



SAFETY DATA SHEET

MineralBoost with B12

Section 1 - Identification of the Material and Supplier

Product name: **MineralBoost Plus B12 Trace Mineral with Vitamin B12 for Cattle**
Recommended Use: Vitamin supplement injection for use as described on the product label.
Supplier name: BioCell Corporation Limited
Address: 19 Lareston Ave, Manukau, Auckland. New Zealand.
Telephone number : 64 09 270 0755

Section 2 - Hazards Identification

EPA Approval Code: HSR100757
Veterinary Medicines (Limited Pack Size, Finished Dose) Group Standard

HSNO Classification	GHS Class	GHS Category
6.1C	Acute toxicity: oral	Category 3
6.3A	Skin irritation	Category 2
6.4A	Eye irritation	Category 2
6.5B	Skin sensitization	Category 1
6.6B	Germ cell mutagenicity	Category 2
6.9B	Specific target organ toxicity (repeated exposure)	Category 2
9.1D	Aquatic toxicity (chronic)	Category 4
9.3C	Vertebrate Ecotoxicant	NA

GHS Pictogram:



Signal word: Danger

HAZARD STATEMENT:

- H301: Toxic if swallowed.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H317: May cause an allergic skin reaction.
- H341: Suspected of causing genetic defects.
- H373: May cause damage to organs through prolonged or repeated exposure.
- H413: May cause long lasting harmful effects to aquatic life.
- H433: Harmful to terrestrial vertebrates.

SAFETY DATA SHEET

MineralBoost with B12



PREVENTION:

- P102: Keep out of reach of children.
- P103: Read label before use.
- P201: Obtain special instructions before use.
- P202: Do not handle until all safety precautions have been read and understood.
- P260: Do not breathe mist/vapours.
- P261: Avoid breathing mist/vapours.
- P264: Wash contacted areas thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P272: Contaminated work clothing should not be allowed out of the workplace.
- P273: Avoid release to the environment.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P281: Use personal protective equipment as required.

RESPONSE:

- P101: If medical advice is needed, have product container or label at hand.
- P314: Get medical advice/attention if you feel unwell.
- P321: See first aid instruction on the label.
- P362: Take off contaminated clothing and wash before re-use.
- P363: Wash contaminated clothing before reuse.
- P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P330: Rinse mouth.
- P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
- P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308 + P313: IF exposed or concerned: Get medical advice/ attention.
- P332 + P313: If skin irritation occurs: Get medical advice/ attention.
- P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.
- P337 + P313: If eye irritation persists: Get medical advice/attention.

STORAGE:

- P405: Store locked up.

DISPOSAL:

- P501: Dispose of contents and containers as specified on the registered label.



SAFETY DATA SHEET

MineralBoost with B12

Emergency Overview

Physical Description & Color: Clear bark blue liquid.

Odour: No data.

Major Health Hazards: harmful if swallowed.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc, %	TWA (mg/m ³)	STEL (mg/m ³)
Zinc disodium EDTA salt	14025-21-9	10-30	not set	not set
Copper disodium EDTA salt	14025-15-1	5-10	not set	not set
Manganese disodium EDTA salt	15375-84-5	5-10	not set	not set
Sodium selenite	10102-18-8	0.1-1.0	not set	not set
other nonhazardous ingredients	Secret	to 100	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other nonhazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5-day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Self-Injection: Accidental self-injection may lead to an inflammatory response. 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 liquid. Strong squeezing of the site should be avoided. The damaged area should be thoroughly cleansed and a topical antiseptic applied. Check your tetanus immunization status.

Inhalation: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Skin Contact: Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until chemical is removed.

Eye Contact: No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.



SAFETY DATA SHEET

MineralBoost with B12

Ingestion: If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

This product is likely to decompose only after heating to dryness, followed by further strong heating. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Not combustible. Use extinguishing media suited to burning materials.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade.

Flash point: Will not burn until water component is driven off.

Upper Flammability Limit: Does not burn.

Lower Flammability Limit: Does not burn.

Autoignition temperature: Does not burn.

Flammability Class: Does not burn.

Section 6 - Accidental Release Measures

Accidental release: This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern. For minor spills, refer to product label for specific instructions. No special protective clothing is normally necessary because of this product. However, it is good practice to wear latex gloves when handling injectables. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Protect this product from light. Store in the closed original container in a dry, cool, well ventilated area out of direct sunlight. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label.



SAFETY DATA SHEET

MineralBoost with B12

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment: Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS/NZS 2161**, Occupational Protective Clothing: **AS/NZS 4501** set 2008, Industrial Eye Protection: **AS/NZS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**. Exposure limits have not been established by SWA for any of the significant ingredients in this product.

