

Safety Data Sheet



1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **SODIUM NITRITE**

Other name(s): Nitrous acid, sodium salt.

Recommended Use of the Chemical and Restrictions on Use Bleaching; as a preservative in food; as a rubber accelerator.

Supplier: Ixom Operations Pty Ltd
ABN: 51 600 546 512
Street Address: Level 8, 1 Nicholson Street
East Melbourne Victoria 3002
Australia

Telephone Number: +61 3 9906 3000
Emergency Telephone: **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

Classification of the chemical:

Oxidising solids - Category 3
Acute Oral Toxicity - Category 3
Eye Irritation - Category 2A

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

Acute Aquatic Toxicity - Category 1

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.

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Precautionary Statement(s):

Prevention:

P102 Keep out of reach of children.
P210 Keep away from heat, sparks, open flames, hot surfaces. No smoking.
P220 Keep and store away from clothing, incompatible materials, combustible materials.
P221 Take any precaution to avoid mixing with combustibles / incompatible materials.
P264 Wash hands 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 or doctor/physician.
P330 Rinse mouth.
P321 Specific treatment (see First Aid Measures on Safety Data Sheet).
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P370+P378 In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish.
P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents and container in accordance with local, regional, national, international regulations.

Poisons Schedule (SUSMP): S7 Dangerous Poison.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Sodium nitrite	7632-00-0	>=98%	H272 H301 H319 H400
Other component(s)	-	to 100%	-

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor at once. Urgent hospital treatment is likely to be needed.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

Skin Contact:

If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice.

Eye Contact:

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

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Ingestion:

Immediately rinse mouth with water. If swallowed, give a glass of water to drink. If vomiting occurs give further water. Seek immediate medical assistance.

Indication of immediate medical attention and special treatment needed:

Treat symptomatically. Delayed pulmonary oedema may result. Danger of methaemoglobin formation after ingestion. Treat with toluonium chloride to reverse methaemoglobinanaemia.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Not combustible, however, if material is involved in a fire use: Coarse water spray, fine water spray, normal foam.

Unsuitable Extinguishing Media:

ABC powder. Carbon dioxide. Dry powder or extinguishing media that contain ammonium salts.

Hazchem or Emergency Action Code: 1Z

Specific hazards arising from the chemical:

Oxidizing substance. Non combustible, but will support combustion of other materials. Environmentally hazardous.

Special protective equipment and precautions for fire-fighters:

Increases intensity of a fire. If safe to do so, remove containers from path of fire. Keep containers cool with water spray. Decomposes on heating emitting toxic fumes, including those of oxides of nitrogen. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:

Shut off all possible sources of ignition. Clear area of all unprotected personnel. Do not allow container or product to get into drains, sewers, streams or ponds. If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Wear protective equipment to prevent skin and eye contact and breathing in dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal.

7. HANDLING AND STORAGE

This material is a Scheduled Poison S7 and must be stored, maintained and used in accordance with the relevant regulations.

Precautions for safe handling:

Avoid skin and eye contact and breathing in dust. Avoid handling which leads to dust formation. Keep out of reach of children. Take precautionary measures against static discharges. Do not mix with combustible substances. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well ventilated place. Protect from moisture. Do NOT store nor transport with ammonium salts. Store away from sources of heat or ignition. Store away from foodstuffs. Store away from acids. Store away from combustible materials. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for spills.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for particulates:

Dusts not otherwise classified: 8hr TWA = 10 mg/m³

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls:

Ensure ventilation is adequate to maintain air concentrations below Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, DUST MASK.



Wear overalls, chemical goggles and impervious gloves. Avoid generating and inhaling dusts. If determined by a risk assessment an inhalation risk exists, wear a dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Crystalline Solid
Colour:	White to Slightly Yellow
Odour:	Faint
Molecular Formula:	NaNO ₂
Solubility:	Soluble in water.
Specific Gravity:	2.17 @20°C

Product Name: SODIUM NITRITE
Substance No: 000031030501

Issued: 23/08/2018
Version: 6

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Relative Vapour Density (air=1):	Not available
Vapour Pressure (20 °C):	Not available
Flash Point (°C):	Not available
Flammability Limits (%):	Not available
Autoignition Temperature (°C):	Not available
Melting Point/Range (°C):	280
Decomposition Point (°C):	>320
pH:	8-9 (100 g/L, 20°C)
Partition Coefficient:	log Pow: -3.7 (n-octanol/water) (25°C)

