



SAFETY DATA SHEET

A18159/07/AUS

BAYMEC POUR-ON FOR CATTLE

SECTION 1 – IDENTIFICATION, CONTACTS

Bayer Australia Ltd
875 Pacific Highway
Pymble NSW 2073

Emergency Telephone Number
1800 033 111
24 hour Emergency Service Australia Wide, Toll Free

Contact Point (for non-emergency calls)
Animal Health Division
Telephone Number: (02) 9391-6000

Product Name	Baymec Pour-on for Cattle
Product Use	Anthelmintic and anti-parasitic backline pour-on for use on cattle and red deer.
Other Names	Ivermectin, isopropanol, isopropyl alcohol, propan-2-ol
Creation Date	25 th June 2003
Revision Date	5 December 2016

SECTION 2 – HAZARD IDENTIFICATION	
Hazard Classification	HAZARDOUS SUBSTANCE CLASSIFIED AS DANGEROUS GOODS according to the Australian Dangerous Goods Code, 7th Edition.
GHS-Classification	Flammable liquids, Category 2 Eye irritation, Category 2 Specific target organ toxicity - single exposure, Category 3 Hazardous to the aquatic environment, Category 1
Signal Word	Danger
Hazard Statements	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H360D May damage the unborn child H362 May cause harm to breast-fed children H401 Very toxic to aquatic organisms
Precautionary statements	Prevention: P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P233 Keep container tightly closed. P263 Avoid contact during pregnancy/while nursing. P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P273 Avoid release to the environment. Response: P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. P308 + P313 IF exposed or concerned: Get medical advice/attention. Storage: P405 Store locked up. Disposal: P501 Dispose of contents/container in accordance with local regulations.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	<p>Ivermectin Concentration [Weight percent] 1 CAS-No.: 70288-86-7 CAS name: 22,23-Dihydroavermectin B1 GHS Classification: Acute Tox. 2 H300 Acute Tox. 3 H311 Repr. 2 H361 STOT RE 2 H373 Aquatic Acute 1 H400</p> <p>Propan-2-ol Concentration [Weight percent] >= 50 - <= 100 CAS-No.: 67-63-0 CAS name: 2-Propanol GHS Classification: Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336</p>
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SECTION 4 – FIRST AID MEASURES

General	Remove victim from contaminated area. If there is a risk of unconsciousness, position and transport in a stable lateral position. Remove soiled or soaked clothing immediately.
Inhalation	Inhalation of this product is a risk. In this event remove from exposure and perform artificial respiration if necessary.
Skin contact	Remove contaminated clothing. Wash affected area immediately with soap and water. Seek medical attention if required.
Eye contact	Flush eye immediately with large amounts of water or normal saline, occasionally lifting eyelids, until no evidence of chemical remains. Seek medical attention if eye irritation persists.
Ingestion	If vomiting occurs keep head lower than hips to help prevent aspiration. Seek medical attention if required.
Advice to doctor	Treat symptomatically and if necessary apply artificial respiration. There is no specific antidote for ivermectin poisoning.

SECTION 5 – FIRE FIGHTING MEASURES

Extinguishing Media	Sprayed water jet, foam, dry powder, CO ₂ , sand
Fire and Explosion Hazards	Highly flammable material. Protect from fire, sparks, naked flame, oxidising agents.
Hazardous Combustion Products	Thermal decomposition products include carbon monoxide.
Fire Fighting	Fight fire in the early stages if safe to do so. Wear respiratory protection. In well ventilated areas wear full face mask with a combination filter. (Offers no protection from carbon monoxide). In enclosed premises: respirator with independent air supply. Contain firefighting water.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Accidental Release	<p>Prevent spillage from spreading or entering soil, waterways and drains. Avoid sources of ignition.</p> <p>Take up with absorbent material such as sawdust, peat or chemical binder. Fill material along with any contaminated soil etc., into sealable containers. Clean affected area with aqueous detergent and a small amount of water. Absorb this detergent/water with absorbent material. Place cleaning materials into the same container. Do not eat, drink or smoke during clean-up operation.</p>
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SECTION 7 – HANDLING AND STORAGE

Safe Handling	Pour the product using a funnel or other equipment to avoid splashing and gugging. Suitable container materials: HDPE
Storage	Keep out of reach of children. Store away from food, drink or animal feeding stuffs. To maintain product quality, store below 30°C. Keep away from heat or moisture. Take precautions against static discharge.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits	ES-TWA Isopropanol 400 ppm (983 mg/m ³), (NOHSC) ES-STEL Isopropanol 500 ppm (1,230 mg/m ³) (NOHSC) No exposure allocated for ivermectin.
Ventilation	Ensure adequate ventilation during use to prevent build-up of fumes.
Eye Protection	Will irritate the eyes. If product in eyes, wash out immediately with water. No eye protection is required under normal conditions of use. Under other conditions of use wear safety goggles
Skin Protection	Will irritate the skin. If product on skin, immediately wash area with soap and water. No skin protection is required under normal conditions of use. Under other conditions of use wear rubber gloves. Wash hands before breaks and at end of work.
Respirator	No respirator is required under normal conditions of use.
Protective Material Types	Rubber
General Advice	Product is poisonous if swallowed.

SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

Physical State	Clear liquid
Colour	Blue
Odour	Slight characteristic smell
Boiling Point	81°C (isopropanol)
Pour point	-10°C
Density	approx 0.802 kg/L at 20°C
Vapour Pressure	42 hPa at 20°C 230 hPa at 50°C 296 hPa at 55°C
Viscosity	3.011 mPa.s at 20°C Discharge time 25.8s (nozzle 3.0mm)
Solubility in Water	Not miscible
pH	7-8 (undiluted)
Flash Point	12°C
Ignition Temperature	395°C
Explosive Limits	LEL 2.5%, UEL 12% (Isopropanol)

SECTION 10 – STABILITY & REACTIVITY

Chemical Stability	Product is chemically stable
Conditions to Avoid	Avoid oxidising agents.
Incompatible Materials	None
Hazardous Decomposition	Thermal decomposition products include carbon monoxide.
Hazardous Reactions	Isopropanol reacts violently with (H ₂ + Pd), nitroform, oleum, COCl ₂ , potassium-tert-butoxide, Al, Al triisopropoxide, crotonaldehyde, oxidants. Can react vigorously with oxidising materials.

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicology Assessment	<p>Propan-2-ol: Acute effects: Causes serious eye irritation. May be harmful if swallowed.</p> <p>Ivermectin: Acute effects: Fatal if swallowed. Toxic in contact with skin.</p>
Information on toxicological effects	<p>Other information on toxicity:</p> <p>Propan-2-ol: Breathing of the fumes may lead to narcotic symptoms. After resorption: headaches, nausea, unconsciousness, dizziness</p> <p>Ivermectin: If overexposed to ivermectin, symptoms may include decreased activity, slow rate of breathing, dilation of the pupils, muscle tremors and inco-ordination.</p>
Acute oral toxicity	<p>Baymec Pour-On for Cattle LD50 Rat: > 2,000 mg/kg</p> <p>Propan-2-ol LD50 Rat: 4,570 mg/kg May be harmful if swallowed.</p> <p>Ivermectin LD50 Rat: ca. 50 mg/kg Fatal if swallowed. Method: OECD 401</p>
Acute inhalation toxicity	<p>Propan-2-ol LC50 Rat: 72.6 mg/l, 4 h The available study results do not lead to a GHS classification</p>
Acute dermal toxicity	<p>Baymec Pour-On for Cattle LD50 Rat: > 2,000 mg/kg</p> <p>Propan-2-ol LD50 Rabbit: 13,400 mg/kg The available study results do not lead to a GHS classification</p> <p>Ivermectin LD50 Rabbit: 406 mg/kg Toxic in contact with skin.</p>

SECTION 11 – TOXICOLOGICAL INFORMATION (cont.)	
Acute toxicity (other routes)	Ivermectin LD50 intraperitoneal Rat: ca. 55 mg/kg
Corrosivity	No statements available.
Skin irritation	Propan-2-ol Rabbit - Result: No skin irritation Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin. May cause skin irritation and/or dermatitis. Ivermectin Human experience: May cause skin irritation and/or dermatitis.
Eye irritation	Propan-2-ol Classification: Causes serious eye irritation. Result: Severe eye irritation Ivermectin Rabbit - Result: Mild eye irritation
Sensitisation	Propan-2-ol Guinea pig - Result: Did not cause sensitisation on laboratory animals.
Phototoxicity	No statements available
Subacute, subchronic and prolonged toxicity	Ivermectin - Symptoms: Neurological disorders STOT - single exposure Propan-2-ol May cause drowsiness or dizziness. STOT - repeated exposure Ivermectin May cause damage to organs through prolonged or repeated exposure.
Aspiration toxicity	No statements available.
Genotoxicity in vitro	Propan-2-ol Ames test - Result: Negative. Micronucleus test - Result: No indication of clastogenic effects. Ivermectin Ames test Result: Negative
Genotoxicity in vivo:	Propan-2-ol Micronucleus test, Mouse Result: No indication of clastogenic effects. Method: OECD 474
Carcinogenicity	Propan-2-ol Rat - Result: Animal testing did not show any carcinogenic effects.

SECTION 11 – TOXICOLOGICAL INFORMATION (cont.)

