

Safety Data Sheet SODIUM SELENATE Anhydrous

SDS no. NMY208VY • Version 1.0 • Date of issue: 2024-12-04

SECTION 1: Identification

GHS Product identifier

Product name SODIUM SELENATE Anhydrous

Recommended use of the chemical and restrictions on use

Laboratory reagent.

Supplier's details

Name ChemSupply Australia Pty Ltd
Address 38-50 Bedford Street
5013 Gillman South Australia
Australia

Telephone 08 8440 2000
email www.chemsupply.com.au

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

- Acute toxicity, inhalation, Cat. 3
- Acute toxicity, oral, Cat. 3
- Specific target organ toxicity following repeated exposure, Cat. 2
- Hazardous to the aquatic environment, short-term (acute), Cat. 1
- Hazardous to the aquatic environment, long-term (chronic), Cat. 1

GHS label elements, including precautionary statements

Safety Data Sheet

SODIUM SELENATE Anhydrous

SDS no. NMY208VY • Version 1.0 • Date of issue: 2024-12-04

Pictograms



Signal word

Danger

Hazard statement(s)

H301 Toxic if swallowed
H331 Toxic if inhaled
H373 May cause damage to organs through prolonged or repeated exposure
H410 Very toxic to aquatic life with long lasting effects

Precautionary statement(s)

P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P311 Call a POISON CENTER/doctor/physician
P391 Collect spillage.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight: 188.94

Components

Component	CAS no.	Concentration
SODIUM SELENATE (EC no.: 236-501-8) (weight)	13410-01-0	98 - <= 100 %
CLASSIFICATIONS: Acute toxicity, inhalation, Cat. 3; Acute toxicity, oral, Cat. 3; Hazardous to the aquatic environment, long-term (chronic), Cat. 1; Hazardous to the aquatic environment, short-term (acute), Cat. 1; Specific target organ toxicity following repeated exposure, Cat. 2. HAZARDS: H301 - Toxic if swallowed; H331 - Toxic if inhaled; H373 - May cause damage to organs [organs] through prolonged or repeated exposure [route]; H400 - Very toxic to aquatic life; H410 - Very toxic to aquatic life with long lasting effects.		

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice

First Aid Facilities: Maintain eyewash fountain in work area.

If inhaled

If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Immediately medical attention is required.

Safety Data Sheet

SODIUM SELENATE Anhydrous

SDS no. NMY208VY • Version 1.0 • Date of issue: 2024-12-04

In case of skin contact	Wash affected areas with copious quantities of water immediately. Remove contaminated clothing and wash before re-use. If rapid recovery does not occur, obtain medical attention
In case of eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.
If swallowed	Rinse mouth thoroughly with water immediately. Do not induce vomiting. Seek immediate medical assistance.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Small fire: Use dry chemical, CO₂ or water spray.

Large fire: Use water spray, fog or foam - Do NOT use water jets.

If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out. Avoid getting water inside the containers.

Specific hazards arising from the chemical

Hazards from Combustion Products: Slenium and sodium oxides.

Material does not burn. Fire or heat will produce irritating, poisonous and/or corrosive gases. Runoff may pollute waterways.

Special protective actions for fire-fighters

Wear SCBA and chemical splash suit. Fully encapsulating, gas-tight suits should be worn for maximum protection. Structural firefighter's uniform is NOT effective for these materials.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Follow precautions for safe handling described in this safety data sheet. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Keep unnecessary and unprotected personnel away from the spillage. Treat the spilled material according to the instructions in the clean-up section.

Wear protective clothing specified for normal operations (see Section 8)

Methods and materials for containment and cleaning up

Do NOT touch or walk through this product. Do NOT touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if safe to do so. Prevent entry into waterways, drains, confined areas. Cover with plastic sheet to minimize spreading. Absorb with earth, sand or other non-combustible material and transfer to container.

DO NOT GET WATER INSIDE CONTAINERS.

SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.

SECTION 7: Handling and storage

Precautions for safe handling

Safety Data Sheet

SODIUM SELENATE Anhydrous

SDS no. NMY208VY • Version 1.0 • Date of issue: 2024-12-04

Use local exhaust extraction over processing area. Avoid generation or accumulation of dusts. Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure. Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene procedures should be implemented. Take off contaminated clothing and wash it before reuse. Wash promptly with soap and water if skin becomes contaminated.

Conditions for safe storage, including any incompatibilities

Store away from oxidizing agents. Store in a cool, dry place. Store in well ventilated area. Keep containers securely sealed and protected against physical damage. Store away from foodstuffs.

