


# SAFETY DATA SHEET

## Multine 5 in 1 Selenised

### Section 1: Identification of the Substance and Supplier

<b>Product name</b>	<b>Multine 5 in 1 Selenised</b>
<b>Recommended use</b>	Veterinary vaccine - Clostridial vaccine for sheep and goats
<b>Company details</b>	<b>Schering-Plough Animal Health Ltd</b> <b>33 Whakatiki Street, Upper Hutt 5018, New Zealand</b>  Phone: 0800 800 543 Fax: 0800 808 100 Website: <a href="http://www.coopersonline.co.nz">www.coopersonline.co.nz</a> Hours: 8 am – 5 pm, Mon – Fri
<b>Emergency telephone</b>	<b>0800 764 766 (0800 POISON) 24 hours human health</b> <b>0800 243 622 (0800 CHEMCALL) 24 hours</b>
<b>Date of preparation</b>	April 2019

### Section 2: Hazards Identification

<b>Hazard classifications</b>	6.5B: Contact sensitiser
<b>GHS Pictogram:</b>	
<b>Signal word</b>	Warning
<b>Hazard statement</b>	H317: May cause an allergic skin reaction.
<b>Prevention statement</b>	P102: Keep out of the reach of children. P103: Read label before use. P261: Avoid breathing mist. P272: Contaminated work clothing should not be allowed out of the workplace. P280: Wear protective gloves.
<b>Response statement</b>	P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P321: See first aid instruction on the label of the product. P333 + P313: If skin irritation or rash occurs: Get medical advice/attention. P362 + P364: Take off contaminated clothing and wash before reuse.
<b>Disposal</b>	P501: Dispose of product, packaging and waste at an approved landfill or other approved facility.

### Section 3: Composition/Information on Ingredients

Chemical name	CAS number	Concentration
<i>Clostridium chauvoei</i> whole cell culture (inactivated)	-	Varies
<i>C. novyi</i> Type B toxoid (inactivated)	-	Varies
<i>C. perfringens</i> Type D toxoid (inactivated)	-	Varies
<i>C. septicum</i> toxoid (inactivated)	-	Varies
<i>C. tetani</i> toxoid (inactivated)	-	Varies
Sodium selenate	13410-01-0	<1%
Thiomersal (Preservative)	54-64-8	<1%

### Section 4: First Aid Measures

#### Necessary first aid measures

**ACCIDENTAL SELF-INJECTION** Obtain medical attention - show this SDS. Accidental self injection may lead to an inflammatory response and medical advice should be sought on the management of deep injections, particularly those near a joint or associated with bruising. If possible the application of gentle squeezing pressure with absorbent material (e.g. facial tissues) at the injection site will swab up unabsorbed vaccine. Strong squeezing of the site should be avoided. The damaged area should be thoroughly cleansed and a topical antiseptic applied.

**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.

**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.

**INGESTION** Rinse mouth and drink a glass of water. Do not induce vomiting unless under the direction of a qualified medical professional or Poison Control Centre. If symptoms persist, consult a doctor.

**INHALATION** 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.

#### Required instructions

For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor.

#### Notes for medical personnel

**Accidental self-injection:** Treat symptomatically. Some risk of hypersensitivity from injection. Contains safety tested inactivated bacterial toxins. Contamination of the needle must be considered.

This product is a vaccine for use in animals. Pathogenic clostridial bacterial strains may cause infection to damaged skin. Local irritation to the eyes, skin, or respiratory tract may occur following direct contact or inhalation of the product. As with any vaccine, exposure may cause hypersensitivity reactions.

#### Workplace facilities

Emergency showers and eyewashes may be warranted depending on quantity and type of use.

### Section 5: Fire Fighting Measures

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

## Multine 5 in 1 Selenised

### Section 6: Accidental Release Measures

<b>Personal Precautions</b>	Avoid contact with skin, eyes and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
<b>Environmental Precautions</b>	Prevent spilled material from flowing onto adjacent land or into streams, ponds, or lakes. Avoid release to the environment.
<b>Emergency procedures</b>	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.

