

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND SUPPLIER

Product name:	Cyrazin KO
Product code:	A010635
Recommended use:	Ectoparasiticide
Company details:	Boehringer Ingelheim Animal Health New Zealand Limited
Address:	Level 3, Boehringer Ingelheim Building 2 Osterley Way Manukau City Auckland 2104 New Zealand
Telephone number:	Phone: +64 9 980 1600 Fax: +64 9 980 1601
Emergency telephone number:	Boehringer Ingelheim Freephone: 0800 800 822 National Poisons Centre : 0800 764 766 (0800 POISON) Fire Service, Ambulance : Dial 111
Date of preparation:	August 2011

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization:	Suspension		
Product components:			
<u>Name</u>	<u>CAS</u>	<u>Proportion</u>	
Cyromazine	66215-27-8	500 g/L	
Ivermectin	70288-86-7	15 g/L	

SECTION 3: HAZARDS IDENTIFICATION

Hazard classifications:	6.1D, 6.8C, 6.9B, 9.1A, 9.2C, 9.3C, 9.4A
Priority and secondary identifiers:	WARNING KEEP OUT OF REACH OF CHILDREN WARNING Dangerous to the environment
Risk and safety phrases:	6.1D HARMFUL IF SWALLOWED. 6.8C IVERMECTIN MAY POSSIBLY HAVE EFFECTS ON OR VIA LACTATION. 6.9B IVERMECTIN POSSIBLY MAY HAVE EFFECTS ON TARGET ORGANS. CYROMAZINE POSSIBLY MAY AFFECT THE BLOOD AND HAEMATOPOIETIC SYSTEM. 9.1A VERY TOXIC TO AQUATIC ENVIRONMENT. 9.2C HARMFUL TO THE SOIL ENVIRONMENT. 9.3C HARMFUL TO TERRESTRIAL VERTEBRATES. 9.4A VERY TOXIC TO TERRESTRIAL INVERTEBRATES. <i>Handle with care. Avoid contamination of any water supply with product or empty container. Avoid release to the environment.</i>

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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

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

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Workplace exposure standards:	Consult Department of Labour WES against formulation details.
Application in the workplace:	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, boots and impervious gloves.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specify product data:	<u>Formulation type:</u> Suspension <u>Appearance:</u> liquid <u>Specific gravity:</u> ~1.1g/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 %
Required specifications:	N/A
Further specifications:	N/A
Specific advice:	N/A

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

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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) 1467-4050mg/kg; LC50 (inhalation) >2.720mg/l air/4 hr; LD50 (dermal) >3100mg/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 0.75mg/kg/day.

Ivermectin

Ivermectin (a macrocyclic lactone class endectocide) is an acute oral toxin [LD50 (oral, mouse) 11.6mg/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 0.4mg/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) 1467mg/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 0.0032mg/L; LC50 bluegill sunfish 0.0096mg/L] and extremely toxic to aquatic invertebrates [EC50 Mysis shrimp 0.022ppb; EC50 crustacea 0.00036mg/L]. Toxic to soil organisms based on effects on dung beetles. Ivermectin is highly toxic to bees [LD50 (contact) 0.002ug/bee]. Toxic to terrestrial vertebrates [LD50 (mouse) 11.6mg/kg]. Ivermectin is neither persistent nor bioaccumulative, but is highly ecotoxic.

Environmental risk and safety phrases:

N/A

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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 1.5%, cyromazine 50%)
UN Number: 3082
Dangerous Goods Class: 9

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

Other requirements:

N/A

SECTION 15: REGULATORY INFORMATION

Regulatory status:

Registered pursuant to the ACVM Act 1997, No. A010635
See www.foodsafety.govt.nz for registration conditions

Approved pursuant to the HSNO Act, Approval Code HSR100050
See www.epa.govt.nz for approval conditions

HSNO and ACVM controls:

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

Refer to Section 3

List exposure limits:

N/A

SECTION 16: OTHER INFORMATION

Additional information:

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

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