

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND SUPPLIER

Product name:	BIONIC PLUS
Product code:	A011825
HSNO approval:	HSR008046
Approval description:	HSNO Approval name: TCA209
UN number:	UN3077
DG class:	9
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains abamectin, sodium selenate)
Packaging group:	III
Hazchem code:	2X
Recommended use:	Combination anthelmintic and mineral capsule for sheep
Company details:	Boehringer Ingelheim Animal Health New Zealand Limited
Address:	Level 3, 2 Osterley Way Manukau Auckland 2104 New Zealand
Telephone number:	Phone: +64 9 263 1400
Emergency telephone number:	Boehringer Ingelheim Freephone: 0800 800 822 National Poisons Centre : 0800 764 766 (0800 POISON) Fire Service, Ambulance : Dial 111
Date of issue:	29 September 2020
Date of review:	10 February 2021

SECTION 2: HAZARD IDENTIFICATION

Signal word: DANGER

GHS pictograms:



HSNO classifications

6.1D (oral)
6.5B
6.6B
6.8A
6.8C
6.9B

9.1A
9.2C
9.3B
9.4A

Hazard statements

H302 – Harmful if swallowed.
H317 – May cause an allergic skin reaction.
H341 – Suspected of causing genetic defects.
H360 – May damage fertility or the unborn child.
H362 – May cause harm to breast-fed children.
H373 – May cause damage to organs through prolonged or repeated exposure.
H410 – Very toxic to aquatic life with long lasting effects.
Harmful to the soil environment.
Toxic to terrestrial vertebrates.
Very toxic to terrestrial invertebrates

Precautionary statements:

P101 – If medical advice is needed, have product container or label on hand.
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 dust.
P263 – Avoid contact during pregnancy/while nursing.
P264 – Wash hands thoroughly after handling.
P270 – Do not eat, drink or smoke while using this product.
P272 – Contaminated work clothing should not be allowed out of the workplace.
P273 – Avoid release to the environment.

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P280 – Wear protective gloves.
P301+P312 – IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.
P302+P352 – IF ON SKIN: Wash with plenty of soap and water.
P308+P313 – IF exposed or concerned: Get medical advice/attention.
P314 – Get medical advice/attention if you feel unwell.
P330 – Rinse mouth.
P333+P313 – If skin irritation or rash occurs: Get medical advice/attention.
P363 – Wash contaminated clothing before reuse.
P391 – Collect spillage.
P405 – Store locked up.
P501 – Dispose of contents/container in accordance with local/regional/national/international regulation.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Plastic capsule containing tablets which contain abamectin, albendazole, selenium and cobalt

Product components:

<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
Abamectin	71751-41-2	185 mg per capsule
Albendazole	54965-21-8	4.62 g per capsule
Selenium (as sodium selenate)	13410-01-0	24 mg Se per capsule
Cobalt (as cobalt sulphate)	-	118 mg Co per capsule
Other	-	to 100%

SECTION 4: FIRST AID MEASURES

Necessary first aid measures: For advice contact the National Poisons Centre on 0800 POISON (0800 764 766), or a doctor immediately.
Ingestion: Call a POISON CENTRE or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting. Give a glass of water to drink.
Skin: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Workplace facilities: No special facilities required.

Notes for medical personnel: Apply symptomatic therapy (no specific antidote).

SECTION 5: FIRE-FIGHTING MEASURES

Type of hazard: There are no specific risks for fire/explosion for this product. It is non-flammable.

Fire hazard properties: Not classified as flammable, and will not support combustion. Hazardous fumes may be released when heated to decomposition.

Regulatory requirements: Not applicable

Extinguishing media and methods: Treat the fire as for the other materials present. Do not allow water to enter drains.

Hazchem code: 2X

Recommended protective clothing: When fighting a major fire wear full protective clothing including breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency procedures: Wear suitable protective clothing. Restrict access to contaminated area. Contain the spill and prevent further dispersion. Retrieve intact containers and capsules from site. Place damaged containers and capsules into containment devices. Wash the area with water and absorb with inert material. Collect spilled material and place in sealable

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containers for subsequent disposal. Avoid contamination of water courses or sewers. Dispose of waste safely.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:	Handle with care.
Regulatory requirements:	N/A
Handling practices:	N/A
Approved handlers:	Not required
Conditions for safe storage:	Store in a dry place below 30 °C. Keep out of reach of children.
Store site requirements:	This substance is subject to a requirement for an emergency management plan and signage, whenever it is held in quantities of 100 kg or more. See Hazardous Substances (Emergency management) regulations 25 to 42.
Packaging:	Packaging Schedule 3 (UN Packing Group III) for quantities >3 kg (Hazardous Substances Packaging Regulations 2001).

