

LIQUID SELENIUM

1 – PRODUCT AND COMPANY INFORMATION

PRODUCT USE: Liquid trace mineral supplement for dairy cows.

SUPPLIER: Deosan Manufacturing Ltd

20 Seddon Street

WAHAROA

NEW ZEALAND

Telephone: 0800 336 726 (0800 DEOSAN) / +64 7 888 5628

Email: info@deosan.co.nz

24 Hour Emergency Contact: 0800 243 622 (CHEMCALL)

International Emergency Number: +64 4 917 9888

New Zealand Poison Centre: 0800 POISON (0800 764 766)

NZ Emergency Services: 111

2 – HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE.

Classified as hazardous according to criteria in the New Zealand Hazardous Substances and New Organisms legislation and GHS 7th Edition.

HAZARD LABELLING: WARNING

Ecotoxic

GHS CLASSIFICATION

- Acute Oral and Inhalation Toxicity Category 4
- Germ Cell Mutagenicity Category 2
- Specific Target Organ toxicity – Single Exposure Category 2
- Hazardous to the Aquatic Environment Chronic Category 3
- Hazardous to Soil Organisms
- Hazardous to Terrestrial Vertebrates

HSNO Classification: 6.1D, 6.6B, 6.9B, 9.1C, 9.2C, 9.3C

GHS HAZARD STATEMENTS

Physical Hazards:

None

LIQUID SELENIUM

Health Hazards:

Harmful if swallowed or inhaled.

May cause damage to organs through prolonged or repeated exposure.

Suspected of causing genetic defects

Environmental Hazards:

Harmful to aquatic life with long-lasting harmful effects.

Harmful to the soil environment.

Harmful to terrestrial vertebrates.

PREVENTION

- Keep out of reach of children.
- Read label and safety data sheet before use.
- Wear eye protection.
- Avoid breathing fumes/vapours.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.

RESPONSE

- If medical advice is needed, have product container or label at hand.
- **IF SWALLOWED:** Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting.
- **IF ON SKIN (or hair):** Non-hazardous. Remove all contaminated clothing. Rinse skin with running water.
- **IF INHALED:** Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- **IF IN EYES:** Contact with eyes may cause irritation. Immediately flush eyes with flowing water including under the eyelids for at several minutes. If irritation persists, seek medical assistance.
- Immediately call a POISON CENTER or doctor/physician if unwell.
- Wash contaminated clothing before reuse.

STORAGE

- Store only in original container.
- Store locked up.

DISPOSAL

Dispose of contents and packaging in accordance with relevant legislation. See Section 13 of this SDS Document for more information.

3 – COMPOSITION / INFORMATION ON INGREDIENTS

LIQUID SELENIUM

Hazardous Ingredients:

Components	CAS- No.	Concentration [%]
Sodium Selenate	13410-01-0	<2

SYNONYMS: None

4 - FIRST AID MEASURES**IN AN EMERGENCY CALL AN AMBULANCE (111).**

Primary routes of exposure by inhalation or ingestion.

MAIN SYMPTOMS CAUSED BY EXPOSURE

Ingestion or inhalation may cause organ damage.

SWALLOWED

Do not induce vomiting. Rinse mouth out. Call a doctor or poison centre.

EYE CONTACT

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists, seek medical advice/attention. Continue rinsing until advised to stop by the Poison Centre or a doctor.

Removal of contact lenses after an eye injury should be undertaken by skilled personnel.

SKIN CONTACT

Not normally hazardous. If irritation or rash occurs, remove contaminated clothing and thoroughly wash skin and hair with running water and soap.

Seek medical attention if irritation persists.

INHALATION

Remove to fresh air and keep at rest in a position comfortable for breathing.

NOTES TO PHYSICIAN

Treat symptomatically based on individual reactions of patient and judgement of doctor.

5 – FIRE FIGHTING MEASURES**EXTINGUISHING MEDIA**In case of fire, use appropriate extinguishing media most suitable for surrounding fire conditions: water, water spray, dry powder, foam, carbon dioxide (CO₂).**FIRE FIGHTING**

Alert Fire Brigade and tell them location and nature of hazard. Clear fire area of all non-emergency personnel.

Prevent, by any means available, spillage from entering drains or water course. Use firefighting procedures suitable for surrounding area.

