Horizon Agresources NZ

SAFETY DATA SHEET

Horizon CobalJect 2000 B12 Injection +Selenium

SECTION 1: IDENTIFICATION

Product name:	**Horizon CobalJect 2000 B12 Injection +Selenium**
ACVM Registration No:	**A011696**
Recommended use:	**For the treatment and control of cobalt and selenium deficiency in sheep and cattle**
Supplier:	**HORIZON AGRESOURCES (NZ) LTD**
Address:	**Gloucester Court** **250 Gloucester St, Napier 4112, New Zealand**
Contact number:	**0800 378 6300**
Emergency contact number:	**0800 734 607 (24 hours)**
National Poisons Centre:	**0800 764 766 (0800 POISON)**
Document version and date:	**3.0** **4 October 2024**

SECTION 2: HAZARD IDENTIFICATION

HSNO Approval number:	HSR100758 Veterinary Medicines (Non-dispersive Closed System Application) Group Standard 2020.
GHS Classification:	Hazardous to the aquatic environment chronic - Category 3.
Hazard statement:	H412: Harmful to aquatic life with long lasting effects.
Prevention:	P103: Read label before use. P273: Avoid release to the environment.
Disposal:	P501: Dispose of contents and containers as specified on the registered label. Preferably dispose of product by use. Otherwise dispose of product and packaging at an approved landfill or other approved facility.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product ingredients	CAS Number	Concentration
Hydroxocobalamin (Vitamin B12)	22465-48-1	2 g/L
Selenium (as sodium selenate)	10102-23-5	4 g/L

Remaining ingredients are commercially sensitive and cannot be disclosed in a public document.

SECTION 4: FIRST AID MEASURES

General information	For advice contact the National Poisons Centre on 0800 POISON (0800 764 766), or a doctor immediately. SELF-INJECTION: Seek medical attention immediately. Have product container to hand. Observe good work practices and avoid skin and eye contact. Wash hands and exposed skin before meals and after use. Do not eat or drink while using. Launder protective clothing separately from other clothing, and before each re-use.

Inhalation:	Remove to fresh air.
Skin contact:	If skin or hair contact occurs remove contaminated clothing and flush skin and hair with running water.
Eye contact:	If splashed in eyes wash out immediately with water.
Ingestion:	If swallowed seek medical attention immediately. Have product container to hand. Rinse mouth out. Do NOT induce vomiting.
Workplace facilities:	No special facilities required.
Notes for medical personnel:	Apply symptomatic therapy (no specific antidote).

SECTION 5: FIRE FIGHTING MEASURES	
Fire and explosion hazards:	Non-flammable, Non-combustible, Non-explosive Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.
Extinguishing media	In case of fire, use carbon dioxide, extinguishing powder or water jet. Fight larger fires with water jet or alcohol resistant foam.
Fire Fighting	Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat and eye protection.
Flash point:	No data available
Auto ignition temperature:	No data available
Flammability class:	No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES	
Personal precautions:	Wear suitable protective clothing. Avoid contact with skin, eyes and clothing. Restrict access to contaminated area. Contain the spill and prevent further dispersion. Retrieve intact containers from site. Place damaged containers into containment devices.
Environmental precautions:	Absorb spills with inert material (e.g. sand or vermiculite), and place in waste containers. Wash the area with water and absorb with further inert material. Collect spilled material and place in sealable containers for subsequent disposal. Prevent contamination of water courses or sewers. Dispose of waste safely.
Methods and materials for containment and cleaning up:	If greater than 1000L is stored in one location, secondary containment and emergency plans to manage any potential spills must be in place. In all cases design storage to prevent discharge to storm-water drains. (If this occurs contact your regional council immediately).

SECTION 7: HANDLING AND STORAGE	
Handling:	Wash hands and exposed skin thoroughly after handling. Do not breathe mist.
Certified handler:	No
Tracking:	No
Storage:	Store below 25°C. Protect from light. Store in original container. Do not store with food. Keep out of reach of children.

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SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION	
Occupational exposure limits:	Sodium selenite 0.1 mg/m^3 (WES-TWA)
Engineering controls:	Prevent exposure by using personal protective equipment and work practices that prevent skin and eye contact.
Protective material types:	We suggest that protective clothing be made from rubber, PVC.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES	
Appearance:	Clear red solution
Odour:	No data available
Odour threshhold:	No data available
pH:	4.5 – 5.5
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point	No data available
Flammability:	No data available
Upper/lower flammability or explosive limits:	No data available
Vapour pressure:	Not applicable
Vapour density:	No data available
Relative density:	0.990 – 1.050 g/mL
Solubility (ies):	Soluble in water
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Kinematic viscosity:	No data available
Particle characteristics:	No data available

SECTION 10: STABILITY AND REACTIVITY	
Reactivity:	Stable under normal conditions of use and storage.
Conditions to Avoid:	No specific conditions to avoid.
Incompatibilities:	No specific materials to avoid.
Hazardous decomposition products:	Hazardous decomposition products are expected when heated to decomposition temperatures. Use appropriate PPE when fighting fires.