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Workplace exposure standards:	Selenium compounds, as Se TWA 0.1 mg/m ³ Cobalt metal dust and fume, as Co TWA 0.05 mg/m ³ Dusts 10 mg/m ³
Application in the workplace:	Applicable to manufacturing. Prevent exposure by using engineering controls, personal protective equipment and work practices that prevent skin contact.
Exposure standards outside the workplace:	TELs and EELs are not set at this time.
Engineering controls:	Ensure that ventilation maintains dust levels below WES.
Personal protection:	Clothing should consist of overalls with long sleeves and impervious gloves.
References:	N/A

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specify product data:	<u>Appearance</u> : Plastic capsule containing tablets. <u>Odour</u> : Not specified. <u>pH</u> : No data <u>Melting point/freezing point</u> : No data <u>Initial boiling point and boiling range</u> : No data <u>Flash point</u> : Non-flammable <u>Flammability</u> : Non-flammable <u>Upper/lower flammability or explosive limits</u> : Non-flammable <u>Vapour pressure</u> : N/A <u>Vapour density</u> : N/A <u>Relative density</u> : No data <u>Solubility</u> : Tablets disintegrate in water. <u>Partition coefficient: n-octanol/water</u> : N/A <u>Auto-ignition temperature</u> : No data <u>Decomposition temperature</u> : No data <u>Kinematic viscosity</u> : No data
Required specifications:	N/A
Further specifications:	N/A
Specific advice:	N/A

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SECTION 10: STABILITY AND REACTIVITY

Stability of the substance:	Stable under normal conditions of use and storage.
Conditions to avoid:	No specific conditions to avoid
Material to avoid:	No specific materials to avoid.
Hazardous decomposition products:	No hazardous products are expected, except when heated to decomposition.
Hazardous polymerization:	Components are not expected to form hazardous polymers.
Specific data:	N/A

SECTION 11: TOXICOLOGICAL INFORMATION

Summary:	<p>Harmful if swallowed. May cause an allergic skin reaction. Suspected of causing genetic defects. May damage fertility or the unborn child. May cause harm to breast-fed children. May cause damage to organs through prolonged or repeated exposure.</p>
Supporting data:	<p><u>Albendazole</u>: Benzimidazoles prevent tubulin polymerisation or spindle movement and their administration can result in aneuploidy. They are weak mutagens. Albendazole has low to moderate acute oral toxicity [LD₅₀ (oral, rabbit) 500-1250 mg/kg; LD₅₀ (oral, rat) 1320-2400 mg/kg; LD₅₀ (oral, mice) >3000 mg/kg]. Identified as a potential skin sensitiser by a positive result in a guinea pig maximisation test. In repeated oral dose studies toxic effects included reduced weight gain, reduced erythrocyte and leucocyte counts, decreased testes and uterine weights, slight increases in relative liver and kidney weights, and sternal bone marrow hypocellularity (lowest NOAEL 5 mg/kg/day). Teratogenicity (visceral, craniofacial and bone defects) has been demonstrated in animal studies (lowest NOEL was 5 mg/kg/day).</p> <p><u>Abamectin</u>: Abamectin is an acute oral toxin [LD₅₀ (oral) 8.7-12.8 mg/kg]. Ingestion of a single large dose of abamectin by humans (~ 100 mg/kg) was associated with coma, hypotension and respiratory failure. Clinical signs in repeated-dose laboratory animal studies included ataxia, tremor, mydriasis, emesis, pupil dilation and coma. High doses produced respiratory failure and deaths. The critical adverse effects in multigenerational reproductive studies were mortality and reduced weight gain of pups in early lactation (NOAEL 0.12 mg/kg/d).</p> <p><u>Sodium selenate</u>: Selenium is an essential trace element. LD₅₀ ranges between 1 and 7 mg/kg for many selenium compounds and animal species. Acute poisoning exhibits as dyspnea, spasms and death from respiratory failure. Selenium poisoning in humans has been described and gastrointestinal and neurological symptoms predominated. Potential mutagen. Repeated oral dose testing of selenium compounds in laboratory species identified a lowest NOAEL of 0.03 mg Se/kg/day (weight loss and liver toxicity).</p> <p><u>Cobalt sulphate</u>: Cobalt and cobalt compounds are possible carcinogens. In repeated does studies, cobalt salts have been implicated in cardiac disease (oral doses, LOAEL 0.02 mg/kg/d) and cobalt metal dust caused pulmonary toxicity when inhaled (LOAEL 0.02 mg/L/d). Cobalt is a known skin and respiratory sensitiser. Cobalt metal fume and dust irritates the respiratory tract. Cobalt metal is irritant to eyes and skin. In a reproductive study in rats, cobalt was embryotoxic when fed at 0.05 mg/kg/d throughout the gestation (decreased foetal weight).</p>