### Section 7: Handling and Storage

<b>Precautions for safe handling</b>	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.
<b>Regulatory requirements</b>	Emergency Plan required where quantities greater than 1,000L are present.
<b>Handling practices</b>	Avoid contact with skin. Keep containers adequately sealed during material transfer, transport, or when not in use.
<b>Certified handlers</b>	Not required
<b>Conditions for safe storage</b>	Store in original container. Keep out of reach of children.
<b>Store site requirements</b>	Store away from light between 2 and 8°C. DO NOT FREEZE.
<b>Packaging</b>	PG III

### Section 8: Exposure Control/Personal Protection

<b>Occupational exposure limits</b>	No information available.
<b>Application in the workplace</b>	Ensure adequate ventilation. Keep container sealed when not in use.
<b>Exposure standards outside the workplace</b>	No TEL or EEL are set for this substance at this time.
<b>Personal protection</b>	Wear chemical resistant gloves, facemask or goggles.
<b>Engineering controls</b>	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.

# SAFETY DATA SHEET

## Multine 5 in 1 Selenised

### Section 9: Physical and Chemical Properties

<b>Appearance</b>	Light brown liquid
<b>Odour</b>	No information available
<b>Odour threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting point/freezing point</b>	No information available
<b>Initial boiling point and boiling range</b>	No information available
<b>Flash point</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Upper/lower flammability or explosive limits</b>	No information available
<b>Vapour pressure</b>	No information available
<b>Vapour density</b>	No information available
<b>Relative density</b>	No information available
<b>Solubility (ies)</b>	Soluble in water
<b>Partition coefficient: n-octanol/water</b>	No information available
<b>Auto-ignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Kinematic viscosity</b>	No information available

### Section 10: Stability and Reactivity

<b>Stability of the substance</b>	Stable under normal conditions.
<b>Conditions to avoid</b>	Avoid high temperatures.
<b>Material to avoid</b>	Avoid food products.
<b>Hazardous decomposition products</b>	Carbon oxides (CO <sub>x</sub> ).

**Multine 5 in 1 Selenised**

**Section 11: Toxicological Information**

**Effects for individual ingredients only**

<b>Acute toxicity</b>	<p>Thiomersal: (Oral) LD50 40mg/kg/bw (Rat) [EPA NZ]</p> <p>Sodium selenate: (Oral) LD50 25mg/kg/bw [INCLASS]</p> <p>Sodium selenate: (Inhalation) Toxic [EPA NZ]</p>
<b>Aspiration hazard</b>	No information available
<b>Respiratory irritation</b>	No information available
<b>Skin corrosion/irritation</b>	No information available
<b>Serious eye damage/irritation</b>	Sodium selenate: Irritating to the eye [EPA NZ]
<b>Respiratory or skin sensitisation</b>	Thiomersal: Skin sensitiser [All references from NTP]
<b>Germ cell mutagenicity</b>	<p>Sodium selenate: Suspected human mutagens</p> <p>Sodium selenite and sodium selenate, fed by gavaging to age-matched male Swiss albino mice and observed after 24 h following a colchicine-fixative-air drying-Giemsa schedule, were found to induce chromosome breaks and spindle disturbances in bone marrow cells. The four concentrations used were fractions of LD50 and the effects were directly proportionate to the concentration of the chemical. Sodium selenite induced a slightly higher frequency of chromosomal aberrations than sodium selenate. [EPA NZ]</p>
<b>Carcinogenicity</b>	No information available
<b>Reproductive toxicity</b>	No information available
<b>Specific organ toxicity</b>	<p>Sodium selenate: (Oral) EndPoint: NOAEL Primary Organ: Hepatotoxicity (liver)</p> <p>Rats receiving selenium compounds (generally sodium selenite) in their diets show acute, subacute, and chronic pathologic pictures entirely similar to those seen in rats fed poisonous field-grown grain... . Rats that received selenium (as sodium selenate) at a dietary level of 100 ppm ate little food and all died in 8-16 days; those receiving 50 ppm all died in 10-97 days. A dietary level of 15 ppm was tolerated for 72 days or more, but food intake was about half of normal. All rats survived a dietary level of 7.5 ppm (about 0.37 mg/kg/day) for 6 months, and their growth was normal. [EPA NZ]</p>
<b>Narcotic effects</b>	No information available

