td>&lt; 0.1</td>
<td>Not classified</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>(CAS No) 91-20-3</td>
<td>&lt; 0.1</td>
<td>Flam. Sol. 2, H228, Acute Tox. 4 (Oral), H302, Carc. 2, H351, Aquatic Acute 1, H400, Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

* The specific chemical identity and/or exact percentage of composition has been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200]. A range of concentration as prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.

### SECTION 4: FIRST AID MEASURES

**Description of First Aid Measures**

**General**: Never give anything by mouth to an unconscious person. If exposed or concerned: Seek medical advice/attention.

**Inhalation**: When symptoms occur: go into open air and ventilate suspected area. Immediately call a POISON CENTER or doctor.

**Skin Contact**: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Seek medical advice/attention.

**Eye Contact**: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**Ingestion**: Do NOT induce vomiting. Rinse mouth. Seek immediate medical advice/attention.
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Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye irritation. Toxic if swallowed.

Inhalation: Prolonged exposure may cause irritation. Respirable dust may be absorbed through the bloodstream and have adverse effects.

Skin Contact: Prolonged exposure may cause skin irritation. Absorption through the skin may occur from direct contact.

Eye Contact: Causes serious eye irritation. Contact causes severe irritation with redness and swelling of the conjunctiva.

Ingestion: This material is toxic in small amounts orally, and can cause adverse health effects or death. Ingestion may cause methemoglobinemia. Initial manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucous membranes, with skin color being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia. Signs and symptoms of nitrite poisoning include methemoglobinemia, nausea, dizziness, increased heart rate, hypotension, fainting and, possibly shock.

Chronic Symptoms: None known.

Indication of Any Immediate Medical Attention and Special Treatment Needed
If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand. Causes methemoglobinemia – emergency response should treat appropriately, such as by intravenous administration of methylene blue.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, fog (flooding amounts).

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire. Do not use ABC dry chemical agents. Carbon dioxide (CO2).

Special Hazards Arising From the Substance or Mixture

Fire Hazard: May cause fire or explosion; strong oxidizer.

Explosion Hazard: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.

Reactivity: Oxidizer: increases the burning rate of combustible materials. The substance is a strong oxidant and reacts with combustible and reducing materials.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. Remove containers from fire area if this can be done without risk. Do not breathe fumes from fires or vapors from decomposition.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Nitrogen oxides.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses. Product is a strong oxidizer.

Reference to Other Sections
Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid breathing dust. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Keep away from combustible material. Avoid all contact with skin, eyes, or clothing.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).


For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Eliminate ignition sources. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions
Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.
Methods and Material for Containment and Cleaning Up

For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. Use only non-sparking tools.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Recover the product by vacuuming, shoveling or sweeping. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant. Vacuum must be fitted with HEPA filter to prevent release of particulates during clean-up. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Reference to Other Sections
See Heading 8. Exposure controls and personal protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: May cause or intensify fire; oxidizer. May form combustible dust concentrations in air.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Keep away from extremely high or low temperatures, ignition sources, and incompatible materials. No smoking. Handle empty containers with care because they may still present a hazard.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed. Avoid creating or spreading dust.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool and well-ventilated place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Protect from moisture. Keep in fireproof place. Store locked up.


Specific End Use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters
For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

