

Safety Data Sheet



Hazardous Substance, Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: **SODIUM NITRATE**

Recommended use: Catalyst; fertiliser; fluxing agent; oxidiser; propellant; preservative.

Supplier: DuluxGroup (PNG) Pte. Ltd.
Street Address: Air Corps Road
Lae Morobe Province
PNG
Telephone: 4723633

Emergency telephone number: Australia – +613 9663 2130

2. HAZARDS IDENTIFICATION

This material is hazardous according to criteria of Safe Work Australia.



Signal Word

Danger

Hazard Classification

Oxidising Solids – Category 3

Acute Toxicity – Oral – Category 3

Acute Hazard to the Aquatic Environment – Category 1

Hazard Statement(s)

H272 May intensify fire; oxidizer
H301 Toxic If swallowed
H401 Toxic to aquatic life

Prevention Precautionary Statement(s)

P102 Keep out of reach of children
P103 Read label before use
P210 Keep away from all sources of ignition - No smoking
P220 Keep/Store away from incompatible materials
P221 Take any precaution to avoid mixing with incompatible materials
P264 Wash hands, face and all exposed skin thoroughly after handling
P270 Do not eat, drink or smoke when using this product
P280 Wear protective clothing, gloves, eye/face protection and suitable respirator

Response Precautionary Statement(s)

P101 If medical advice is needed, have product container or label at hand
P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

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P330 Rinse mouth
P370+378 In case of fire: Use water spray for extinction

Storage Precautionary Statement(s)

P405 Store locked up

Disposal Precautionary Statement(s)

P501 Dispose of contents/container in accordance with regional and national regulations.

Poisons Schedule (Aust): Not applicable

DANGEROUS GOODS CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Class: 5.1 Oxidising Agent

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO.	PROPORTION
Sodium nitrate	7632-00-0	100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Remove victim from 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. Seek medical advice if effects persist.

Skin contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

Eye contact: If in eyes wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

PPE for First Aiders: Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If dust exists, wear dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically.

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Clinical findings: The smooth muscle relaxant effect of nitrate salts may lead to headache, dizziness and marked hypotension. Cyanosis is clinically detectable when approximately 15% of the haemoglobin in the blood has been converted to methaemoglobin.

- *At approximately 30-40% of methaemoglobin, headache, dizziness, weakness and shortness of breath may occur.*
- *At approximately 60% of methaemoglobin, stupor, convulsions, coma and respiratory paralysis may occur. The blood is a chocolate brown colour.*
- *At higher levels death may result.*
-

Treatment is for exposure to nitrates: Give 100% oxygen. In cases of ingestion; use gastric lavage. Dermal cases are treated with continued washing until all ammonium salts are removed. With cases of visible symptoms and those when the methaemoglobin level is greater than 40%, a clinician administers methylene blue.

5. FIRE-FIGHTING MEASURES

Hazchem Code: 1Z

Suitable extinguishing media: If material is involved in a fire use water fog (or if unavailable fine water spray). Do NOT use ABC powder or carbon dioxide.

Specific hazards: Oxidising substance. Non-combustible, but will support combustion of other materials.

Fire fighting further advice: Nitrate salts on their own are not combustible, however they will support the combustion of other materials. Decomposes on heating emitting irritating white fumes. Brown fumes indicate the presence of toxic oxides of nitrogen. On detection of fire the compartment(s) should be opened up to allow maximum ventilation. If safe to do so, remove containers from path of fire. Keep containers cool with water spray. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition. A major fire may involve a risk of explosion.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of dust. Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS

Shut off all possible sources of ignition. Clear area of all unprotected personnel. Wear protective equipment to prevent skin and eye contamination and the inhalation of 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. Slippery when spilt. Avoid accidents, clean up immediately.

If contamination of sewers or waterways has occurred advise local emergency services.

Dangerous Goods – Initial Emergency Response Guide No: 31

7. HANDLING AND STORAGE

Handling: Avoid skin and eye contact and inhalation of dust.

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Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat or ignition. Keep containers sealed as material may absorb moisture. Keep containers closed when not in use - check regularly for spills.

This material is classified as a Dangerous Good Class 5.1 Oxidising Substance as per the criteria of the Australian Dangerous Goods Code and must be stored in accordance with the relevant regulations.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

National occupational exposure limits:

No value assigned for this specific material by Safe Work Australia.

However for:

	TWA		STEL		CARCINOGEN	NOTICES
	ppm	mg/m3	ppm	mg/m3	CATEGORY	
Nuisance dusts	-	10	-	-	-	-

As published by Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15-minute period, which should not be exceeded at any time during a normal eight-hour workday.

No Exposure Standards assigned to other constituents.