LIQUID SELENIUM

Equipment should be thoroughly decontaminated after use.

SPECIFIC HAZARDS

Non-Combustible. Non-reactive.

FIRE INCOMPATIBILITY

None

DECOMPOSITION

N/A.

PERSONAL PROTECTIVE EQUIPMENT

Fire-fighters should wear full protective clothing suitable for chemical hazards with self-contained breathing apparatus. The substance must be contained and prevented from entering drains and water courses in all circumstances.

HAZCHEM CODE

3Z

6 – ACCIDENTAL RELEASE MEASURES

Wear protective gloves, clothing and eye/face protection.

Keep unnecessary people away from the hazardous area.

MINOR SPILLS

Clean up all spills immediately.

Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable labelled container for waste disposal.

MAJOR SPILLS

Prevent, by any means available, spillage from entering drains or water course.

Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling.

Absorb remaining product with sand, earth or vermiculite. Collect solid residues and seal in labelled drums for disposal.

Wash area and prevent runoff into drains. If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice - See Section 8 of the SDS

7 – HANDLING AND STORAGE

PROCEDURE FOR HANDLING

Operators should be trained in procedures for safe use of this material.

Contact lenses should not be worn when working with this chemical.

Wear eye protection. Use appropriate personal protective equipment. See section 8 of the SDS.

LIQUID SELENIUM

Avoid inhalation of mists.

When handling, DO NOT eat, drink, or smoke.

Keep containers securely sealed when not in use. Avoid physical damage to containers.

Use good occupational work practice. Always wash hands with soap and water after handling.

SUITABLE PACKAGING

The UN Packaging specification number as well as the UN packaging Logo is to be printed on the containers. Store product in original packaging.

Corrosive resistant Plastic (HDPE) drum

Check all packaging is clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

None.

STORAGE REQUIREMENTS

Store locked up.

Store in original containers.

Keep containers securely sealed to protect from moisture contamination. Store in a cool, dry, well-ventilated area.

Store away from foodstuff containers.

Protect containers against physical damage and check regularly for leaks.

8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

TWA 0.1mg/m³.

ENGINEERING CONTROLS

None.

VENTILATION SYSTEM

None.

PERSONAL PROTECTION EQUIPMENT (PPE)

When handling product always wear PVC protective gloves and eye protection. Protective clothing, Chemical/waterproof boots and chemical resistant apron also recommended.

PERSONAL RESPIRATORS

Required if spray/mist present.

SKIN PROTECTION

Wear impervious protective clothing, including chemical resistant boots, gloves, apron or overalls as appropriate to prevent skin contact. Refer to AS/NZS 2161.1:2016 Occupational Protective Gloves – Selection, use and maintenance; AS/NZS 2210.1:2010 for Safety footwear; AS/NZS 4501.1:2008 Occupational protective clothing – Guidelines on the selection, use, care and maintenance of protective clothing.

LIQUID SELENIUM

EYE PROTECTION

Use approved chemical safety goggles and a full-face shield. Refer to Personal eye protection Part 1: Eye and face protectors for occupational applications, Australian/New Zealand Standard: AS/NZS 1337.1:2010. Ensure that there is ready access to eye wash unit.

9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Clear liquid.

PHYSICAL PROPERTIES

PROPERTY	VALUE
State:	Liquid
Odour:	None
Molecular Weight:	Not available
Melting Range (°C):	~0°C
Boiling Range (°C):	~100°C
Solubility in water (g/L, 20°C):	Miscible
pH:	6.5 – 7.5
Specific Gravity (g/ml):	1.01 – 1.015
Bulk Density (kg/m ³):	Not applicable
Volatile Component (%vol, 21°C):	Not applicable
Relative Vapor Density (air=1):	Not available
Vapour Pressure (hPa, 1175°C):	Not available
Autoignition Temp (°C):	Not applicable
Flash Point (°C):	Not applicable
Lower Explosive Limit (%):	Not applicable
Upper Explosive Limit (%):	Not applicable
Decomposition Temp (°C):	Not applicable
Viscosity (cps):	Not available
Evaporation Rate:	Non volatile

10 – CHEMICAL STABILITY AND REACTIVITY

CHEMICAL STABILITY

Product is stable under normal conditions of use, storage, and temperature.

