



# SAFETY DATA SHEET

Revision date: 16-May-2024

Revision Number 6

## Section 1: Identification

### Product identifier

**Product Name** SODIUM THIOCYANATE

**Product Code(s)** 000032049801

### Other means of identification

**CAS No.** 540-72-7

**Synonyms** Rhodanate; Sodium sulphocyanide; Thiocyanic acid, sodium salt; Sodium rhodanide.

### Recommended use of the chemical and restrictions on use

**Recommended use** General chemical.

**Uses advised against** No information available

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

#### Supplier

Ixom Operations Pty Ltd (Incorporated in Australia)  
NZBN: 9429041465226 Address: 166 Totara Street  
Mt Maunganui South  
New Zealand

Telephone Number: +64 9 368 2700

Facsimile: +64 9 368 2710

### Emergency telephone number

**Emergency Telephone** 0 800 734 607 (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.

## Section 2: Hazard identification

Not classified as a Dangerous Good under NZS 5433 Transport of Dangerous Goods on Land; NON-DANGEROUS GOODS.

Classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

### GHS Classification

<b>Acute toxicity - Oral</b>	Category 4
<b>Skin sensitization</b>	Category 1
<b>Chronic aquatic toxicity</b>	Category 2

### Label elements

**Signal word**

Warning

**Hazard statements** H302 - Harmful if swallowed  
H317 - May cause an allergic skin reaction  
H411 - Toxic to aquatic life with long lasting effects

**Precautionary Statements - Prevention**

Keep out of reach of children.  
Read label before use.  
Avoid breathing dust or spray mist.  
Wash hands thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Contaminated work clothing must not be allowed out of the workplace.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/clothing and eye/face protection.  
Avoid release to the environment.

**Precautionary Statements - Response**

Specific treatment (see First aid on this SDS).

**Skin**

IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical advice/attention.  
Call a POISON CENTER or doctor if you feel unwell.  
Wash contaminated clothing before reuse.

**Ingestion**

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
Rinse mouth.

**Spill**

Collect spillage.

**Precautionary Statements - Storage**

No storage statements.

**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

**Other hazards which do not result in classification**

Contact with acids liberates very toxic gas.

### Section 3: Composition/information on ingredients

**Chemical nature** Substance.

Chemical name	CAS No.	Weight-%
Sodium thiocyanate	540-72-7	<=100%

## Section 4: First-aid measures

### Description of first aid measures

<b>General advice</b>	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.
<b>Inhalation</b>	Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	Wash skin with soap and water. (Call a physician if symptoms occur).
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Clean mouth with water and drink afterwards plenty of water.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. Use personal protective equipment as required.

### Most important symptoms and effects, both acute and delayed

**Symptoms** Irritation. May cause redness and tearing of the eyes. May cause allergic skin reaction. Redness. Rashes. Hives.

**Effects of Exposure** No information available.

### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically. May cause sensitization by skin contact.

## Section 5: Fire-fighting measures

### Suitable Extinguishing Media

**Suitable Extinguishing Media** Use extinguishing agent suitable for type of surrounding fire.

**Unsuitable extinguishing media** No information available.

### Specific hazards arising from the chemical

**Specific hazards arising from the chemical** Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. May cause sensitization by skin contact.

### Special protective actions for fire-fighters

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

## Section 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Do not touch or walk through spilled material. Use personal protective equipment as required. Wash thoroughly

after handling. Contact with acids liberates very toxic gas. Avoid breathing dust or spray mist.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Clear area of all unprotected personnel.

#### Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

#### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Use appropriate personal protective equipment (PPE). Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust.

#### Precautions to prevent secondary hazards

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## **Section 7: Handling and storage**

#### Precautions for safe handling

**Advice on safe handling** Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. Avoid generation of dust. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Use personal protection equipment. Wash thoroughly after handling.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands and face before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from light. Protect from moisture. Keep container closed when not in use.

**Incompatible materials** Acids. Bases. Alcohols. Amines. Ammonia. Amides. Glycols.

## **Section 8: Exposure controls/personal protection**

#### Control parameters

**Exposure Limits** No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority. However, Workplace Exposure Standard(s) for particulates:.

Chemical name	New Zealand	Australia	ACGIH TLV	United Kingdom
Sodium thiocyanate 540-72-7	-	-	-	TWA: 5 mg/m <sup>3</sup> STEL: 15 mg/m <sup>3</sup> Sk*

Particulates not otherwise classified: 8hr WES-TWA 10 mg/m<sup>3</sup> (inhalable dust) or 3 mg/m<sup>3</sup> (respirable dust)

As published by the New Zealand Workplace Health & Safety Authority.

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

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

#### **Engineering controls**

Apply technical measures to comply with the occupational exposure limits.

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

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.



**Eye/face protection**

Goggles.

**Hand protection**

Impervious gloves.

**Skin and body protection**

Overalls. Wear suitable protective clothing. Boots.

**Respiratory protection**

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.

**Environmental exposure controls**

Do not allow into any sewer, on the ground or into any body of water. Local authorities should be advised if significant spillages cannot be contained.