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SECTION 12: ECOLOGICAL INFORMATION

Summary:

Very toxic to aquatic life with long lasting effects.
Harmful to the soil environment.
Toxic to terrestrial vertebrates.
Very toxic to terrestrial invertebrates

Supporting data:

Albendazole: Albendazole may be toxic to terrestrial vertebrates based on LD₅₀ data [LD₅₀ (oral, rabbit) 500-1250 mg/kg]. Not toxic to fish or honey bees. The potential for bioaccumulation is low and benzimidazoles are degraded in soil and probably also in water.

Abamectin: Abamectin is a highly effective insecticide and acaricide produced by the soil microbe *Streptomyces avermitilis*. It acts by stimulating the release of gamma-aminobutyric acid, an inhibitory neurotransmitter, causing paralysis of the parasite. It is highly toxic to invertebrates in the aquatic, soil and terrestrial environments. Aquatic organisms: Abamectin is highly toxic to fish and extremely toxic to aquatic invertebrates [LC₅₀ Rainbow trout is 3.6 ppb (96hrs); EC₅₀ *Daphnia magna* 0.34 ppb (48hrs)]. Persist: yes. Soil organisms: Dung beetle Terrestrial fate value 20-40. Abamectin is toxic to mammals [LD₅₀ (oral, rats) 8.7 mg/kg], but is less toxic to birds [LC₅₀ Bobwhite quail >2000 mg/kg]. Abamectin is highly toxic to bees [LD₅₀ (oral) 0.0094 µg/bee; LD₅₀ (contact) 0.002 µg/bee].

Selenium chelate: Selenium accumulates in living tissues and bioconcentration in aquatic organisms will be moderate to very high. Very toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment. Toxic to terrestrial vertebrates based on laboratory animal toxicity data.

Disodium cobalt EDTA: Cobalt is toxic to fish and other aquatic life [LC₅₀ (96hr, Trout) 1.406mg/L; EC₅₀ (48hr, *Daphnia magna*) 1.11 mg/L]. Not readily biodegradable, cobalt persists.

SECTION 13: DISPOSAL CONSIDERATIONS

Restrictions:

There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.

Disposal method:

Preferably dispose of the product by use. Otherwise dispose of product at an approved landfill or other approved facility. Disposal of this product must comply with the Hazardous Substances (Disposal) Notice 2017 and the requirements of the Resource Management Act for which approval should be sought from the Regional Authority.

Contaminated packaging:

Do NOT use container for any other purpose. Disposal of contaminated packaging must comply with the Hazardous Substances (Disposal) Notice 2017 clause 12.

SECTION 14: TRANSPORT INFORMATION

Land Transport Rule: Dangerous Goods 2005 - NZS 5433:2007

Transport according to NZS 5433 (Transport of Hazardous Substances on Land). Considered a Dangerous Good for transport.

UN Number: 3077

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, N.O.S. (contains abamectin, sodium selenate)

Class(es) 9

Packing Group: III

Precautions: Ecotoxic

Hazchem code: 2X

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SECTION 15: REGULATORY INFORMATION

Regulatory status:

Registered pursuant to the ACVM Act 1997, No. A011825
See www.foodsafety.govt.nz for registration conditions

Approved pursuant to the HSNO Act, Approval Code HSR008046
See www.epa.govt.nz for approval conditions

HSNO and ACVM controls:

Refer to Section 2

SECTION 16: OTHER INFORMATION

Additional information:

For product information visit the Boehringer Ingelheim website
www.boehringer-ingelheim.co.nz

While the information set forth is believed to be accurate as of the date hereof, BOEHRINGER INGELHEIM makes no warranty with respect hereto and disclaims all liability from reliance thereon.