

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND SUPPLIER

Product name:	Eclipse Pour-On
Product code:	A009270
Recommended use:	For the control and treatment of internal parasites, including endectocide resistant strains, lungworm and lice in cattle.
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:	02 October 2007

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Liquid

Product components:

<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
Abamectin	71751-41-2	10
Levamisole	14769-73-4	200
1-methyl-2-pyrrolidinone	872-50-4	530

SECTION 3: HAZARDS IDENTIFICATION

Hazard classifications:	6.1D, 6.3A, 6.4A, 6.5B, 6.6B, 6.8A, 6.8C, 6.9A, 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 May be harmful if swallowed. Wash hands and exposed skin before meals and after use. 6.3A Can cause skin irritation. Avoid skin contact. 6.4A Can cause eye irritation. Avoid contact with eyes. 6.5B Repeated exposure may cause skin allergy. Avoid skin contact. 6.6B Levamisole may possibly cause damage to genetic material. Handle with care. 6.8A 1-methyl-2-pyrrolidinone can affect development and/or reproduction. Handle with care. 6.8C Abamectin may possibly have effects on or via lactation. Handle with care. 6.9A Levamisole (blood and haematopoietic system) and abamectin (nervous system) may possibly cause organ damage. Handle with care. 9.1A Very toxic to aquatic organisms. Avoid contamination of any water supply with product or empty container. 9.2C Harmful to the soil environment. Avoid release to the environment. 9.3C Harmful to terrestrial vertebrates. Avoid release to the environment. 9.4A Very toxic to terrestrial invertebrates. Avoid release to the environment.

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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 and eye 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 the nature of the product (possible mutagen, reproductive/developmental toxin, sensitiser and irritant).

SECTION 5: FIRE FIGHTING MEASURES

Type of hazard:

Non flammable, Non combustible, Non explosive

Fire hazard properties:

Eclipse Pour-On 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:

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 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. Prevent 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

Regulatory requirements:

N/A

Handling practices:

N/A

Approved handlers:

Not required

Conditions for safe storage:

Store below 25°C. Protect from light. Keep out of reach of children.

Store site requirements:

This substance is subject to a requirement for an emergency management plan, secondary containment and signage, whenever it is held in quantities of 100L or more. See Hazardous Substances (Emergency management) regulations 25 to 42.

Packaging:

Packaging Schedule 3 (UN Packing Group III) for quantities >1L (Hazardous Substances Packaging Regulations 2001).

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SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Workplace exposure standards:	1-methyl-2-pyrrolidinone, TWA 25 ppm, 103 mg/m ³ STEL 75 ppm, 309 mg/m ³ Dusts 10mg/m ³
Application in the workplace:	Prevent exposure by using engineering controls, personal protective equipment and work practices that prevent skin and eye contact.
Exposure standards outside the workplace:	TELs and EELs are not set at this time.
Engineering controls:	Use only in well ventilated areas.
Personal protection:	Clothing should consist of overalls with long sleeves, and impervious gloves. Wear eye protection (eg. glasses, goggles or face shield).
References:	N/A

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specify product data:	<u>Formulation type:</u> Solution <u>Appearance:</u> Clear solution <u>Specific gravity:</u> ~1.04g/mL <u>Vapour Pressure:</u> NA <u>Solubility in Water:</u> Abamectin is insoluble in water
Required specifications:	List relevant physical and chemical data.
Further specifications:	Any additional data that are relevant to product.
Specific advice:	Cross references to other sections in SDS where appropriate.

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 decomposition 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

Data and interpretation:	May be harmful if swallowed. Can cause skin irritation. Can cause eye irritation. Repeated exposure may cause skin allergy. Levamisole may possibly cause damage to genetic material. 1-methyl-2-pyrrolidinone can affect development and/or reproduction. Abamectin may possibly have effects on or via lactation. Levamisole (blood and haematopoietic system) and abamectin (nervous system) may possibly cause organ damage.
Summaries data:	<u>Abamectin:</u> Abamectin is a highly effective insecticide and acaricide produced by the soil microbe <i>Streptomyces avermitilis</i> . 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 [LC ₅₀ Rainbow trout is 3.6 ppb (96hrs); EC ₅₀ <i>Daphnia magna</i> 0.34 ppb (48hrs)]. Persist: yes. Soil organisms: Dung beetle Terrestrial fate value 20-40. Abamectin is toxic to mammals [LD ₅₀ (oral, rats) 8.7 mg/kg], but is less toxic to birds [LC ₅₀ Bobwhite quail >2000 mg/kg]. Abamectin is highly toxic

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to bees [LD₅₀ (oral) 0.0094 µg/bee; LD₅₀ (contact) 0.002 µg/bee].
Levamisole: Levamisole is a broad-spectrum anthelmintic with a long history of use in cattle and sheep. It has moderate to high acute toxicity [LD₅₀ (oral, rats & mice) = 200-500 mg/kg]. A potential mutagen [levamisole] induced chromosome gaps and breaks in human lymphocytes in vitro and in vivo and levamisole hydrochloride induced an increase in the mitotic index, numerical chromosomal changes (aneuploidy, polyploidy) and structural chromosomal changes]. Haemolytic anaemic was the main toxic effect demonstrated in repeated dose animal studies (LOAEL 1.25mg/kg/day). In humans, levamisole has been associated with various non-specific effects (nausea, vomiting, rashes). Levamisole has induced leucopenia and agranulocytosis (idiosyncratic) at low doses.
1-methyl-2-pyrrolidinone: Low acute toxicity [LD₅₀ (oral, rabbit) 3500mg/kg; LD₅₀ (dermal) >8000 mg/kg]. In reproductive studies in laboratory animals, repeated dose exposure from mating to weaning was associated with lower pup body weights, reduced fertility and fecundity, reduced litter sizes, reduced pup survival, resorptions and malformations, (NOEL 50mg/kg/day). Irritant to skin and eyes.

SECTION 12: ENVIRONMENTAL INFORMATION

Potential environmental interactions:

Very toxic to aquatic organisms. Harmful to the soil environment. Harmful to terrestrial vertebrates. Very toxic to terrestrial invertebrates.

Data organisation :

Abamectin: Abamectin is an acute oral toxin [LD₅₀ (oral) 8.7-12.8mg/kg]. Ingestion of a single large dose of abamectin by humans (~100mg/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 0.12mg/kg/day).

Levamisole:

Levamisole is potentially toxic to terrestrial vertebrates based on laboratory animal toxicity data [LD₅₀ (oral, rats & mice) = 200-500mg/kg]. Not toxic to fish or honey bees. Levamisole does not bioaccumulate in biological systems. In soil, levamisole has a half-life of five to seventy five days depending on sunlight, soil type and climatic conditions. Levamisole binds strongly to soil particles and organic matter. It does not leach in soils and is readily degraded by hydrolysis and microbial action.

Environmental risk and safety phrases:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Abamectin 1%)

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. Avoid contamination of any water source. 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.

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SECTION 14: TRANSPORT INFORMATION

Relevant information: Dangerous Goods for transport.
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Abamectin 1%)
UN Number: 3082
Dangerous Goods Class: 9

The maximum quantity per package of this substance allowed for carriage on public transport is 1L.

Other requirements: N/A

SECTION 15: REGULATORY INFORMATION

Regulatory status: Registered pursuant to the ACVM Act 1997, No. A009270
See www.foodsafety.govt.nz for registration conditions

Approved pursuant to the HSNO Act, Approval Code HSR002284
See www.epa.govt.nz for approval conditions

SDS is required for quantities greater than or equal to 0.1L

HSNO and ACVM controls: 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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