<table>
<thead>
<tr>
<th>Naphthalene (91-20-3)</th>
<th>Mexico</th>
<th>OEL TWA (mg/m³)</th>
<th>50 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>OEL TWA (ppm)</td>
<td>10 ppm</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>OEL STEL (mg/m³)</td>
<td>75 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>OEL STEL (ppm)</td>
<td>15 ppm</td>
<td></td>
</tr>
<tr>
<td>USA ACGIH</td>
<td>ACGIH TWA (ppm)</td>
<td>10 ppm</td>
<td></td>
</tr>
<tr>
<td>USA ACGIH</td>
<td>ACGIH chemical category</td>
<td>Skin - potential significant contribution to overall exposure by the cutaneous route, Confirmed Animal Carcinogen with Unknown Relevance to Humans</td>
<td></td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>50 mg/m³</td>
<td></td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (ppm)</td>
<td>10 ppm</td>
<td></td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (TWA) (mg/m³)</td>
<td>50 mg/m³</td>
<td></td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (TWA) (ppm)</td>
<td>10 ppm</td>
<td></td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (STEL) (mg/m³)</td>
<td>75 mg/m³</td>
<td></td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (STEL) (ppm)</td>
<td>15 ppm</td>
<td></td>
</tr>
<tr>
<td>USA IDLH</td>
<td>US IDLH (ppm)</td>
<td>250 ppm</td>
<td></td>
</tr>
<tr>
<td>Alberta</td>
<td>OEL STEL (mg/m³)</td>
<td>79 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>
Sodium Nitrite, Free-Flowing Grades

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<table>
<thead>
<tr>
<th>Province/Region</th>
<th>STEL (ppm)</th>
<th>STEL (mg/m³)</th>
<th>TWA (ppm)</th>
<th>TWA (mg/m³)</th>
<th>OEL STEL (ppm)</th>
<th>OEL STEL (mg/m³)</th>
<th>OEL TWA (ppm)</th>
<th>OEL TWA (mg/m³)</th>
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</thead>
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<td>75</td>
<td></td>
<td></td>
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<td>10</td>
<td>52</td>
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<td></td>
<td>10</td>
<td>25</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>15</td>
<td>52</td>
<td></td>
<td></td>
<td>10</td>
<td>25</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Yukon</td>
<td>15</td>
<td>52</td>
<td></td>
<td></td>
<td>10</td>
<td>25</td>
<td>10</td>
<td>25</td>
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<td>Nova Scotia</td>
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<td></td>
<td></td>
<td>10</td>
<td>25</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>10</td>
<td>52</td>
<td></td>
<td></td>
<td>10</td>
<td>25</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Québec</td>
<td>79</td>
<td>25</td>
<td></td>
<td></td>
<td>10</td>
<td>52</td>
<td>10</td>
<td>52</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>15</td>
<td>52</td>
<td></td>
<td></td>
<td>10</td>
<td>25</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Yukon</td>
<td>15</td>
<td>52</td>
<td></td>
<td></td>
<td>10</td>
<td>25</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Newfoundland &amp; Labrador</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td>52</td>
<td>10</td>
<td>52</td>
</tr>
</tbody>
</table>

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Gas detectors should be used when flammable gases or vapors may be released. Proper grounding procedures to avoid static electricity should be followed. Avoid creating or spreading dust. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure all national/local regulations are observed.


Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Environmental Exposure Controls: Avoid release to the environment.

Other Information: When using, do not eat, drink or smoke.
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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Pale straw-colored</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting Point</td>
<td>271.1 °C (520 °F)</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available</td>
</tr>
<tr>
<td>Lower Flammable Limit</td>
<td>Not available</td>
</tr>
<tr>
<td>Upper Flammable Limit</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative Vapor Density at 20 °C</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative Density</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.168</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not available</td>
</tr>
<tr>
<td>Partition Coefficient: N-Octanol/Water</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosion Data – Sensitivity to Mechanical Impact</td>
<td>Not expected to present an explosion hazard due to mechanical impact.</td>
</tr>
<tr>
<td>Explosion Data – Sensitivity to Static Discharge</td>
<td>Static discharge could act as an ignition source.</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY
Reactivity: Oxidizer: increases the burning rate of combustible materials. The substance is a strong oxidant and reacts with combustible and reducing materials.

Chemical Stability: May cause fire or explosion; strong oxidizer. Product itself is not explosive but if dust is generated, dust clouds suspended in air can be explosive.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight, extremely high or low temperatures, ignition sources, combustible materials, incompatible materials. Avoid creating or spreading dust.