CONDITIONS TO AVOID

Avoid excessive heat, direct sunlight, moisture, high temperatures. Keep containers dry and tightly closed to avoid moisture absorption and contamination.

INCOMPATIBLE MATERIALS

None.

HAZARDOUS DECOMPOSITION PRODUCTS

None.

LIQUID SELENIUM

HAZARDOUS REACTIONS

None

11 – TOXICOLOGICAL INFORMATION

SWALLOWED

Highly toxic. May cause nausea. May cause organ damage

EYE

Prolonged eye contact may cause mild inflammation.

SKIN

Skin contact is not expected to have harmful health effects.

INHALED

Highly toxic. May cause organ damage. May cause mutagenicity.

CHRONIC HEALTH EFFECTS

N/A

TOXICITY AND IRRITATION DATA

TOXICITY

Acute Oral Toxicity, Rat, LD50: Not available.

Acute Dermal Toxicity, LD50: Not available..

Acute Inhalation Toxicity, LC50: Not available.

IRRITATION

The material may be irritating to the eye, with prolonged contact causing inflammation.

Sensitisation (respiratory/contact): No evidence for skin sensitization.

Carcinogenic effects: Not classified or listed by IARC, NTP, or Cal Prop65.

Mutagenic effects: Not expected to be mutagenic.

Reproductive or developmental effects: Not expected to cause adverse reproductive effects.

Aspiration hazard: No information available.

Specific target organ toxicity: No information available.

12 – ECOLOGICAL INFORMATION

ECOTOXICITY

Harmful to aquatic life with long-lasting harmful effects.

Harmful to the soil environment

Harmful to terrestrial vertebrates

LIQUID SELENIUM

ECOTOXICITY DATA

Fish, (Carassius auratus), 24hr LC50: Not available.

Persistence and Degradability: Not available.

Mobility: Completely soluble.

DO NOT discharge into sewer or waterways.

13 – DISPOSAL INFORMATION

PRODUCT

Return unwanted product to the manufacturer for disposal or contact the Regional Council for local chemical disposal area details.

Treatment in a biological wastewater treatment system with prior approval and arrangement is also permissible providing that the substance is rendered non-hazardous and does not pose any adverse effects to human health or the environment.

Alternatively consult an approved Waste Management company for disposal options.

PACKAGING

NZ: Triple-rinse empty containers. Contact AgRecovery to arrange for pick-up or drop-off at a collection depot.

Overseas: Triple-rinse empty containers. Dispose of containers in accordance with guidance/regulations from relevant local authorities.

Observe all label safeguards until containers are cleaned and destroyed.

Where possible retain label warnings and SDS and observe all notices pertaining to the product.

14 – TRANSPORT INFORMATION

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: UN, IATA, IMDG

Not classified as a Dangerous Good under NZS 5433:2007 Transport of Dangerous Goods on Land.

15 – REGULATORY INFORMATION

REGULATIONS

Classified as hazardous according to the criteria of the New Zealand Hazardous Substances and New Organisms Act.

This product has been assigned to the following Group Standard by Deosan Manufacturing Ltd:
Animal Nutritional and Animal Care Products Group Standard 2017

Location compliance certification, certified handler and tracking regulations do not apply.

LIQUID SELENIUM

SECTION 16 – OTHER INFORMATION

INTERPRETATION AND ABBREVIATIONS

EPA - The Environmental Protection Authority of New Zealand

HSNO - Hazardous Substances and New Organisms Act 1996

MPI - Ministry for Primary Industries

EINECS - European Inventory of Existing Commercial Chemical Substances.

ERPG - Emergency Response Planning Guidelines.

GHS - Globally Harmonized System of Classification and Labelling of Chemicals.

SOURCES OF KEY DATA USED TO COMPILE THE DATASHEET:

Manufacturer's SDS, NZ EPA, CCID

DISCLAIMER: *The information contained in this safety data sheet was obtained from current and reliable sources. This data is supplied without warranty, expressed or implied, regarding its correctness and accuracy. It is the user's responsibility to determine safe conditions for use of this product and to assume liability for loss, injury, damage or expense resulting from improper use of this product.*

Deosan recommends that if this sheet is kept in hard copy that the user check www.deosan.co.nz/safety-data-sheets/ monthly to ensure it is still current.