



Infosafe No™ 3NUG7	Issue Date : November 2010	ISSUED by NUFARMNZ
--------------------	----------------------------	--------------------

Product Name **SELCOTE® ULTRA**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name SELCOTE® ULTRA

Product Code 04571

Product Type Nutritional supplement

Company Name Nufarm NZ

Address 6 Manu Street, Otahuhu
Auckland 2024 New Zealand

Emergency Tel. 0800 651 911

Telephone/Fax Number Tel: 0-9-270 4157
Fax: 0-9-270 4159

Email www.nufarm.co.nz

Recommended Use To correct livestock selenium deficiency. Apply to pasture or fodder crops.

Other Information This SDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

2. HAZARDS IDENTIFICATION

Hazard Classification Not classified as Dangerous Goods according to the LTSA New Zealand.

Risk Phrase(s)

Other Information 6.1D acute toxicant, 6.6B mutagen, 6.9B target organ toxicant, 9.1C aquatic toxicant, 9.2C soil toxicant, 9.3C terrestrial vertebrate toxicant, TOXICITY
Harmful - may be harmful if swallowed, inhaled or absorbed through the skin. Suspected of causing heritable mutations at high doses. May cause organ damage from repeated oral exposure at high doses.
ECOTOXIC
Harmful to aquatic life with long-lasting effects.
Harmful to the soil environment at high doses.
Harmful to terrestrial vertebrates.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Solid

Information on Composition Selcote Ultra contains 10g/kg selenium as sodium and barium selenate (90% minimum) and sodium and barium selenite (10% maximum).

<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
Selenium (as sodium and barium selenate)		10g/kg
Selenium (as sodium and barium selenite)		1g/kg max
Ingredients determined to be non-hazardous	-	990g/kg

4. FIRST AID MEASURES

First Aid Measures For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if the victim is not breathing. Use mouth-to-nose rather than mouth-to-mouth. Obtain medical attention.

Inhalation Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.



Infosafe No™ 3NUG7 Issue Date : November 2010 ISSUED by NUFARMNZ

Product Name **SELCOTE® ULTRA**

Ingestion Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. For advice, contact the National Poisons Centre (0800 764 766). Seek medical assistance immediately.

Skin Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. If a large area is affected seek medical assistance.

Eye Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance.

First Aid Facilities Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

Advice to Doctor Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media Carbon dioxide to exclude air.

Hazards from Combustion May emit toxic fumes of selenium dioxide if involved in fires or exposed to extreme heat.

Products

Special Protective Equipment for fire fighters Full protective clothing and self-contained breathing apparatus.

Specific Methods Keep up wind. Do not allow washings to reach sewage or effluent systems.

Other Information Location Certificate: Not applicable
Hazardous Atmosphere Zone: Not applicable
Number of Fire Extinguishers: Not applicable

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal Wear protective clothing. Clear area of unprotected personnel. Sweep up solids without generating dust. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill.

Personal Protection For appropriate personal protective equipment (PPE), refer Section 8.

Environmental Precautions Prevent from entering drains, waterways or sewers.

7. HANDLING AND STORAGE

Precautions for Safe Handling Avoid skin and eye contact and inhalation of dust.
APPROVED HANDLER: Not applicable
TRACKING: Is not required
RECORD KEEPING: Not applicable

Conditions for Safe Storage Keep out of reach of children.
Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs. Storage must be in accordance with NZS 8409 Management of Agrichemicals.
Stores containing 1,000kg of Selcote Ultra are subject to signage, and more than 1,000kg require emergency response plans.

Other Information Always read the label and any attached leaflet before use.
Aggregate Storage Volume Thresholds:
When stored with substances of the same hazard classification the aggregate quantity must be considered. For full details refer to the current NZS8409 Management of Agrichemicals and the HSNO Regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product.
WES TWA for selenium and compounds, as Se = 0.1 mg/m³

Engineering Controls Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Avoid generating and inhaling dusts. Use with local exhaust ventilation or while wearing a dust mask. Keep containers closed when not in use.

Personal Protective Equipment When handling the product wear safety goggles, impervious gloves, cotton overalls buttoned to the neck and wrist, and boots.

Infosafe No™ 3NUG7	Issue Date : November 2010	ISSUED by NUFARMNZ
--------------------	----------------------------	--------------------

Product Name **SELCOTE® ULTRA**

Hygiene Measures Do not eat, drink or smoke while using.
Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Solid

Appearance Yellow-green granules

Solubility in Water Sparingly soluble in water

Specific Gravity 1.00

Volatile Component Nil

Other Information (GR) Granule

10. STABILITY AND REACTIVITY

Chemical Stability Stable at room temperature. Incompatible with strong oxidizing agents, sparks and open flames.