Hazardous Decomposition Products: Thermal decomposition for sodium nitrite occurs at > 320 °C (> 608 °F) releasing nitrogen monoxide, nitrogen dioxide, disodium oxide.

SECTION 11: TOXICOCHEMICAL INFORMATION
Information on Toxicological Effects - Product

Acute Toxicity: Oral: Toxic if swallowed.

LD50 and LC50 Data:

| Sodium Nitrite, Free-Flowing Grades         | ATE US (oral) | 77.00 mg/kg body weight |

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

Carcinogenicity: Not classified
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Specific Target Organ Toxicity (Repeated Exposure): Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Aspiration Hazard: Not classified

Potential Adverse Human Health Effects and Symptoms: Toxic if swallowed.
Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation. Respirable dust may be absorbed through the bloodstream and have adverse effects.
Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation. Absorption through the skin may occur from direct contact.
Symptoms/Injuries After Eye Contact: Causes serious eye irritation. Contact causes severe irritation with redness and swelling of the conjunctiva.
Symptoms/Injuries After Ingestion: This material is toxic in small amounts orally, and can cause adverse health effects or death. Ingestion may cause methemoglobinemia. Initial manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucous membranes, with skin color being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia. Signs and symptoms of nitrite poisoning include methemoglobinemia, nausea, dizziness, increased heart rate, hypotension, fainting and, possibly shock.
Chronic Symptoms: None known.

Information on Toxicological Effects - Ingredient(s)
LD50 and LC50 Data:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>LD50 Oral Rat</th>
<th>LC50 Inhalation Rat (mg/l)</th>
<th>ATE US (oral)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium nitrite (7632-00-0)</td>
<td>85 mg/kg</td>
<td>5.5 mg/l/4h</td>
<td>180.000 mg/kg body weight</td>
</tr>
<tr>
<td>Sodium sulfate (7757-82-6)</td>
<td>13500 - 14500 mg/l (Exposure time: 96 h - Species: Pimephales promelas)</td>
<td>2564 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
<td>&gt; 6800 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])</td>
</tr>
<tr>
<td>Naphthalene (91-20-3)</td>
<td>533 - 710 mg/kg</td>
<td>&gt; 340 mg/l (Exposure time: 1 h)</td>
<td>1120.000 mg/kg body weight</td>
</tr>
</tbody>
</table>

IARC Group

- Sodium nitrite (7632-00-0): 2B
- Naphthalene (91-20-3): 2B

SECTION 12: ECOLOGICAL INFORMATION

Toxicity
Ecology - General: Very toxic to aquatic life.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>LC50 Fish 1</th>
<th>LC 50 Fish 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium nitrite (7632-00-0)</td>
<td>0.19 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])</td>
<td>0.092 - 0.13 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])</td>
</tr>
<tr>
<td>Sodium sulfate (7757-82-6)</td>
<td>13500 (13500 - 14500) mg/l (Exposure time: 96 h - Species: Pimephales promelas)</td>
<td>2564 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
</tr>
<tr>
<td>Naphthalene (91-20-3)</td>
<td>5.74 - 6.44 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])</td>
<td>2.16 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
</tr>
</tbody>
</table>
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LC 50 Fish 2 1.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 Daphnia 2 1.96 mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through])

Persistence and Degradability
Sodium Nitrite, Free-Flowing Grades
Persistence and Degradability Not established.

Bioaccumulative Potential
Sodium Nitrite, Free-Flowing Grades
Bioaccumulative Potential Not established.

