

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND SUPPLIER**

<b>Product name:</b>	<b>Cyrazin KO</b>
<b>Product code:</b>	A010635
<b>Recommended use:</b>	Ectoparasiticide
<b>Company details:</b>	Boehringer Ingelheim Animal Health New Zealand Limited
<b>Address:</b>	Level 3, Boehringer Ingelheim Building 2 Osterley Way Manukau City Auckland 2104 New Zealand
<b>Telephone number:</b>	Phone: +64 9 263 1400
<b>Emergency telephone number:</b>	Boehringer Ingelheim Freephone: 0800 800 822 National Poisons Centre : 0800 764 766 (0800 POISON) Fire Service, Ambulance : Dial 111
<b>Date of issue:</b>	August 2011
<b>Date of review:</b>	4 February 2020

**SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

**Chemical characterization:** Suspension

**Product components:**

<b><u>Name</u></b>	<b><u>CAS</u></b>	<b><u>Proportion</u></b>
Cyromazine	66215-27-8	500 g/L
Ivermectin	70288-86-7	15 g/L
BHT	128-37-0	< 10%
Other		To 1 L

**SECTION 3: HAZARDS IDENTIFICATION**

<b>Hazard classifications:</b>	6.1D, 6.8C, 6.9B, 9.1A, 9.2C, 9.3C, 9.4A
<b>Priority and secondary identifiers:</b>	WARNING
<b>Risk and safety phrases:</b>	6.1D Harmful if swallowed. 6.8C Ivermectin and BHT may possibly have effects on or via lactation. 6.9B Cyromazine possibly may have effects on target organs. 9.1A Very toxic to the aquatic environment. 9.2C Harmful to the soil environment. 9.3C Harmful to terrestrial vertebrates. 9.4A Very toxic to terrestrial invertebrates.  <b>Hazard Statement(s)</b> H302 Harmful if swallowed. H362 Suspected of damaging fertility or the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H423 Harmful to the soil environment. H433 Harmful to terrestrial vertebrates. H441 Very toxic to terrestrial invertebrates.

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## **Precautionary Statement(s) - Prevention**

P102 Keep out of reach of children.  
P103 Read label before use.  
P201 Obtain special instructions before use.  
P260 Do not breathe fumes/vapours/spray.  
P263 Avoid contact during pregnancy/while nursing.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P273 Avoid release to the environment.

## **Precautionary Statement(s) - Response**

P101 If medical advice is needed, have product container or label at hand.  
P301 + P312 IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.  
P308 + P313 IF exposed or concerned: Get medical advice/attention.  
P314 Get medical advice/attention if you feel unwell.  
P330 Rinse mouth.  
P391 Collect spillage.

## **Precautionary Statement(s) - Disposal**

P501 Preferably dispose of product by use. Otherwise, dispose of product at an approved landfill or other approved facility. Avoid contamination of any water source. Triple rinse container immediately after emptying and add to dip wash. Recycle via AGRECOVERY Rural Recycling Programme (see [www.agrecovery.co.nz](http://www.agrecovery.co.nz)). Do NOT use container for any other purpose.

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## 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: If swallowed, seek medical attention. Do NOT induce vomiting.  
Eyes: If splashed in eyes, wash out immediately with water.  
Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.  
Inhalation: Remove to fresh air.

**Workplace facilities:**

No special facilities required

**Required instructions:**

Observe good work practices and avoid skin 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 reuse.

**Notes for medical personnel:**

Apply symptomatic therapy (no specific antidote).  
Note: Cyromazine is not a cholinesterase inhibitor (is an insect growth regulator).

## SECTION 5: FIRE FIGHTING MEASURES

**Type of hazard:**

Non flammable, Non combustible, Non explosive

**Fire hazard properties:**

Cyrazin KO is not classified as flammable, and will not support combustion. Hazardous fumes 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:**

Not applicable

**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 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.

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## SECTION 7: HANDLING AND STORAGE

<b>Precautions for safe handling:</b>	Apply with well-maintained and calibrated equipment. Handle with care.
<b>Regulatory requirements:</b>	N/A
<b>Handling practices:</b>	N/A
<b>Approved handlers:</b>	Not required
<b>Conditions for safe storage:</b>	Store concentrated liquid in original container, tightly closed away from direct sunlight, in a cool, dry place. Keep out of reach of children.
<b>Store site requirements:</b>	This substance is subject to a requirement for an emergency signage, whenever it is held in quantities of 1000 L or more. See Hazardous Substances (Emergency management) regulations 25 to 42.
<b>Packaging:</b>	UN Packing Group III; Packaging Schedule 4 (Hazardous Substances Packaging Regulations 2001).

## SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

<b>Workplace exposure standards:</b>	Consult Department of Labour WES against formulation details.
<b>Application in the workplace:</b>	Prevent exposure by using engineering controls, personal protective equipment and work practices that prevent skin contact.
<b>Exposure standards outside the workplace:</b>	TELs and EELs are not set at this time.
<b>Engineering controls:</b>	Ensure that ventilation maintains dust levels below WES.
<b>Personal protection:</b>	Clothing should consist of overalls with long sleeves, boots and impervious gloves.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Specify product data:</b>	<u>Formulation type:</u> Suspension <u>Appearance:</u> liquid <u>Specific gravity:</u> ~1.1 g/mL <u>pH:</u> N/D <u>Boiling point:</u> > 100 °C. <u>Vapour Pressure:</u> NA <u>Solubility in Water:</u> [ cyromazine ] 1.1%
<b>Required specifications:</b>	N/A
<b>Further specifications:</b>	N/A
<b>Specific advice:</b>	N/A

## SECTION 10: STABILITY AND REACTIVITY

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

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## SECTION 11: TOXICOLOGICAL INFORMATION

### Data and interpretation:

#### Cyrazin KO

Harmful if swallowed. Ivermectin may possibly have effects on or via lactation. Ivermectin may possibly have effects on target organs. Cyromazine may possibly affect the blood and haematopoietic system.