**Multine 5 in 1 Selenised**

**Section 12: Ecological Information**

**Effects for individual ingredients only**

<b>Aquatic</b>	<p>Thiomersal: (Lake trout) 48-hr LC50 2.13mg/L</p> <p>Sodium selenate: Very ecotoxic in the aquatic environment [EPA NZ] (crustacean) Gammarus pseudolimnaeus Scud - LC50- 48 hr 83 ug/l (= 0.083 mg/l) (algal) Species: Selenastrum capricornutum Green algae- EC50-96 hr-200 ug/l (= 0.2 mg/l) (fish) Acute: Pimephales promelas Fathead minnow- LC50-96 hr 690 ug/l (= 0.69 mg/l) Chronic: Pimephales promelas Fathead minnow- NOEC-32 day 390 ug/l (= 0.39 mg/l)</p>
<b>Terrestrial</b>	<p>Thiomersal: (Rat) LD50 40mg/kg/bw [EPA NZ]</p> <p>Sodium selenate: Very ecotoxic to terrestrial vertebrates [EPA NZ]</p>
<b>Soil</b>	<p>Thiomersal: A benchmark of 0.1 ppm was established for Hg based on the work of Abbasi and Soni (1983). A safety factor of 5 was applied to the 0.5 ppm LOEC because it caused a 65% reduction in earthworm survival. Confidence in this benchmark is low because of the limited amount of data. [R. A. Efrogmson, M. E. Will, G. W. Suter II Oak Ridge National Laboratory - Toxicological Benchmarks for Contaminants of Potential Concern for Effects on Soil and Litter Invertebrates and Heterotrophic Process: 1997 Revision]</p> <p>Sodium selenate: Very ecotoxic in the soil environment [EPA NZ] Effect of Selenic acid, Disodium salt on Medicago sativa Growth Endpoint: 22 day(s) EC20 of 0.1 mg/kg soil (NR: NR) on Measurement: Number of nodules/nodulated plant roots; Response Site: NR Whole Organism Endpoint: 22 day(s) EC20 of 0.1 mg/kg soil (NR: NR) on Measurement: Weight; Response Site: Whole Organism Effect of Selenic acid, Disodium salt on Medicago sativa (Alfalfa) Population Endpoint: 22 day(s) EC20 of 0.1 mg/kg soil (NR: NR) on Measurement: Biomass; Response Site: Root</p>
<b>Persistence and degradability</b>	No information available
<b>Bioaccumulative</b>	<p>Sodium selenate: Yes Daphnia magna Water flea BCF = 3650 Fresh Water, 96 h, Renewal Conc = 0.89 - 0.99 ug/l [EPA NZ]</p>
<b>Mobility in soil</b>	<p>Sodium selenate: Soil DT 50 &gt; 30 days: ND [EPA NZ]</p>
<b>Other adverse effects</b>	No information available

## Multine 5 in 1 Selenised

### Section 13: Disposal Considerations

**Disposal information**

**Disposal**

Dispose of unused contents in a suitable landfill. Where possible, dispose of unused product through AgRecovery Chemicals. Avoid contamination of any water source or the environment with product or empty container.

**Container Disposal**

Dispose of empty container by puncturing and burying in a suitable landfill. Where possible, recycle through AgRecovery. Do NOT burn.

**Needle Disposal**

Discarded needles should immediately be placed in a designated and appropriately labelled 'sharps' container

**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: HSR000015  
For full listings of controls see [www.epa.govt.nz](http://www.epa.govt.nz)

ACVM Registration No: A000935  
For conditions of registration see [www.foodsafety.govt.nz](http://www.foodsafety.govt.nz)

### Section 16: Other Information

**Additional information**

Multine 5 in 1 Selenised is a registered trademark.

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