10. STABILITY AND REACTIVITY

Reactivity:	Mixtures with ammonium compounds or cyanides may explode.
Chemical stability:	Hygroscopic: absorbs moisture or water from surrounding air.
Possibility of hazardous reactions:	Oxidizing agent. Supports combustion of other materials and increases intensity of a fire. Reacts with reducing agents, acids, amines, and amine-containing materials. Hazardous polymerisation will not occur.
Conditions to avoid:	Avoid exposure to heat. Avoid exposure to moisture. Avoid dust generation. Avoid contact with foodstuffs. Avoid contact with combustible chemicals.
Incompatible materials:	Incompatible with reducing agents, acids, ammonium salts, amines, amine compounds, combustible materials, ammonium compounds, cyanides.
Hazardous decomposition products:	Oxides of nitrogen. Disodium oxide.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion:	Swallowing can result in nausea, vomiting, diarrhoea, and abdominal pain. Swallowing large amounts may result in headaches, dizziness and a reduction in blood pressure (hypotension). There is a risk of damage to the blood (methemoglobinemia) after a single uptake.
Eye contact:	An eye irritant.
Skin contact:	Contact with skin may result in irritation.
Inhalation:	Breathing in dust may result in respiratory irritation. Inhalation may result in headache or dizziness as a result of dilation of the blood vessels and a subsequent reduction of blood pressure. Breathing in vapour can result in headaches, dizziness, drowsiness, and possible nausea.
Acute toxicity:	Oral LD50 (rat): 180 mg/kg.
Skin corrosion/irritation:	Non-irritant (rabbit).
Serious eye damage/irritation:	Irritant (rabbit).
Respiratory or skin sensitisation:	No information available.

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Chronic effects: Available evidence from animal studies indicate that repeated or prolonged exposure to this material could result in effects on the blood. Under certain circumstances nitrosamines can form in contact with nitrosating agents. Some nitrosamines were found to cause cancer in animal experiments.

Aspiration hazard: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Avoid contaminating waterways.

Persistence/degradability: Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

Bioaccumulative potential: Not expected to bioaccumulate.

Mobility in soil: Adsorption to solid soil phase is not expected.

Aquatic toxicity: Very toxic to aquatic organisms.

96hr LC50 (fish): 0.54-26.3 mg/L (Salmo gairdneri)

13. DISPOSAL CONSIDERATIONS

Disposal methods:
Refer to Waste Management Authority. Dispose of material through a licensed waste contractor.

14. TRANSPORT INFORMATION

Road and Rail Transport

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.



UN No: 1500
Transport Hazard Class: 5.1 Oxidizing Agent
Subrisk 1: 6.1 Toxic
Packing Group: III
Proper Shipping Name or Technical Name: SODIUM NITRITE
Hazchem or Emergency Action Code: 1Z

Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN No: 1500
Transport Hazard Class: 5.1 Oxidizing Agent
Subrisk 1: 6.1 Toxic
Packing Group: III

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Proper Shipping Name or Technical Name: SODIUM NITRITE

IMDG EMS Fire: F-A
IMDG EMS Spill: S-Q

Air Transport

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN No: 1500
Transport Hazard Class: 5.1 Oxidizing Agent
Subrisk 1: 6.1 Toxic
Packing Group: III
Proper Shipping Name or Technical Name: SODIUM NITRITE

15. REGULATORY INFORMATION

Classification:

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

Classification of the chemical:

Oxidising solids - Category 3
Acute Oral Toxicity - Category 3
Eye Irritation - Category 2A

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

Acute Aquatic Toxicity - Category 1

Hazard Statement(s):

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H301 Toxic if swallowed.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.

Poisons Schedule (SUSMP): S7 Dangerous Poison.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Supplier Safety Data Sheet; 02/ 2016.

Toxicity Profile - Nitrites (Sodium and Potassium) British Industrial Biological Research Association (BIBRA).

This safety data sheet has been prepared by Ixom Operations Pty Ltd Toxicology & SDS Services.

Reason(s) for Issue:

Revised Primary SDS
Change in Hazardous Chemical Classification

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This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.