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: This product should only be used in a well-ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

Eye Protection: Eye protection such as protective glasses or goggles is recommended when this product is being used.

Skin Protection: You should avoid contact even with mild skin irritants. Therefore, you should wear suitable impervious elbow-length gloves and facial protection when handling this product. See below for suitable material types.

Protective Material Types: There is no data that enables us to recommend any type except that it should be impermeable.

Respirator: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Clear dark blue liquid.
Odour:	No data.
Boiling Point:	Approximately 100°C at 100kPa.
Freezing/Melting Point:	Approximately 0°C.
Volatiles:	Water component.
Vapour Pressure:	2.37 kPa at 20°C (water vapour pressure).
Vapour Density:	As for water.
Specific Gravity:	No data.
Water Solubility:	Completely soluble in water.
pH:	No data.
Volatility:	No data.
Odour Threshold:	No data.
Evaporation Rate:	As for water.
Coeff Oil/water Distribution:	No data
Autoignition temp:	Does not burn.

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: Protect this product from light. Store in the closed original container in a dry, cool, well ventilated area out of direct sunlight.

SAFETY DATA SHEET

MineralBoost with B12



Incompatibilities: Contact with acids may lead to small quantities of toxic gas.

Fire Decomposition: This product is likely to decompose only after heating to dryness, followed by further strong heating. Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. May form nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. May form hydrogen chloride gas, other compounds of chlorine. Sodium compounds, copper compounds, manganese compounds, selenium compounds. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Polymerisation: Polymerisation reactions are unlikely; they are not expected to occur.

Section 11 - Toxicological Information

Local Effects:

Target Organs: There is no data to hand indicating any particular target organs. Sodium Selenite is classed by SWA as a potential sensitiser by skin contact.

Classification of Hazardous Ingredients

Ingredient	Risk Phrases
Sodium Selenite	$\geq 0.1\% \text{Conc} < 1\%$: Xn; R22; R31
	<ul style="list-style-type: none">• Acute toxicity - category 2• Skin sensitisation - category 1• Hazardous to the aquatic environment (chronic) - category 2

Potential Health Effects

Persons sensitised to sodium selenite should avoid contact with this product.

Inhalation:

Short Term Exposure: Available data indicates that this product is not harmful. In addition product is unlikely to cause any discomfort or irritation.

Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short Term Exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. However, product may be irritating, but is unlikely to cause anything more than mild transient discomfort. This product contains sodium selenite, a dermal sensitiser, at a low concentration. Although it is not expected that contact with this product will result in sensitisation, people with an existing sensitisation may experience an allergic reaction if exposed to this product, and in some cases the reaction may be severe.

Long Term Exposure: No data for health effects associated with long term skin exposure. **Eye Contact:**

Short Term Exposure: This product may be irritating to eyes, but is unlikely to cause anything more than mild transient discomfort.

Long Term Exposure: No data for health effects associated with long term eye exposure. **Ingestion:**

Short Term Exposure: Significant oral exposure is considered to be unlikely. Available data shows that this product is harmful, but symptoms are not available. This product is unlikely to cause any irritation problems in the short or long term.

SAFETY DATA SHEET

MineralBoost with B12

Long Term Exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

Section 12 - Ecological Information

Insufficient data to be sure of status.

Section 13 - Disposal Considerations

Disposal: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. Discarded needles should immediately be placed in a designated and appropriately labelled sharps container. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

Section 14 - Transport Information

UN Number: 2630

UN Proper Shipping Name: Sodium selenite

Dangerous Goods Class: 6.1

UN Packaging Group: I

Environmental Hazards: Marine Pollutant

Transport of Dangerous Goods Pictogram:



Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)

AICS Australian Inventory of Chemical Substances

SWA Safe Work Australia, formerly ASCC and NOHSC

CAS number Chemical Abstracts Service Registry Number

Hazchem Code Emergency action code of numbers and letters that provide information to emergency services especially firefighters

IARC International Agency for Research on Cancer

IATA International Air Transport Association the trade association for the world's airlines.

IMSBC Formerly IMDG, the code for carriage of Dangerous Goods by sea freight.

NOS Not otherwise specified

SAFETY DATA SHEET

MineralBoost with B12



NTP National Toxicology Program (USA)
SUSMP Standard for the Uniform Scheduling of Medicines & Poisons
UN Number United Nations Number

SUPPLIER STATEMENT:

The product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with legal regulations. The information in this SDS is based on the level of knowledge at the time of preparation and relates to the product in the state in which it is supplied. The information describes the product from the safety point of view and is not intended to guarantee any particular properties and shall not establish a legally valid contractual relationship

Please read SDS and all labels carefully before using product.