## **Section 9: Physical and chemical properties**

### Information on basic physical and chemical properties

<b>Physical state</b>	Solid
<b>Appearance</b>	Crystalline
<b>Color</b>	White
<b>Odor</b>	Odourless
<b>Odor threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	4.8 at 1070 g/L at 20.1°C	None known
<b>Melting point / freezing point</b>	287°C	None known

<b>Boiling point / boiling range</b>	>400°C	None known
<b>Flash point</b>	Not Applicable	None known
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	Not Applicable	
<b>Lower flammability or explosive limits</b>	Not Applicable	
<b>Vapor pressure</b>	No data available	None known
<b>Vapor density</b>	No data available	None known
<b>Relative density</b>	1.76 at 20°C	None known
<b>Water solubility</b>	No data available	None known
<b>Solubility(ies)</b>	Soluble in water	None known
<b>Partition coefficient</b>	No data available	None known
<b>Autoignition temperature</b>	Not Applicable	None known
<b>Decomposition temperature</b>		None known
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	No data available	None known

**Other information****Particle characteristics****Section 10: Stability and reactivity****Reactivity**

**Reactivity** Contact with acids liberates very toxic gas. Hygroscopic: absorbs moisture or water from surrounding air.

**Chemical stability**

**Stability** Stable.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**Possibility of hazardous reactions**

**Hazardous polymerization** Hazardous polymerization does not occur.

**Possibility of hazardous reactions** May decompose on exposure to light.

**Conditions to avoid**

**Conditions to avoid** Moisture. Exposure to light.

**Incompatible materials**

**Incompatible materials** Acids. Bases. Alcohols. Amines. Ammonia. Amides. Glycols.

**Hazardous decomposition products**

**Hazardous decomposition products** Carbon oxides. Nitrogen oxides. Sodium oxides. Hydrogen cyanide. Hydrogen sulfide. Oxides of sulfur.

**Section 11: Toxicological information**

**Acute toxicity****Information on likely routes of exposure**

<b>Product Information</b>	No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:
<b>Inhalation</b>	May cause irritation.
<b>Eye contact</b>	May cause irritation.
<b>Skin contact</b>	May cause irritation. May cause sensitization by skin contact.
<b>Ingestion</b>	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed.
<b>Symptoms</b>	Irritation. May cause redness and tearing of the eyes. May cause allergic skin reaction. Redness. Rashes. Hives.

**Acute toxicity****Numerical measures of toxicity**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium thiocyanate	= 764 mg/kg ( Rat )	-	-

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	No information available.
<b>Serious eye damage/eye irritation</b>	No information available.
<b>Respiratory or skin sensitization</b>	May cause sensitization by skin contact.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	Not classified.
<b>Chronic effects:</b>	May cause damage to central nervous system, thyroid, cardiovascular system.

**Data used to identify the health effects** Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

## Section 12: Ecological information

### Ecotoxicity

**Aquatic ecotoxicity** Toxic to aquatic life with long lasting effects. Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Sodium thiocyanate	-	-	48h EC50 Daphnia magna (Water flea) = 11 mg/L

**Terrestrial ecotoxicity** There is no data for this product.

**Persistence and degradability** No information available.

### Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

### Mobility in soil

**Mobility** No information available.

### Other adverse effects

No information available.

## Section 13: Disposal considerations

### Waste treatment methods

**Waste from residues/unused products** Dispose of product in packaging in a way that is consistent with the EPA Consolidation 30 April 2021 of the Hazardous Substances (Disposal) Notice 2017 and the Act. Treat the substance using a method that changes the characteristics or composition of the substance so that the substance is no longer a hazardous substance; or export the substance from New Zealand as waste.

**Contaminated packaging** For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the substance that it contained, taking into account the material the package is manufactured from.

Packages may only be reused or recycled if:

- the substance has a physical hazard other than corrosive to metal, and has been treated to remove any residual contents of the hazardous substance;
- or for substances that have a health or environmental hazard, or corrosive to metal, the contents of the residue in the package are below the threshold for the substance to be classified as hazardous in the Hazardous Substances (Hazard Classification) Notice 2020.



## Section 14: Transport information

<b><u>ROAD AND RAIL TRANSPORT</u></b>	Not classified as a Dangerous Good under NZS 5433 Transport of Dangerous Goods on Land; NON-DANGEROUS GOODS.
<b><u>IATA</u></b>	Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.
<b><u>IMDG</u></b>	Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available

### Special precautions for user

Please refer to the applicable dangerous goods regulations for additional information

## Section 15: Regulatory information

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

<b>EPA New Zealand HSNO approval code or group standard</b>	HSR002503 - Additives, Process Chemicals and Raw Materials (Subsidiary Hazard)
<b>National regulations</b>	There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances
<b>Certified handlers, tracking and controlled substance license requirements</b>	<p>Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information</p> <p>Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information</p> <p>Controlled substance licenses are required to possess certain explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information</p>

### International Regulations

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

### International Inventories

<b>NZIoC</b>	This material is listed on the New Zealand Inventory of Chemicals.
<b>TSCA</b>	Contact supplier for inventory compliance status.
<b>DSL/NDSL</b>	Contact supplier for inventory compliance status.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.
<b>AIIC</b>	This material is listed on the Australian Inventory of Industrial Chemicals.
<b>TCSI</b>	Contact supplier for inventory compliance status.

**Legend:****NZIoC - New Zealand Inventory of Chemicals**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

**AIIIC- Australian Inventory of Industrial Chemicals**

TCSI - Taiwan Chemical Substance Inventory

**Section 16: Other information**

Supplier Safety Data Sheet 03/ 2024

**Prepared By** This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

**Revision date:** 16-May-2024

**Reason(s) For Issue:** 5 Yearly Revised Primary SDS

**Revision Note:**

\*\*\*Indicates updated data since last publication.

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend**

SVHC: Substances of Very High Concern for Authorization:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances

vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

STOT: Specific Target Organ Toxicity

ATE: Acute Toxicity Estimate

LC50: 50% Lethal Concentration

LD50: 50% Lethal Dose

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
**	Hazard Designation	+	Sensitizers
C	Carcinogen		

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

Environmental Protection Agency

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

U.S. National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Disclaimer**

**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.**

**End of Safety Data Sheet**