



## Safety Data Sheet

Date of Issue: 09.09.2021

Date of Expiry: 09.09.2026

### 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Company Name** : ECP Limited  
**Address** : PO Box 34125, Birkenhead, Auckland 0746  
**Telephone** : +64 9 480 4386  
**Facsimile** : +64 9 480 4385  
**Emergency phone number** : 0800 243 622 (24 hours)

<b>Product Name</b>	<b>Sodium Nitrite</b>
<b>Product Code</b>	<b>48501</b>
<b>CAS No.</b>	<b>7632-00-0</b>

**Recommended use** : Laboratory Investigations

### 2: Hazard's identification

#### 2.1 GHS Classification

Oxidizing liquids or solids (Category C), H272  
Acute toxicity, Oral (Category C), H301  
Eye irritation (Category A), H319  
Aquatic toxicity (Acute or Chronic) (Category A), H400, H411

#### 2.2 GHS Label elements, including precautionary statements

##### Pictogram



**Signal word** : Danger

##### Hazard statement(s)

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

##### Precautionary statement(s)

##### Prevention

P210 Keep away from heat.  
P220 Keep/Store away from clothing/ combustible materials.  
P221 Take any precaution to avoid mixing with combustibles.  
P264 Wash skin 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/ eye protection/ face protection.

##### Response

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.  
P321 Specific treatment (see supplemental first aid instructions on this label).  
P330 Rinse mouth.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.  
P391 Collect spillage.

### Storage

P405 Store locked up.

### Disposal

P501 Dispose of contents/ container to an approved waste disposal plant.

## 2.3 Other hazards - none

### 3: Composition/information on ingredients

#### 3.1 Substances

Formula : NNaO2  
Molecular weight : 69.00 g/mol  
CAS-No. : 7632-00-0  
EC-No. : 231-555-9  
Index-No. : 007-010-00-4

Ingredient	Concentration %
Sodium Nitrite	<= 100 %

### 4: First aid measures

#### 4.1 Description of first-aid measures

##### General advice

Show this material safety data sheet to the doctor in attendance.

##### If inhaled

After inhalation: fresh air.

##### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

##### In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

##### If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

#### 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

## **5: Firefighting measures**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

Water Foam Carbon dioxide (CO<sub>2</sub>) Dry powder

#### **Unsuitable extinguishing media**

For this substance/mixture no limitations of extinguishing agents are given.

### **5.2 Special hazards arising from the substance or mixture**

Nitrogen oxides (NO<sub>x</sub>)

Sodium oxides

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

Has a fire-promoting effect due to release of oxygen.

### **5.3 Advice for firefighters**

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### **5.4 Further information**

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## **6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

### **6.2 Environmental precautions**

Do not let product enter drains.

### **6.3 Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### **6.4 Reference to other sections**

For disposal see section 13.

## **7: Handling and storage**

### **7.1 Precautions for safe handling**

Advice on protection against fire and explosion :

Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures :

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

For precautions see section 2.2.

### **7.2 Conditions for safe storage, including any incompatibilities**

#### **Storage conditions**

Tightly closed. Away from combustible materials and sources of ignition and heat. Keep locked up or in an area accessible only to qualified or authorized persons. Do not store near

combustible materials. Hygroscopic.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Ingredients with workplace control parameters

We are not aware of any national exposure limit.

### 8.2 Exposure controls

#### Appropriate engineering controls

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

#### Personal protective equipment

##### Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards.

##### 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 a full-face particle respirator type or 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.

## 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### a) Appearance

Form : solid, Crystalline powder

Color : white, light yellow

b) Odor : odourless

c) Odor : Threshold Not applicable

d) pH : No data available

e) Melting point/freezing point : 271 °C - lit.

Melting point/range

f) Initial boiling point & boiling range : No data available

g) Flash point : Not applicable

h) Evaporation rate : No data available

i) Flammability (solid, gas) : No data available

j) Upper/lower flammability or explosive limits : No data available

k) Vapor pressure : No data available

l) Vapor density : No data available

- m) Relative density : No data available  
n) Water solubility : 820 g/l at 20 °C  
o) Partition coefficient: n-octanol/water: Not applicable for inorganic substances  
p) Autoignition temperature : No data available  
q) Decomposition temperature : No data available  
r) Viscosity : Viscosity, kinematic: No data available  
: Viscosity, dynamic: No data available  
s) Explosive properties : No data available  
t) Oxidizing properties : The substance or mixture is classified as oxidizing with the category 3.

## 9.2 Other safety information

No data available

## 10: Stability and reactivity

### 10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions

*Risk of explosion with:*

combustible substances, Aluminium, Sulfides, Cyanides, potassium cyanide, urea, hydrazine and derivatives, oxidisable substances, unsaturated hydrocarbons, sodium amide, phenol, Ethylene oxide, strong reducing agents, Ammonium salts, amides, hydrochloric acid, Potassium hexacyanoferrate (II)

*A risk of explosion and/or of toxic gas formation exists with the following substances:*

Acids with Amines

*Release of:*

Nitrosamine

*Risk of ignition or formation of inflammable gases or vapours with:*

butadiene

*Exothermic reaction with:*

Ethylene oxide

### 10.4 Conditions to avoid

Exposure to moisture.

### 10.5 Incompatible materials

No data available

### 10.6 Hazardous decomposition products

In the event of fire: see section 5

## 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - 186 mg/kg

Remarks:

(RTECS)

Skin corrosion/irritation : No data available

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Moderate eye irritation  
(OECD Test Guideline 405)

Respiratory or skin sensitization : No data available

Germ cell mutagenicity : No data available

Carcinogenicity

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

Reproductive toxicity : No data available

Specific target organ toxicity - single exposure : No data available

Specific target organ toxicity - repeated exposure : No data available

Aspiration hazard : No data available

### 11.2 Additional Information

RTECS: RA1225000

Headache, Nausea, Incoordination., Absorption into the body leads to the formation of methaemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12: Ecological information

### 12.1 Toxicity

Toxicity to fish flow-through test LC50 - *Oncorhynchus mykiss* (rainbow trout) - 0.54  
- 26.3 mg/l - 96 h

Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates  
static test EC50 - *Daphnia magna* (Water flea) - 15.4 mg/l - 48 h  
(OECD Test Guideline 202)

Toxicity to algae  
static test ErC50 - *Desmodesmus subspicatus* (green algae) - > 100  
mg/l - 72 h  
(OECD Test Guideline 201)

Toxicity to bacteria  
static test EC50 - activated sludge - 510 mg/l - 3 h  
(OECD Test Guideline 209)

### 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

## 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not Conducted

## 12.6 Other adverse effects

No data available

## 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## 14: Transport Information Table

		ADR/RID – European packaging certification	IMDG International Maritime Dangerous Goods Code	IATA – DGR International Air Travel Association – Dangerous Goods Regulations
14.1	UN Number	1500	1500	1500
14.2	UN Proper Shipping name	SODIUM NITRITE	SODIUM NITRITE	Sodium nitrite
14.3	Transport Hazard Class	5.1 (6.1)	5.1 (6.1)	5.1 (6.1)
14.4	Packaging group	III	III	III
14.5	Environmental Hazards	Yes	Yes	No
14.6	Special precautions for user	none		
14.7	Hazchem Code	1Z		

## 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### National regulatory information

HSNO Approval Code: HSR001286

HSNO Group Standard Approval: HSR002693 - Laboratory Chemicals and Reagent Kits (Oxidising [5.1.1]) Group Standard 2006

Tracking Required: not required

Approved Handler Cert.: not required

## 16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further

information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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