Biological Limit Values:

As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

Engineering measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Avoid generating and inhaling dusts. Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.

Personal protection equipment: OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, DUST MASK.

Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If dust exists, wear dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from butyl rubber/leather/natural rubber/neoprene/nitrile rubber/polyethylene/polyvinyl alcohol (PVA)/polyvinyl chloride (PVC)/teflon should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Avoid skin and eye contact and inhalation of dust. Ensure that eyewash stations and safety showers are close to the workstation location.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: White crystalline powder with a faint odour.

Solubility:	Soluble in water
Specific Gravity (20°C):	2.26
Relative Vapour Density (air=1):	N App
Vapour Pressure (20 °C):	N App
Flash Point (°C):	N App
Flammability Limits (%):	N App
Autoignition Temperature (°C):	N App
Melting Point/Range (°C):	306
Boiling Point/Range (°C):	N App
Decomposition Point (°C):	>600
pH, 10% aqueous solution:	8 - 9

(Typical values only - consult specification sheet)

N Av = Not available

N App = Not applicable

10. STABILITY AND REACTIVITY

Reactivity: If material comes in contact with acids toxic gases/vapours may evolve. If involved in a fire, material may increase fire's intensity.

Chemical stability: Sodium nitrate is a powerful oxidising agent. Organic materials may become highly combustible when contaminated with sodium nitrate. On contact with acids may evolve oxides of nitrogen.

Hazardous reactions: Reacts with oxidising agents, reducing agents and acids.

Conditions to avoid: Avoid dust generation and exposure to heat and moisture.

Incompatible materials: Incompatible with oxidising agents, reducing agents, ammonium salts, organic materials and acids.

Hazardous decomposition products: Oxides of nitrogen and 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:

Acute Effects

Inhalation: Inhalation of dusts may produce respiratory irritation.

Skin contact: Contact with skin may result in irritation.

Ingestion: Swallowing can result in nausea, vomiting and abdominal pain.

Eye contact: May be an eye irritant. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.

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Acute toxicity

Inhalation: This material has been classified as non-hazardous.

Skin contact: This material has been classified as non-hazardous.

Ingestion: This material has been classified as a Category 3 Hazard.

Acute toxicity estimate (based on ingredients): 50 - 300 mg/Kg

Corrosion/Irritancy: Eye: this material has been classified as not corrosive or irritating to eyes.

Skin: this material has been classified as not corrosive or irritating to skin.

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser.

Skin: this material has been classified as not a skin sensitiser.

Aspiration hazard: This material has been classified as non-hazardous.

Specific target organ toxicity (single exposure): This material has been classified as non-hazardous.

Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as non-hazardous.

Reproductive toxicity (including via lactation): This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as non-hazardous.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as a Category Acute 1 Hazard.

Acute toxicity estimate (based on ingredients): <1 mg/L

Long-term aquatic hazard: No information is available to complete an assessment.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

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14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

UN No: 1498
Dangerous Goods Class: 5.1
Packing Group: III
Hazchem Code: 1Z
Emergency Response Guide No: 31

Proper Shipping Name: SODIUM NITRATE

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), flammable gases (Class 2.1), toxic gases (Class 2.3), flammable liquids (Class 3), flammable solids (Class 4.1), spontaneously combustible substances (Class 4.2), dangerous when wet substances (Class 4.3), organic peroxides (Class 5.2), radioactive substances (Class 7), corrosive substances (Class 8), fire risk substances or combustible liquids, however exemptions may apply. Also note that fire risk substances including dangerous goods of Class 6 or Class 9, which are fire risk substances, are incompatible with dangerous goods of Class 1, Class 5.1 and Class 5.2.

MARINE TRANSPORT

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

This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.

UN No: 1498
Dangerous Goods Class: 5.1
Packing Group: III

Proper Shipping Name: SODIUM NITRATE

AIR TRANSPORT

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

UN No: 1498
Dangerous Goods Class: 5.1
Packing Group: III

Proper Shipping Name: SODIUM NITRATE

15. REGULATORY INFORMATION

This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)
The Stockholm Convention (Persistent Organic Pollutants)
The Rotterdam Convention (Prior Informed Consent)
Basel Convention (Hazardous Waste)

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This material is subject to the following international agreements:

International Convention for the Prevention of Pollution from Ships (MARPOL)

- Annex III - Harmful Substances carried in Packaged Form

This material/constituent(s) is covered by the following requirements:

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

16. OTHER INFORMATION

Literary reference

This Safety Data Sheet has been prepared by Chemical Data Services Pty Ltd (chemdata.com.au) on behalf of its client.

Reason(s) For Issue: First Issue.

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since DuluxGroup (Australia) Pty Ltd and DuluxGroup (New Zealand) Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.