Material Safety Data Sheet
Sodium Nitrite, 0.1 N Solution MSDS

Section 1: Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Product Name: Sodium Nitrite, 0.1 N Solution</th>
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</thead>
<tbody>
<tr>
<td>Catalog Codes: SLS2977</td>
</tr>
<tr>
<td>CAS#: Mixture.</td>
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<tr>
<td>RTECS: Not applicable.</td>
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<tr>
<td>TSCA: TSCA 8(b) inventory: Water; Sodium nitrite</td>
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<tr>
<td>CI#: Not available.</td>
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<tr>
<td>Synonym: Sodium Nitrite, 0.1N Solution</td>
</tr>
<tr>
<td>Chemical Name: Not applicable.</td>
</tr>
<tr>
<td>Chemical Formula: Not applicable.</td>
</tr>
</tbody>
</table>

Contact Information:
Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396
US Sales: 1-800-901-7247
International Sales: 1-281-441-4400
Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>99.7</td>
</tr>
<tr>
<td>Sodium nitrite</td>
<td>7632-00-0</td>
<td>0.35</td>
</tr>
</tbody>
</table>

Toxicological Data on Ingredients:

Section 3: Hazards Identification

Potential Acute Health Effects:
Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion. Non-corrosive for skin. Non-corrosive to the eyes. Non-corrosive for lungs. Severe over-exposure can result in death.

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Sodium nitrite]. Mutagenic for bacteria and/or yeast. [Sodium nitrite]. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male, Development toxin [POSSIBLE] [Sodium nitrite]. The substance may be toxic to blood, cardiovascular system. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures
**Eye Contact:**
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

**Skin Contact:**
Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

**Serious Skin Contact:** Not available.

**Inhalation:**
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation:** Not available.

**Ingestion:**
If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

**Serious Ingestion:** Not available.

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### Section 5: Fire and Explosion Data

**Flammability of the Product:** Non-flammable.

**Auto-Ignition Temperature:** Not applicable.

**Flash Points:** Not applicable.

**Flammable Limits:** Not applicable.

**Products of Combustion:** Not available.

**Fire Hazards in Presence of Various Substances:** Not applicable.

**Explosion Hazards in Presence of Various Substances:**
Risks of explosion of the product in presence of mechanical impact: Not available. Non-explosive in presence of open flames and sparks.

**Fire Fighting Media and Instructions:** Not applicable.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:**
Explodes when heated over 1000 F (538 C). Sodium Nitrite + thiocyanate explodes on heating. A mixture of sodium nitrite and various cyanides explodes on contact. Mixture of sodium nitrite and phthalic acid or anhydride explode violently on heating. Fusion of urea with sodium nitrite Interaction of nitrites when heated with metal amidosulfates (sulfamates) may become explosively violent owing to liberation of nitrogen and steam mixed with ammonium sulfamate form. Violent explosion occurs if an ammonium salt is is melted with nitrite salt. Shock may explode nitrites. (Sodium nitrite) must be carried out exactly as described to avoid risk of explosion.

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### Section 6: Accidental Release Measures

**Small Spill:**
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:**
Poisonous liquid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.
Section 7: Handling and Storage

Precautions:
Keep locked up. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 23°C (73.4°F).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Personal Protection: Safety glasses. Lab coat.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.
Odor: Odorless.
Taste: Not available.
Molecular Weight: Not applicable.
Color: Colorless. Clear
pH (1% soln/water): Neutral.
Boiling Point: The lowest known value is 100°C (212°F) (Water).
Melting Point: Not available.
Critical Temperature: Not available.
Specific Gravity: The only known value is 1 (Water = 1) (Water).
Vapor Pressure: The highest known value is 2.3 kPa (@ 20°C) (Water).
Vapor Density: The highest known value is 0.62 (Air = 1) (Water).
Volatility: Not available.
Odor Threshold: Not available.
Water/Oil Dist. Coeff.: Not available.
Ionicity (in Water): Not available.
Dispersion Properties: See solubility in water, methanol.
Solubility:
Easily soluble in cold water, hot water. Partially soluble in methanol. Very slightly soluble in diethyl ether.

Section 10: Stability and Reactivity Data
Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials

Incompatibility with various substances: Slightly reactive to reactive with combustible materials, organic materials.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Hygroscopic. Slowly oxidizes to nitrate in air. Reacts vigorously with reducing materials. Sodium nitrite is a strong oxidizer and is incompatible with the following: acetalanilide, metals as powders, ammonium salts, aminoguanidine salts, anitpyrine, Butadiene, chlorates, hypophosphites, activated carbon, iodides, mercury salts, permanganate, phthalic acid, phthalic anydride, sodium amide, sodium disulphite, cyanides (e.g. potassium cyanide, sodium cyanide), sodium thiocyanate, lithium, sulfites, tannic acid, urea, wood, vegetable astringent decoctions, infusions, or tinctures. (Sodium nitrite)

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact.

Toxicity to Animals:
LD50: Not available. LC50: Not available.

Chronic Effects on Humans:
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Sodium nitrite]. Mutagenic for bacteria and/or yeast. [Sodium nitrite]. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male, Development toxin [POSSIBLE] [Sodium nitrite]. Contains material which may cause damage to the following organs: blood, cardiovascular system.

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May affect genetic material, cause cancer, and birth defects based on animal data.

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation. Ingestion: May cause gastrointestinal tract irritation. May affect the brain, behavior and nervous system. May also affect the liver, blood, metabolism, cardiovascular system, and urinary system. Inhalation: May affect the respiratory system. May cause biochemical changes and metabolism. May affect the blood, and the cardiovascular system.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations
Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

**DOT Classification:** Not a DOT controlled material (United States).

**Identification:** Not applicable.

**Special Provisions for Transport:** Not applicable.

Section 15: Other Regulatory Information

**Federal and State Regulations:**
New York release reporting list: Sodium nitrite Pennsylvania RTK: Sodium nitrite Massachusetts RTK: Sodium nitrite New Jersey: Sodium nitrite TSCA 8(b) inventory: Water; Sodium nitrite TSCA 12(b) one time export: Sodium nitrite


**Other Classifications:**

**WHMIS (Canada):** Not controlled under WHMIS (Canada).

**DSCL (EEC):**
R25- Toxic if swallowed. S1/2- Keep locked up and out of the reach of children. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**HMIS (U.S.A.):**
- **Health Hazard:** 1
- **Fire Hazard:** 0
- **Reactivity:** 0
- **Personal Protection:** a

**National Fire Protection Association (U.S.A.):**
- **Health:** 1
- **Flammability:** 0
- **Reactivity:** 0
- **Specific hazard:**

**Protective Equipment:**
Not applicable. Lab coat. Not applicable. Safety glasses.

Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

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