1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Sodium nitrite
Product Number : 237213
Brand : Sigma-Aldrich
Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO  63103
USA
Telephone : +1 800-325-5832
Fax : +1 800-325-5052
Emergency Phone # : (314) 776-6555

2. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : NaNO2
Molecular Weight : 69.00 g/mol

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium nitrite</td>
<td>7632-00-0</td>
<td>231-555-9</td>
<td>007-010-00-4</td>
</tr>
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</table>

3. HAZARDS IDENTIFICATION

Emergency Overview
OSHA Hazards
Oxidizer
Target Organ Effect
Highly toxic by inhalation
Toxic by ingestion
Carcinogen

Target Organs
Blood, Cardiovascular system., Smooth muscle.

HMIS Classification
Health Hazard: 4
Chronic Health Hazard: *
Flammability: 0
Physical hazards: 3

NFPA Rating
Health Hazard: 4
Fire : 0
Reactivity Hazard: 0

Potential Health Effects
Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
Skin: May be harmful if absorbed through skin. May cause skin irritation.
Eyes: May cause eye irritation.
Ingestion: May be harmful if swallowed.

4. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Flammable properties
Flash point: no data available
Ignition temperature: 490 °C (914 °F)

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters
Wear self-contained breathing apparatus for fire fighting if necessary.

Further information
Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Discharge into the environment must be avoided. Do not let product enter drains.

Methods for cleaning up
Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling
Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from combustible material.

Storage
Keep container tightly closed in a dry and well-ventilated place.

hygroscopic
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
Handle with gloves. For prolonged or repeated contact use protective gloves.

Eye protection
Safety glasses

Skin and body protection
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form solid
Colour no data available

Safety data
pH 9
Melting point 281 °C (538 °F)
Boiling point 320 °C (608 °F)
Flash point no data available
Ignition temperature 490 °C (914 °F) -
Lower explosion limit no data available
Upper explosion limit no data available
Density 2.168 g/cm3
Water solubility no data available

10. STABILITY AND REACTIVITY

Storage stability
Stable under recommended storage conditions.

Conditions to avoid
Exposure to moisture.

Materials to avoid
Acids, Powdered metals, Ammonia, Cyanides, Amines, Activated carbon
11. TOXICOLOGICAL INFORMATION

Acute toxicity
LD50 Oral - rat - 180 mg/kg
LC50 Inhalation - rat - 4 h - 5.5 mg/m3

Irritation and corrosion
Eyes - rabbit - Mild eye irritation - 24 h

Sensitisation
no data available

Chronic exposure
no data available

Signs and Symptoms of Exposure
Headache, Nausea, Incoordination.

Potential Health Effects
- **Inhalation**: May be harmful if inhaled. May cause respiratory tract irritation.
- **Skin**: May be harmful if absorbed through skin. May cause skin irritation.
- **Eyes**: May cause eye irritation.
- **Ingestion**: May be harmful if swallowed.
- **Target Organs**: Blood, Cardiovascular system., Smooth muscle.,

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)
no data available

Ecotoxicity effects
- **Toxicity to fish**: LC50 - Oncorhynchus mykiss (rainbow trout) - 0.092 mg/l - 96 h
- **mortality NOEC**: Oncorhynchus mykiss (rainbow trout) - 0.54 mg/l - 96 h
- **Toxicity to daphnia and other aquatic invertebrates**: EC50 - Daphnia magna (Water flea) - 12.5 mg/l - 48 h

Further information on ecology
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic organisms.
no data available
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic organisms.
13. DISPOSAL CONSIDERATIONS

Product
Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
UN-Number: 1500  Class: 5.1 (6.1)  Packing group: III
Proper shipping name: Sodium nitrite

IMDG
UN-Number: 1500  Class: 5.1 (6.1)  Packing group: III  EMS-No: F-A, S-Q
Proper shipping name: SODIUM NITRITE
Marine pollutant: No

IATA
UN-Number: 1500  Class: 5.1 (6.1)  Packing group: III
Proper shipping name: Sodium nitrite

15. REGULATORY INFORMATION

OSHA Hazards
Oxidizer, Target Organ Effect, Highly toxic by inhalation, Toxic by ingestion, Carcinogen

TSCA Status
On TSCA Inventory

DSL Status
All components of this product are on the Canadian DSL list.

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

<table>
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SARA 311/312 Hazards
Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

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Pennsylvania Right To Know Components

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New Jersey Right To Know Components

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California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.
16. OTHER INFORMATION

Further information
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