Fertility	<p>Propan-2-ol Result: Animal testing did not show any effects on fertility. Toxicological Evaluations (Institute for Toxicology of Bayer Pharma AG)</p>
Developmental toxicity	<p>Propan-2-ol Result: Evidence of an embryotoxic effect in animal studies at doses which are harmful to the parent animals. Toxicological Evaluations (Institute for Toxicology of Bayer Pharma AG)</p> <p>CMR classification: Ivermectin Fertility: Suspected of damaging the unborn child..</p>
Neurotoxicity	<p>No statements available.</p> <p>Neurological symptoms Propan-2-ol May cause drowsiness or dizziness.</p>

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicology Assessment	<p>Propan-2-ol Acute aquatic toxicity: slightly water endangering</p> <p>Ivermectin Acute aquatic toxicity: Very toxic to aquatic life.</p>
Toxicity	<p>Toxicity to fish: Propan-2-ol Acute Fish toxicity: LC50 > 100 mg/l Test species: Leuciscus idus (Golden orfe) Duration of test: 48 h Acute Fish toxicity: LC50 1,400 mg/l Test species:Lepomis macrochirus (Bluegill) Duration of test: 96h</p> <p>Ivermectin Acute Fish toxicity: LC50 0.003 mg/l Test species: Oncorhynchus mykiss (rainbow trout) Duration of test: 48 h</p> <p>Toxicity to daphnia and other aquatic invertebrates Propan-2-ol EC50 > 100 mg/l Test species: Daphnia magna (Water flea) Duration of test: 48 h</p> <p>Ivermectin EC50 0.000025 mg/l Duration of test: 48 h</p> <p>Toxicity to algae: Propan-2-ol IC50 > 1,000 mg/l Test species: Desmodesmus subspicatus (green algae) Duration of test: 72 h</p>

SECTION 12 – ECOLOGICAL INFORMATION (cont.)

Persistence and degradability	<p>Ivermectin NOEL >= 10 mg/l Duration of test: 14 d Toxicity to bacteria:</p> <p>Propan-2-ol EC0 1,050 mg/l Test species: Pseudomonas putida Duration of test: 24 h</p> <p>Toxicity to fish, daphnia, aquatic and terrestrial fauna (Chronic toxicity) No statements available.</p> <p>Biodegradability Propan-2-ol > 70 %, 10 d. According to the results of tests of biodegradability this product is considered as being readily biodegradable.</p> <p>Photodegradation Ivermectin The product is eliminable from the environment by direct photodegradation.</p> <p>M-Factor: Ivermectin 10,000</p>
Bioaccumulative potential	<p>Ivermectin Does not bioaccumulate.</p>
Other adverse effects	<p>Baymec Pour On for Cattle Do not allow to enter surface waters or groundwater</p>

SECTION 13 – DISPOSAL INFORMATION

After Intended Use	<p>Thoroughly empty the container during treatment. Triple rinse container with water. Dispose of rinsate, and bury containers below 500 mm, in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots. Empty containers and product should not be burnt. Do not dispose of undiluted chemicals on-site.</p>
After spill or accident	<p>Dispose of sealed containers at an approved local waste disposal site.</p>

SECTION 14 – TRANSPORT INFORMATION

UN No	1993
UN Proper Shipping Name	FLAMMABLE LIQUID N.O.S. (ISOPROPANOL, IVERMECTIN)
Class & Subsidiary Risk	Class 3; no subsidiary risk allocated.
Packaging Group	III

SECTION 15 – REGULATORY INFORMATION

Poisons Schedule	Schedule 5
APVMA Registration	The product is registered by the APVMA.
Registration Number	51138

SECTION 16 – OTHER INFORMATION

Summary of Changes	GHS Update
Acronyms	<p>ADG Code Australian Code for the Transport of Dangerous Goods by Road and Rail</p> <p>APVMA Australian Pesticides and Veterinary Medicines Authority</p> <p>CAS Chemical Abstracts Service Registry Number</p> <p>GHS Globally Harmonized System of Classification and Labelling of Chemicals</p> <p>HDPE High density polyethylene</p> <p>LDPE Low density polyethylene</p> <p>OECD Organisation for Economic Co-operation and Development</p> <p>STOT Specific Target Organ Toxicity</p> <p>SUSDP Standard for the Uniform Scheduling of Drugs and Poisons</p> <p>TWA Time Weighted Average – average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.</p> <p>UN Number United Nations number</p>
Disclaimer	<p>This Safety Data Sheet has been developed according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Third revised edition. United Nations, 2009. The data, information and recommendations herein ("information") are represented in good faith and believed to be correct as of the date hereof. The purpose of this Safety Data Sheet is to describe product in terms of their safety requirements. Bayer Australia Limited makes no representation of merchantability, fitness for a particular purpose or application, or of any other nature with respect to the information or the product to which the information refers ("the product"). The information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use of the product. The physical data shown herein are typical values based on material tested. These values should not be construed as a guaranteed analysis of any specific lot or as guaranteed specification for the product or specific lots thereof. Due care should be taken to make sure that the use or disposal of this product and / or its packaging is in compliance with relevant Federal, State and Local Government regulations.</p>

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