

SAFETY DATA SHEET

Nilverm Selenised®

Section 1: Identification of the Substance and Supplier

Product name	Nilverm Selenised Liquid containing 3.3 - 5% levamisole hydrochloride and 0.07 - 0.18% sodium selenate
Recommended use	Oral drench for sheep and cattle
Company details	Schering-Plough Animal Health Limited 33 Whakatiki Street, Upper Hutt Phone: 0800 800 543 Fax: 0800 808 100 Website: www.spah.co.nz Hours 8am – 5 pm, Mon – Fri
Emergency telephone	0800 764 766 (0800 POISON) 24 hours human health 0800 243 622 (0800 CHEMCALL) 24 hours
Date of preparation	January 2007

Section 2: Hazards Identification

Hazard classifications	6.1E, 6.4A, 6.5B, 6.6B, 6.9B
Priority identifiers	Warning – keep out of reach of children
Secondary identifier	6.1E May be harmful if swallowed, inhaled or absorbed through the skin 6.4A May cause eye irritation 6.5B May cause an allergic skin reaction 6.6B Suspected of causing genetic defects 6.9B May cause damage to the blood and hematopoietic system from repeated oral exposure at high doses
Risk & Safety Phrases	R22 Harmful if swallowed R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed

Section 3: Composition/Information on Ingredients

Chemical name	CAS number	Concentration
Citric Acid	77-92-9	<10%
Levamisole Hydrochloride	16595-80-5	4%
Sodium selenate	13410-01-0	<1%

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Section 4: First Aid Measures

Necessary first aid measures	<p>Remove to fresh air. If any trouble breathing, get immediate medical attention. Administer artificial respiration if breathing has ceased. If irritation or symptoms occur or persist, consult a doctor.</p> <p>SKIN CONTACT: In case of skin contact, while wearing protective gloves, carefully remove any contaminated clothing, including shoes, and wash skin thoroughly with soap and water. If irritation or symptoms occur or persist, consult a doctor.</p> <p>EYE CONTACT: In case of eye contact, immediately rinse eyes thoroughly with plenty of water. If wearing contact lenses, remove only after initial rinse, and continue rinsing eyes for at least 15 minutes. If irritation occurs or persists, consult a doctor.</p> <p>INGESTION: Rinse mouth and drink a glass of water. Do not induce vomiting unless under the direction of a qualified medical professional or National Poisons Centre. If symptoms persist, consult a doctor.</p>
Required instructions	<p>For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor.</p>
Notes for medical personnel	<p>Inhalation: remove to fresh air & provide oxygen if breathing is difficult</p>
Workplace facilities	<p>Emergency showers and eyewashes may be warranted depending on quantity and type of use.</p>

Section 5: Fire Fighting Measures

Type of hazard	<p>Not classified as flammable</p>
Fire hazard properties	<p>Not applicable</p>
Regulatory requirements	<p>Not applicable</p>
Extinguishing media and methods	<p>Carbon dioxide (CO₂), extinguishing powder or water spray</p>
Hazchem code	<p>2X</p>
Recommended protective clothing	<p>Wear full protective clothing and self-contained breathing apparatus (SCBA).</p>

Section 6: Accidental Release Measures

Emergency procedures	<p>Wear chemical resistant gloves and overalls, facemask or goggles. Prevent further spillage. Adsorb spilled product and place in sealable container for disposal. Wash down affected area with water plus detergent. Absorb and collect washings and place in the same sealable container for disposal. Seek advice from the local authority regarding disposal.</p>
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Section 7: Handling and Storage

Precautions for safe handling	Avoid contact with skin, eyes, and mucosa. Keep containers adequately sealed during material transfer, transport, or when not in use. See Section 8 (Exposure Controls) for additional guidance.
Regulatory requirements	Emergency Plan required where quantities greater than 1000L are present
Handling practices	Avoid contact with skin. Keep containers adequately sealed during material transfer, transport, or when not in use.
Approved handlers	Not required.
Conditions for safe storage	Store in original container in a cool, dry, ventilated place away from direct heat or direct sunlight. Keep container sealed when not in use.
Store site requirements	Store in a cool, dry, well ventilated area.
Packaging	PGIII