### Summaries data:

#### Cyromazine

An acute toxin - 'slightly toxic' [LD50 (oral) 1467-4050 mg/kg; LC50 (inhalation) >2.720 mg/L air/4 hr; LD50 (dermal) >3100 mg/kg]. In repeated oral dose animal studies, the most consistent effect was a reduction in body weight gain at high dose levels during the treatment period (largely reversible). Red blood cell counts and haemoglobin levels were reduced in some animals at high doses. Lowest NOAEL 0.75 mg/kg/day.

#### Ivermectin

Ivermectin (a macrocyclic lactone class endectocide) is an acute oral toxin [LD50 (oral, mouse) 11.6 mg/kg; LD50 (oral, dog) >10 mg/kg; LD50 (dermal, rabbit) ~ 406 mg/kg]. Clinical signs in repeated dose laboratory animal studies included ataxia, tremors, mydriasis, emesis and coma. High doses produced respiratory failure and deaths. Neonates were affected via milk (neurotoxicity and reduced body weights, LOAEL 0.4 mg/kg/d). Foetal malformations were observed at doses that caused maternal toxicity. Ivermectin is widely used in humans for the treatment of onchocerciasis at single doses of 0.2 mg/kg and adverse effects are usually mild and transient.

## SECTION 12: ENVIRONMENTAL INFORMATION

### Potential environmental interactions:

#### Cyrazin KO

Very toxic to aquatic environment. Harmful to soil and terrestrial vertebrates. Very toxic to terrestrial invertebrates.

### Data organisation :

#### Cyromazine

Insect growth regulator with contact action, which interferes with moulting and pupation of flies (interferes with the first dipteran larval moult and to a certain extent with metamorphosis). May be toxic to bees [adult honey bees (no action up to 5 µg/bee)] and soil organisms. Low toxicity for birds and mammals. A potential terrestrial vertebrate toxin based on toxicity data from laboratory animals [LD50 (oral, rabbit) 1467 mg/kg]. Cyromazine is not expected to accumulate in soils, plants or tissues.

#### Ivermectin

Ivermectin is a highly effective insecticide and acaricide produced by the soil microbe *Streptomyces avermitilis*. It acts by increasing gamma-aminobutyric acid, an inhibitory neurotransmitter, causing paralysis of the parasite. It is highly toxic to invertebrates in the aquatic, soil and terrestrial environments. Ivermectin is highly toxic to fish [LC50 rainbow trout 0.0032 mg/L; LC50 bluegill sunfish 0.0096 mg/L] and extremely toxic to aquatic invertebrates [EC50 Mysid shrimp 0.022 ppb; EC50 crustacea 0.00036 mg/L]. Toxic to soil organisms based on effects on dung beetles. Ivermectin is highly toxic to bees [LD50 (contact) 0.002 µg/bee]. Toxic to terrestrial vertebrates [LD50 (mouse) 11.6 mg/kg]. Ivermectin is neither persistent nor bioaccumulative, but is highly ecotoxic.

### Environmental risk and safety phrases:

9.1A Very toxic to aquatic environment.  
9.2C Harmful to the soil environment.  
9.3C Harmful to terrestrial vertebrates.

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9.4A Very toxic to terrestrial invertebrates.

## SECTION 13: DISPOSAL CONSIDERATIONS

### Disposal information :

Preferably dispose of the product by use. Otherwise dispose of product and packaging at an approved landfill or other approved facility. Triple rinse container and add rinsate to dip wash. Burn empty container in an appropriate incinerator, if circumstances such as wind direction permit. Otherwise crush or puncture and bury in a suitable landfill. Do NOT use container for any other purpose.

## SECTION 14: TRANSPORT INFORMATION

### Relevant information:

Dangerous Goods for transport.  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Ivermectin, Cyromazine)  
UN Number: 3082  
Dangerous Goods Class: 9

The maximum quantity per package of this substance allowed for carriage on public transport is 10 L.

### Other requirements:

N/A

## SECTION 15: REGULATORY INFORMATION

### Regulatory status:

Registered pursuant to the ACVM Act 1997, No. A010635  
See [www.foodsafety.govt.nz](http://www.foodsafety.govt.nz) for registration conditions

Approved pursuant to the HSNO Act, Approval Code HSR100050  
See [www.epa.govt.nz](http://www.epa.govt.nz) for approval conditions

### HSNO and ACVM controls:

SDS is required for quantities greater than or equal to 1 L

### List exposure limits:

Refer to Section 3

N/A

## SECTION 16: OTHER INFORMATION

### Additional information:

For product information visit the Boehringer Ingelheim website  
[www.boehringer-ingelheim.co.nz](http://www.boehringer-ingelheim.co.nz)

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