# Sodium Nitrite
##CAS No 7632-00-0

###MATERIAL SAFETY DATA SHEET
SDS/MSDS

##SECTION 1: Identification of the substance/mixture and of the company/undertaking

###1.1 Product identifiers

<table>
<thead>
<tr>
<th>Product name</th>
<th>Sodium Nitrite</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS-No.</td>
<td>7632-00-0</td>
</tr>
</tbody>
</table>

###1.2 Relevant identified uses of the substance or mixture and uses advised against

<table>
<thead>
<tr>
<th>Identified uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory chemicals, Industrial &amp; for professional use only.</td>
</tr>
</tbody>
</table>

###1.3 Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Drug House (P) Ltd</td>
</tr>
<tr>
<td>7/28 Vardaan House</td>
</tr>
<tr>
<td>New Delhi-10002</td>
</tr>
<tr>
<td>INDIA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>+91 11 49404040</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:care@cdhfinechemical.com">care@cdhfinechemical.com</a></td>
</tr>
</tbody>
</table>

###1.4 Emergency telephone number

<table>
<thead>
<tr>
<th>Emergency Phone #</th>
</tr>
</thead>
<tbody>
<tr>
<td>+91 11 49404040 (9:00am - 6:00 pm) [Office hours]</td>
</tr>
</tbody>
</table>

##SECTION 2: Hazards identification

###2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**
- Oxidizing solids (Category 3), H272
- Acute toxicity, Oral (Category 3), H301
- Eye irritation (Category 2), H319
- Acute aquatic toxicity (Category 1), H400

For the full text of the H-Statements mentioned in this Section, see Section 16.

###2.2 Label elements

**Labelling according Regulation (EC) No 1272/2008**

<table>
<thead>
<tr>
<th>Pictogram</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="signal.png" alt="Signal word: Danger" /></td>
</tr>
<tr>
<td>![Hazard statement(s)]</td>
</tr>
<tr>
<td>H272: May intensify fire; oxidizer.</td>
</tr>
<tr>
<td>H301: Toxic if swallowed.</td>
</tr>
<tr>
<td>H319: Causes serious eye irritation.</td>
</tr>
</tbody>
</table>
H400

Precautionary statement(s)
P220 Keep/Store away from clothing/ combustible materials.
P273 Avoid release to the environment.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/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.

Supplemental Hazard Statements

2.3 Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances
Formula: NaNO2
Molecular weight: 69.00 g/mol
CAS-No.: 7632-00-0
EC-No.: 231-555-9
Index-No.: 007-010-00-4

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration
Sodium nitrite CAS-No. 7632-00-0 Ox. Sol. 3; Acute Tox. 3; Eye <= 100 %
EC-No. 231-555-9 Irrit. 2; Aquatic Acute 1; H272,
Index-No. 007-010-00-4 H301, H319, H400
M-Factor - Aquatic Acute: 1

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

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. Take victim immediately to hospital. 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.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
No data available
SECTION 5: Firefighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture
Nitrogen oxides (NOx), Sodium oxides

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

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

6.3 Methods and materials for containment and cleaning up
Sweep up and shovel.\20 Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Avoid contact with skin and eyes. 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 heat and sources of ignition. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. 

- hygroscopic
- Storage class (TRGS 510): Oxidizing hazardous materials

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

- **Appropriate engineering controls**
  Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

- **Personal protective equipment**
  - **Eye/face protection**
    Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection**
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**SECTION 9: Physical and chemical properties**

9.1 **Information on basic physical and chemical properties**

- **a) Appearance** Form: solid
- **b) Odour** odourless
- **c) Odour Threshold** No data available
- **d) pH** 9
- **e) Melting point/freezing point** Melting point/range: 271 °C - lit.
- **f) Initial boiling point and boiling range** 320 °C
- **g) Flash point** No data available
- **h) Evaporation rate** No data available
- **i) Flammability (solid, gas)** No data available
- **j) Upper/lower flammability or explosive limits** No data available
- **k) Vapour pressure** < 0.0001 hPa at 25 °C
- **l) Vapour density** No data available
- **m) Relative density** 2.168 g/cm3
- **n) Water solubility** 820 g/l at 20 °C
- **o) Partition coefficient: n-octanol/water** log Pow: -3.7 at 25 °C
- **p) Auto-ignition temperature** No data available
- **q) Decomposition temperature** No data available
- **r) Viscosity** No data available
- **s) Explosive properties** No data available
- **t) Oxidizing properties** The substance or mixture is classified as oxidizing with the category 3.
SECTION 10: Stability and reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
Exposure to moisture

10.5 Incompatible materials
Acids, Powdered metals, Ammonia, Cyanides, Amines, Activated carbon, Combustible material, Reducing agents

10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Nitrogen oxides (NOx), Sodium oxides
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - Rat - 157.9 mg/kg (Sodium nitrite)
LD50 Oral - Mouse - 175 mg/kg (Sodium nitrite)
Remarks: Vascular: BP lowering not characterized in autonomic section. Vascular: Regional or general arteriolar or venous dilation.

Skin corrosion/irritation
Skin - Rabbit (Sodium nitrite)
Result: No skin irritation - 48 h
(OECD Test Guideline 404)

Serious eye damage/eye irritation
Eyes - Rabbit (Sodium nitrite)
Result: Eye irritation - 24 h
(OECD Test Guideline 405)

Respiratory or skin sensitisation
No data available (Sodium nitrite)

Germ cell mutagenicity
No data available (Sodium nitrite)

Carcinogenicity
IARC: 2A - Group 2A: Probably carcinogenic to humans (Sodium nitrite)

Reproductive toxicity
No data available (Sodium nitrite)

Specific target organ toxicity - single exposure
No data available (Sodium nitrite)

Specific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available (Sodium nitrite)

Additional Information
RTECS: RA1225000

Headache, Nausea, Incoordination., Absorption into the body leads to the formation of methemoglobin which in delayed 2 to 4 hours or longer. (Sodium nitrite)
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. (Sodium nitrite)
Liver - Irregularities - Based on Human Evidence (Sodium nitrite)

SECTION 12: Ecological information

12.1 Toxicity
Toxicity to fish
flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 0.94 - 1.92 mg/l - 96.0 h (Sodium nitrite)
mortality NOEC - Oncorhynchus mykiss (rainbow trout) - 0.54 mg/l - 96.0 h (Sodium nitrite)

Toxicity to daphnia and other aquatic invertebrates
EC50 - Daphnia magna (Water flea) - 12.5 mg/l - 48 h (Sodium nitrite)

Toxicity to algae
NOEC - Desmodesmus subspicatus (green algae) - 100 mg/l - 72 h (Sodium nitrite)
(OECD Test Guideline 201)

12.2 Persistence and degradability
The methods for determining biodegradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available (Sodium nitrite)

12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
Very toxic to aquatic life.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
Dispose of as unused product.
SECTION 14: Transport information

14.1 UN number
ADR/RID: 1500  
IMDG: 1500  
IATA: 1500

14.2 UN proper shipping name
ADR/RID: SODIUM NITRITE  
IMDG: SODIUM NITRITE  
IATA: Sodium nitrite

14.3 Transport hazard class(es)
ADR/RID: 5.1 (6.1)  
IMDG: 5.1 (6.1)  
IATA: 5.1 (6.1)

14.4 Packaging group
ADR/RID: III  
IMDG: III  
IATA: III

14.5 Environmental hazards
ADR/RID: no  
IMDG Marine pollutant: no  
IATA: no

14.6 Special precautions for user
No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment
For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H272 May intensify fire; oxidizer.
H301 Toxic if swallowed.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.

Further information
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.