

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND SUPPLIER

Product Name:	Polerize
Product Code:	A011361
Product Type:	Endectocide
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
Recommended Use:	An endectocide for the treatment and control of internal and external parasites in sheep.
Date of Preparation:	10 October 2019

SECTION 2: HAZARDS IDENTIFICATION

Signal Word(s):	DANGER
Hazard Classification(s):	6.1E, 6.5B, 6.6B, 6.8A, 6.8C, 6.9B, 9.1C, 9.2C, 9.3C
Hazard Statement(s):	H303 May be 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. 6.9B May cause damage to organs through prolonged and repeated exposure. 9.1C Harmful to aquatic life with long-lasting effects. 9.2C Harmful to the soil environment. Avoid release to the environment. 9.3C Harmful to terrestrial vertebrates. Avoid release to the environment.
General Precautionary Statement(s)	P102 Keep out of reach of children.
Pictogram(s)	The below pictograms are GHS Hazard symbols for workplace use. See SECTION 14 for Dangerous Goods information.



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Precautionary statement(s) - Prevention	P201	Obtain special instructions before use
	P202	Do not handle until all safety precautions have been read and understood.
	P260	Do not breathe fumes.
	P263	Avoid contact during pregnancy/while nursing.
	P264	Wash hands 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.
	P281	Use personal protective equipment as required.
Precautionary statement(s) - Response	P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
	P314	Get medical advice/attention if you feel unwell.
	P363	Wash contaminated clothing before reuse.
	P302+P352	IF ON SKIN: Wash with plenty of soap and water.
	P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
	P308+P313	IF exposed or concerned: Get medical advice/attention.
Other Information	P405	Store locked up.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization: Liquid

Product Components:

Name	CAS	Proportion
Abamectin	71751-41-2	1 g/L
Albendazole	54965-21-8	25 g/L
Closantel (as the sodium salt)	61438-64-0	50 g/L
Other	-	To 1 L

SECTION 4: FIRST AID MEASURES

First Aid Measures:	If exposed or concerned: Get medical advice/attention.
Inhalation:	Remove patient to fresh air. Call the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor if you feel unwell.
Ingestion:	Do NOT induce vomiting. Call the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor if you feel unwell.
Skin:	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
Eye Contact:	If splashed in eyes wash out immediately with water.
Workplace facilities:	No special facilities required.
Required instructions:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves. Wash contaminated clothing before reuse.
Notes for medical personnel:	Apply symptomatic therapy (no specific antidote). Note the nature of the product (possible mutagen, reproductive/developmental toxin and sensitiser).

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SECTION 5: FIRE-FIGHTING MEASURES

Type of hazard:	Non flammable, Non combustible, Non explosive
Fire hazard properties:	Polerize is not classified as flammable. Hazardous fumes when heated to decomposition.
Regulatory requirements:	N/A
Extinguishing media and methods:	Treat the fire as for the other materials present. Do not allow water to enter drains.
Hazchem Code:	N/A
Recommended protective clothing:	When fighting a major fire wear full protective clothing including breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Spills & Disposal:	Restrict access to contaminated area. Contain the spill and prevent further dispersion. Retrieve intact containers from site. Place damaged containers into containment devices. Absorb spills with inert material 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. Avoid contamination of water courses or sewers. Dispose of waste safely.
Personal Protection:	Wear suitable protective clothing as required, including protective gloves.
Environmental Precautions:	Avoid contamination of water courses or sewers. Dispose of waste safely.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:	Apply with well-maintained and calibrated equipment. Handle with care.
Conditions for safe storage:	Store in a cool, dry, well-ventilated area. Protect from light. Store in suitable, labelled containers. Keep containers closed when not in use. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.
Store site requirements:	Store locked up. Store below 25 °C with top secured, away from direct sunlight. Keep out of reach of children.
Other Information:	N/A