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hand Protection: Ensure hand protection complies with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection

Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Respiratory protection

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Solid
Appearance	White powder.
Color	No data available.
Odor	Almost odourless
Odor threshold	No data available.
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.

Safety Data Sheet

SODIUM SELENATE Anhydrous

SDS no. NMY208VY • Version 1.0 • Date of issue: 2024-12-04

Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	5.5 - 7.5 @ ~19.0 g/l at 25°C.
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Soluble - ~19 g/l @ 20°C.
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	No data available.
Evaporation rate	No data available.
Density and/or relative density	No data available.
Relative vapor density	No data available.
Particle characteristics	No data available.

Supplemental information regarding physical hazard classes

No data available.

Further safety characteristics (supplemental)

No data available.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions of storage and handling.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Hazardous Polymerization: Will not occur

Conditions to avoid

Avoid storing in direct sunlight and avoid extremes of temperature.

Incompatible materials

Strong oxidising agents.

Hazardous decomposition products

Selenium, selenium oxides, disodium oxide.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Ingestion: Toxic by ingestion. Selenium acts as an enzyme toxin even after the absorption of small doses. Acute selenium poisoning produces central nervous system effects, which include nervousness, convulsions, and drowsiness. Symptoms of exposure may include anemia, stomach pains, vomiting, diarrhea, coughing, chest pains and difficulty in breathing. Other signs of intoxication can include skin eruptions, lassitude, gastrointestinal distress, teeth that are discoloured or decayed, odourous (<qt>garlic</qt>) breath, and partial loss of hair and nails.

Safety Data Sheet

SODIUM SELENATE Anhydrous

SDS no. NMY208VY • Version 1.0 • Date of issue: 2024-12-04

Inhalation: Toxic by inhalation. Selenium compounds in general have a strong irritant effect on mucous membranes, especially in the respiratory tract (bronchopneumonia, pulmonary oedema). Other symptoms may include those mentioned in Acute - Swallowed.

Skin corrosion/irritation

May cause skin irritation.

Serious eye damage/irritation

May cause eye irritation. Selenium compounds in general have a strong irritant effect on mucous membranes, especially in the eye.

Respiratory or skin sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Selenium [7782-49-2] and selenium compounds are evaluated in the IARC Monographs (Vol. 9, Suppl. 7;1987) as Group 3: Unclassifiable as to carcinogenicity to humans.

Reproductive toxicity

Not classified based on available information.

Specific target organ toxicity (STOT) - single exposure

Not classified based on available information.

Specific target organ toxicity (STOT) - repeated exposure

Specific Target Organ Toxicity - Repeated Exposure Category 2

H373 May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Not classified based on available information.

Additional information

Chronic Effects: Danger of cumulative effects. Chronic exposure by inhalation can produce symptoms that include lumbar pain, liver and spleen damage, as well as any of the other symptoms mentioned in Acute - Swallowed. Dermatitis is possible. Long-term exposure results in impairment in the gastrointestinal tract, spleen, bone marrow, heart, nerves (paralysis symptoms). Selenium is an essential trace element for man.

SECTION 12: Ecological information

Toxicity

Ecological Information: H410 Very toxic to aquatic life with long lasting effects.

Information on Ecological Effects: Ecotoxic effects: Selenium compounds and selenites:

Biological effects: Fish toxicity: *C. auratus* LC100: 2 mg/l/18 d

crustaceans: *Daphnia* toxicity: > 2.5 mg/l;

algae: *Sc. quadricauda* toxicity: > 2.5 mg/l;

protozoa: ~acute toxicity: 183 mg/l;

flagellate protozoa toxicity: > 0.0029 mg/l;

cold-blooded animals: ~acute toxicity: 2 mg/l.

Known Harmful Effects on the Environment: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)

UN Number: 2630

Class: 6.1

Packing Group: I

Proper Shipping Name: SELENATES

Hazchem emergency action code (EAC)

2X

IMDG

UN Number: 2630

Class: 6.1

Packing Group: I

EMS Number:

Proper Shipping Name: SELENATES

IATA

UN Number: 2630

Class: 6.1

Packing Group: I

Proper Shipping Name: SELENATES

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: S7

SECTION 16: Other information

Further information/disclaimer

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

Preparation information

All information provided in this data sheet or by our technical representatives is compiled from the best knowledge available to us. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, we make no warranty either expressed or implied, with respect to the completeness or accuracy to the information contained herein. ChemSupply Australia Pty Ltd accepts no responsibility whatsoever for its accuracy or for any results that may be obtained by customers from using the data and disclaims all liability for reliance on information provided in this data sheet or by our technical representatives.

Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'

Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.

Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.

Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019

Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)