SECTION 11: TOXICOLOGICAL INFORMATION	
Acute toxicity:	**Sodium selenate** Acute Tox.2 (oral) H300: Fatal if swallowed. R PHRASE: R 25 [Company Data] (inhalation) H330: Fatal if inhaled. R PHRASE: R 23 [Company Data] Refer to EPA website

Skin corrosion/irritation:	No data available
Serious eye damage/ irritation:	**Sodium selenate** Eye Irrit.2 H319: Causes serious eye irritation. CROSS REFERENCE: Cas #13410-01-0 SPECIES: RESULT: Severe eye irritation may be seen with selenium dust exposure. Refer to EPA website
Respiratory or skin sensitisation:	No data available
Germ cell mutagenicity:	**Sodium selenate** Muta.2 H341: Suspected of causing genetic defects CROSS REFERENCE: Cas #13410-01-0 There remains some concern that human exposure to selenium compounds may be associated with a mutagenic risk Refer to EPA website
Carcinogenicity:	No data available
Reproductive toxicity:	No data available
Specific target organ toxicity – single exposure:	No data available
Specific target organ toxicity – repeated exposure:	**Sodium selenate** STOT Rep.Exp.2 H373: May cause damage to organs through prolonged or repeated oral exposure. R PHRASE: R 33 [Company Data] Refer to EPA website
Aspiration hazard:	No data available

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity- Aquatic:	**Sodium selenate** Aquatic Acute 1 H400: Very toxic to aquatic life. Short term toxicity to fish: R PHRASE: R 50/53 [Company Data] Short term toxicity to invertebrates: R PHRASE: R 50/53 [Company Data] Toxicity to freshwater algae and cyanobacteria: R PHRASE: R 50/53 [Company Data] Aquatic Chronic 1 H410: Harmful to aquatic life with long lasting effects. Toxicity to freshwater algae and cyanobacteria: R PHRASE: R 50/53 [Company Data] Refer to EPA website
Ecotoxicity- Terrestrial:	No data available
Persistence and degradability:	No data available
The potential to be bioaccumulative:	No data available
Mobility in soil:	No data available
Other adverse effects:	No data available

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SECTION 13: DISPOSAL CONSIDERATIONS	
Disposal:	Preferably dispose of the product by its intended use. If this isn't possible, dispose of product and packaging at an approved landfill or other approved hazardous waste disposal facility. Avoid contamination of any water source. Preferably recycle empty container using a suitable drench container recovery program (e.g. AgRecovery: for details visit the site http://www.agrecovery.co.nz/programmes/container-recycling) If this isn't possible then burn empty container in an appropriate incinerator, providing circumstances permit; i.e. suitable wind direction. Otherwise crush or puncture and bury in a suitable landfill. Do NOT re-use container for any other purpose.

SECTION 14: TRANSPORT INFORMATION	
UN Number:	Not applicable
UN proper shipping name:	Not applicable
UN dangerous goods class and subsidiary risk:	Not applicable
UN Packaging Group:	Not applicable
Environmental hazards:	Not applicable
Special precautions when transporting the substance:	Not applicable

SECTION 15: REGULATORY INFORMATION	
HSNO Approval number:	HSR100758 Veterinary Medicines (Non-dispersive Closed System Application) Group Standard 2020.
ACVM No:	A011696 See www.foodsafety.govt.nz for registration conditions

SECTION 16: OTHER INFORMATION	
Abbreviations:	ACVM: Agricultural Compounds and Veterinary Medicines EPA: Environmental Protection Agency (previously known as ERMA) CAS Number: Chemical Abstracts Service Registry Number GHS: Globally Harmonized System HAZCHEM Code: Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters HSNO: Hazardous Substances and New Organisms (Act and Regulations) UN Number: United Nations Number SDS: Safety Data Sheet ARTG: Australian Register of Therapeutic Goods Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time. Controls Matrix: List of default controls linking regulation numbers to Matrix code (e.g. T1, I16). IARC: International Agency for Research on Cancer LEL: Lower Explosive Limit STEL: Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15-minute period, provided the TWA is not exceeded.

	TWA: Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours) WES: Workplace Exposure Standard - The airborne UEL: Upper Explosive Limit EC50: Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species) LD50: Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats). LC50: Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
References:	Unless otherwise stated, toxicity information has been obtained from the EPA HSNO chemical classification information database (CCID) http://www.epa.govt.nz/hs/compliance/chemicals.html for specific chemicals. EPA Transfer Gazettes, Classifications and controls assigned for specific ingredients (consolidated gazette, 2004) Controls Matrix, Part of the EPA New Zealand User Guide to the HSNO Control Regulations WES 2013, The NZ Workplace Exposure Standards Effective from 2013, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz. Other References: Suppliers SDSs
Disclaimer:	This SDS was prepared by Horizon Agresources Ltd, and is based on our current state of knowledge, including information obtained from suppliers. This SDS is written in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications, are based on experience, EPA Guidelines and international classifications. This SDS is copyright Horizon Agresources Ltd, and must not be edited without the permission of the copyright holder or used for other than intended purpose.