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Workplace exposure standards:	Dusts 10 mg/m ³ Other WES values are not set at this time
Application in the workplace:	Prevent exposure by using engineering controls, personal protective equipment and work practices that prevent skin contact.
Engineering controls:	Ensure that ventilation maintains dust levels below WES.
Personal Protective Equipment:	Clothing should consist of overalls with long sleeves and impervious gloves.
Hygiene Measures:	Wash hands thoroughly after handling.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Form:	Suspension
Appearance:	Light yellow to yellow liquid
Odour:	N/A
Decomposition Temperature:	N/A
Melting Point:	N/A
Boiling Point:	ca. 100 °C
Solubility in Water:	Insoluble
pH:	~7 - 9
Vapour Pressure:	N/A
Vapour Density (Air=1):	N/A
Partition Coefficient: n-octanol/water	N/A
Density:	~1.05 - 1.10 g/mL
Flash Point:	N/A
Flammability:	N/A
Auto-Ignition Temperature:	N/A
Explosion Properties:	N/A
Oxidising Properties:	N/A
Kinematic Viscosity:	N/A
Other Information:	N/A

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal conditions of use and storage.
Conditions to Avoid:	No specific conditions to avoid.
Incompatible Materials:	No specific materials to avoid.
Hazardous Decomposition Products:	No hazardous products are expected, except when heated to decomposition.
Possibility of Hazardous Reactions:	Not known
Hazardous Polymerization:	Components are not expected to form hazardous polymers.

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SECTION 11: TOXICOLOGICAL INFORMATION

Toxicology Information:

May be 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 and repeated exposure.

Summaries Data:

Abamectin: 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).

Albendazole: 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 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 5mg/kg/day).

Closantel Sodium: Closantel is an acute oral toxin [LD50 (oral, rat) 262 mg/kg]. In repeated dose laboratory animal studies spermatic granulomas and hepatic fatty were observed (NOEL was 2.5 mg/kg/day). Reduced pregnancy rates recorded in reproductive studies (rats) at doses of 40 mg/kg/day and above were attributed to toxicity of the male reproductive organs. Male gonads, and secondarily the liver, appear as target organs for toxicity. Limited human clinical reports are available from 33 patients who were treated with a single oral or parenteral dose of closantel at 2.5 to 10 mg/kg per kg and there were no adverse effects.

SECTION 12: ENVIRONMENTAL INFORMATION

Environmental Hazards:

Harmful to aquatic life with long-lasting effects. Harmful to the soil environment. Harmful to terrestrial vertebrates. Avoid release to the environment.

Other Precautions:

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 (96 hrs); EC50 Daphnia magna 0.34 ppb (48 hrs)]. 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].

Albendazole: Benzimidazoles prevent tubulin polymerisation or

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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 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).

Closantel: Closantel is a broad spectrum antiparasitic (trematodes, nematodes, arthropods - especially those species which feed on blood or plasma). The anti-trematode activity of closantel is mainly used against liver fluke. Closantel is an aquatic toxin [LC50 (Common eel, 24 h) 2.5 mg/L] and is potentially toxic to terrestrial vertebrates based on laboratory animal toxicity data [LD50 (oral, rat) 262 mg/kg].

SECTION 13: DISPOSAL CONSIDERATIONS

Product and Packaging Disposal:

Preferably dispose of product by use. Otherwise dispose of product, packaging and waste at an approved landfill or equivalent facility. Avoid contamination of any water source. Triple rinse container immediately after emptying and pour rinsate onto waste ground. Recycle via AGRECOVERY Rural Recycling Programme (see www.agrecovery.co.nz). Do NOT use container for any other purpose.

SECTION 14: TRANSPORT INFORMATION

Transport Information:

Not classified as dangerous goods for rail, road, air or sea transport.

Other requirements:

N/A

SECTION 15: REGULATORY INFORMATION

Regulatory Status:

Registered pursuant to the ACVM Act 1997, No. A011361
See www.foodsafety.govt.nz for registration conditions

Approved pursuant to the HSNO Act, Approval Code HSR100758
See www.epa.govt.nz for approval conditions

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.