Section 8: Exposure Control/Personal Protection

Workplace exposure standards	None set for this substance
Application in the workplace	Ensure adequate ventilation. Keep container sealed when not in use.
Exposure standards outside the workplace	No TEL is set for this substance at this time EEL - Not applicable
Personal protection	Wear chemical resistant gloves, facemask or goggles.
Engineering controls	The health hazard risks of handling this material are dependent on many factors, including physical form, duration and frequency of process or task, and effectiveness of engineering controls. Site-specific risk assessments should be conducted to determine the feasibility and the appropriateness of all exposure control measures. Exposure controls for normal operating or routine procedures follow a tiered strategy. Engineering controls are the preferred means of long-term or permanent exposure control. If engineering controls are not feasible, appropriate use of personal protective equipment (PPE) may be considered as alternative control measures. Exposure controls for non-routine operations must be evaluated and addressed as part of the site-specific risk assessment.

Section 9: Physical and Chemical Properties

Appearance	Pink liquid
Boiling Point	100 °C
Melting/Softening point	Not applicable
Vapour Pressure	Not determined
Specific Gravity	1.0
Solubility (H ₂ O)	Soluble
Percent Volatiles	Not determined
Evaporation Rate	Not determined

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Section 10: Stability and Reactivity

Stability of the substance	Stable under normal conditions.
Conditions to avoid	Avoid high temperatures
Material to avoid	Avoid food products
Hazardous decomposition products	Carbon oxides (CO _x)

Section 11: Toxicological Information

Acute effects for individual ingredients only

ORAL	Levamisole: LD50 200mg/kg bw (rat/mouse) [ERMA] Citric acid: LD50 5000mg/kg bw (mouse) [IUCRID 2000] Sodium selenate: LD50 25mg/kg/bw [INCLASS] Sodium selenate: Toxic by inhalation [INCLASS]
TEL	No TEL is set for this substance at this time.

Chronic/long term effects for individual ingredients only

Citric acid: Anecdotal evidence suggests irritating to skin pH at 1.9% is 2.2 therefore aqueous solution is strongly acidic [ME]

Levamisole: Mutagenic effects -levamisole induced chromosome gaps and breaks in human lymphocytes in vitro and in vivo after volunteers were given 2 mg/kg. No chromosomal damage occurred in mice given 2.5 mg/kg subcutaneously.[<http://www.emea.eu.int/pdfs/vet/mrls/levamisole1.pdf>]

Levamisole: ADI of 0-6 µg/kg based on LOAEL of 1.25 mg/kg/day haemolytic effects in dogs, safety factor of 200 [<http://www.emea.eu.int/pdfs/vet/mrls/levamisole2.pdf>]

Sodium selenate: NOAEL of 0.37mg/kg/bw/day for Hepatotoxicity/ Alimentary system (liver) effects based on [Hayes, W.J., Jr., E.R. Laws, Jr., (eds.).

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Section 12: Environmental Information

Effects for individual ingredients only

EEL Not applicable

Section 13: Disposal Considerations

Disposal information

Disposal

Dispose of this product only by using according to the label, or at an approved landfill, or other approved facility.

Container Disposal

Triple rinse empty container. Burn in an appropriate incinerator, if circumstances such as wind direction permit. Otherwise crush or puncture and bury in a suitable landfill or recycle if appropriate.

Reference

Current version of NZS 8409 Management of Agrichemicals

Section 14: Transport Information

Relevant information

Not classified as a dangerous good for transport.

Section 15: Regulatory Information

Regulatory status

HSNO Approval Code: HSR001921.
For a full listing of controls see www.ermanz.govt.nz
ACVM registration number: A06830.
For conditions of registration see www.nzfsa.govt.nz/acvm/

HSNO and ACVM controls

Emergency Plan: 1,000 Litres

Section 16: Other Information

Additional information

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Schering-Plough urges each user or recipient of this SDS to read the entire data sheet to become aware of the potential hazards associated with this material. This SDS summarises, at the date of issue, our best knowledge of the health and safety hazard information. Although reasonable care has been taken in the preparation of this document, Schering-Plough Animal Health Ltd extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequence of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).