Sodium nitrite (7632-00-0)
Log Pow -3.7 (at 25 °C)

Naphthalene (91-20-3)
BCF Fish 1 30 - 430
Log Pow 3.3 (at 20 °C)

Mobility in Soil Not available

Other Adverse Effects
Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations
Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.
Ecology – Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT
Proper Shipping Name: SODIUM NITRITE
Hazard Class: 5.1
Identification Number: UN1500
Label Codes: 5.1, 6.1
Packing Group: III
Marine Pollutant: Marine pollutant
ERG Number: 140

14.2 In Accordance with IMDG
Proper Shipping Name: SODIUM NITRITE
Hazard Class: 5.1
Division: 5.1
Subsidiary Risk(s): 6.1
Identification Number: UN1500
Packing Group: III
Label Codes: 5.1, 6.1
EmS-No. (Fire): F-A
EmS-No. (Spillage): S-Q
Marine pollutant: Marine pollutant

14.3 In Accordance with IATA
Proper Shipping Name: SODIUM NITRITE
Packing Group: III
Identification Number: UN1500
Hazard Class: 5.1
Label Codes: 5.1, 6.1
Division: 5.1
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Subsidiary Risk(s) : 6.1
ERG Code (IATA) : 5P

14.4 In Accordance with TDG
Proper Shipping Name : SODIUM NITRITE
Packing Group : III
Hazard Class : 5.1
Identification Number : UN1500
Label Codes : 5.1, 6.1
Marine Pollutant (TDG) : Marine pollutant

SECTION 15: REGULATORY INFORMATION

US Federal Regulations
Sodium Nitrite, Free-Flowing Grades
SARA Section 311/312 Hazard Classes
Fire hazard
Immediate (acute) health hazard

Sodium nitrite (7632-00-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Subject to reporting requirements of United States SARA Section 313
EPA TSCA Regulatory Flag
S - S - indicates a substance that is identified in a proposed or final
Significant New Uses Rule.
SARA Section 311/312 Hazard Classes
Reactive hazard
Immediate (acute) health hazard
SARA Section 313 - Emission Reporting
1.0 %

Sodium sulfate (7757-82-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Naphthalene (91-20-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Subject to reporting requirements of United States SARA Section 313
EPA TSCA Regulatory Flag
T - T - indicates a substance that is the subject of a Section 4 test
rule under TSCA.
RQ (Reportable Quantity, Section 304 of EPA’s List of Lists):
100 lb
SARA Section 313 - Emission Reporting
0.1 %

US State Regulations
Naphthalene (91-20-3)
U.S. - California - Proposition 65 - Carcinogens List
WARNING: This product contains chemicals known to the State of California to cause cancer.

Sodium nitrite (7632-00-0)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Sodium sulfate (7757-82-6)
U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Naphthalene (91-20-3)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
Sodium Nitrite, Free-Flowing Grades

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U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Canadian Regulations

<table>
<thead>
<tr>
<th>Sodium Nitrite, Free-Flowing Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHMIS Classification</td>
</tr>
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<td>Sodium nitrite (7632-00-0)</td>
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<td>IDL Concentration 1 %</td>
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</tbody>
</table>

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 09/29/15
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

| Acute Tox. 3 (Oral) | Acute toxicity (oral) Category 3 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral) Category 4 |
| Aquatic Acute 1     | Hazardous to the aquatic environment - Acute Hazard Category 1 |
| Aquatic Chronic 1   | Hazardous to the aquatic environment - Chronic Hazard Category 1 |
| Carc. 2             | Carcinogenicity Category 2 |
| Comb. Dust          | Combustible Dust |
| Eye Irrit. 2A       | Serious eye damage/eye irritation Category 2A |
| Flam. Sol. 2        | Flammable solids Category 2 |
| Ox. Sol. 2          | Oxidizing solids Category 2 |
| H228                | Flammable solid |
| Comb. Dust          | May form combustible dust concentrations in air |
| H272                | May intensify fire; oxidizer |
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<table>
<thead>
<tr>
<th>H301</th>
<th>Toxic if swallowed</th>
</tr>
</thead>
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<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H351</td>
<td>Suspected of causing cancer</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

Party Responsible for the Preparation of This Document
CHEMTRADE LOGISTICS, INC.
For SDS Info: (416) 496-5856

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA’S “Right to Know” (29 CFR 1910.1200) and Canada’s WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Chemtrade and its affiliates assume no responsibility. Chemtrade is a member of the CIAC (Chemistry Industry Association of Canada) and adheres to the codes and principles of Responsible Care™.

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