Hazardous Polymerization Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information No specific toxicological data is available for this product. Data below is for constituents.
Sodium selenate is rapidly absorbed into the body, either by swallowing or breathing in dust.

Health Hazard No adverse health effects are expected if the product is handled in accordance with this Safety Data Sheet and the product label.

Inhalation Inhalation of dust may result in respiratory irritation. Effects may include those described for 'swallowing'. Can cause possible allergic reactions, producing asthma like symptoms.

Ingestion Swallowing may result in nausea, vomiting, diarrhoea and abdominal pain. Large amounts may cause muscle spasms, coma and death from respiratory failure.

Skin Contact with skin may result in irritation.

Eye May be an eye irritant.

Chronic Effects Repeated or prolonged exposure to selenate compounds may cause bronchial irritation, gastro-intestinal hypermotility resulting in diarrhoea, loss of weight and liver changes.

Carcinogenicity Objective reviewers of literature have concluded that selenium is not carcinogenic, albeit it may even play a protective role against carcinogenicity in small doses. IARC have classified Selenium and Selenium compounds as Group 3 - not classifiable as to their carcinogenicity to humans.

Acute Toxicity - Oral LD50 (rat) 1.6 mg/kg for sodium selenate
LD50 (rat) 7 mg/kg for barium selenate
LD50 (rabbit) 2.19 mg/kg for sodium selenite

Subchronic/Chronic Toxicity Rats fed a dietary level of 100ppm, ate little food and all died in 8-16 days. Those receiving 50ppm died in 10-97 days. A dietary level of 15ppm was tolerated for 72 days or more but food intake was about half of normal. All rats survived 7.5ppm (0.37mg/kg) for 6 months, and their growth was normal.

Human Effects A woman who had ingested 53mg/kg of sodium selenate experienced gastrointestinal hypermotility with diarrhoea. Liver function tests were abnormal.

12. ECOLOGICAL INFORMATION

Persistence / Degradability Not readily degradable (sodium selenate)

Bioaccumulative Potential Daphnia BCF value = 3650 for sodium selenate

Basis for Assessment Ecotoxicological data have not been determined specifically for this product. Data below is for the active ingredient unless otherwise stated.

Acute Toxicity - Fish LC50 (96hr) for Fathead minnow is 0.69 mg/l for sodium selenate



Infosafe No™ 3NUG7	Issue Date : November 2010	ISSUED by NUFARMNZ
--------------------	----------------------------	--------------------

Product Name **SELCOTE® ULTRA**

Acute Toxicity - Daphnia	LC50(96h) Daphnia magna 0.58mg/L for sodium selenate LC50(48h) Daphnia magna 0.75mg/L (adult), 0.55mg/L (juvenile) for sodium selenate
Acute Toxicity - Algae	EC50 (96h) for green algae 0.2 mg/l for sodium selenate.

13. DISPOSAL CONSIDERATIONS

Product Disposal	Dispose of product only by using according to the label, or at an approved landfill.
Container Disposal	Ensure container is completely empty. Burn in an appropriate incinerator if circumstances, such as wind direction, permit. Otherwise crush and bury in an appropriate landfill.

14. TRANSPORT INFORMATION

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
Other Information	Do not carry this product on a passenger service vehicle.

15. REGULATORY INFORMATION

National and or International Regulatory Information	This product does not require registration under the ACVM Act. Approved pursuant to the HSNO Act 1996, Approval Code HSR002521 See www.ermanz.govt.nz for approval controls
Packaging & Labelling	HARMFUL - keep out of reach of children
Hazard Rating Systems	NFPA/HMIS: 2-0-1

16. OTHER INFORMATION

Contact Person/Point	IN AN EMERGENCY, DIAL 111 - FIRE OR POLICE 24Hr Tollfree Emergency No: 0800 651 911 24Hr Emergency No: National Poisons Centre Phone: 0800 764 766
Revisions Highlighted	The SDS was reviewed. Minor changes were made to the information.
Other Information	Supersedes SDS issued February 2009 ...End Of MSDS...

© Copyright ACOHS Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe MSDS displayed is the intellectual property of Acohs Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe MSDS displayed is the intellectual property of Acohs Pty Ltd. The compilation of MSDS's displayed is the intellectual property of Acohs Pty Ltd.

Copying of any MSDS displayed is permitted for personal use only and otherwise is not permitted. In particular the MSDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of MSDS without the express written consent of Acohs Pty Ltd.