

SAFETY DATA SHEET

Bayticol pour on 1%



Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	15.08.2018	122000001437	Date of first issue: 15.08.2018

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Bayticol pour on 1%

HSNO Approval Number : HSR001801

ACVM number : A005335

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub- : Veterinary medicine
stance/Mixture

1.3 Details of the supplier of the safety data sheet

Company

Bayer New Zealand Limited
3 Argus Place
0627 HILLCREST, AUCKLAND, NEW ZEALAND
NEW ZEALAND
Tel.: 0800 652 488
Fax: 0800 229 838
Mail: bhc-md-oeko@bayer.com

1.4 Emergency telephone number

In case of emergency: 0800 734 607 IXOM SH&E Shared services (24hr)

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

6.9: Specific Target Organ : Category B
Toxicity (Oral)

9.1: Aquatic toxicity (Acute or : Category C
Chronic)

9.4: Ecotoxic to terrestrial : Category C
invertebrates

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H373 May cause damage to organs through prolonged or repeated exposure in contact with skin.

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H412 Harmful to aquatic life with long lasting effects.
H443 Harmful to terrestrial invertebrates.

Precautionary statements : **Prevention:**
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.
Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

Other hazards which do not result in classification
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
White mineral oil (petroleum), viscosity $\leq 20,5$ mm ² /s	8042-47-5	≥ 70 -< 90
2-Octyldodecan-1-ol	5333-42-6	≥ 10 -< 20
Flumethrin	69770-45-2	≥ 1 -< 2,5

SECTION 4. FIRST AID MEASURES

General advice : Take off all contaminated clothing immediately.
You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24hr emergency service).

If inhaled : Remove to fresh air.
Call a physician immediately.

In case of skin contact : After contact with skin, wash immediately with plenty of soap and water.
If skin reactions occur, contact a physician.

In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

If swallowed : If swallowed, seek medical advice immediately and show this container or label.

Most important symptoms and effects, both acute and delayed : No information available.
No information available.

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Notes to physician : No information available.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire-fighting : Fire may cause evolution of:
Hydrogen cyanide (hydrocyanic acid)
Hydrogen fluoride
Hydrogen chloride gas
Nitrogen oxides (NOx)
Carbon oxides
- Specific extinguishing methods : Prevent fire extinguishing water from contaminating surface water or the ground water system.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Use with adequate ventilation.
No special precautions required.
- Environmental precautions : Do not flush into surface water or sanitary sewer system.
- Methods and materials for containment and cleaning up : Suppress (knock down) gases/vapours/mists with a water spray jet.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Place in closed containers. Label for proper disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : No special protective measures against fire required.
- Advice on safe handling : Industrial uses:
Avoid formation of aerosol.
Use with local exhaust ventilation.
Avoid contact with skin, eyes and clothing.
- Hygiene measures : Cleanliness Guidelines (GMP) for manufacturing of drugs must be observed!
- Conditions for safe storage : For storage suitable stores with adequate product-reception volume must be used.
During handling local official regulations must be observed in

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order to avert impairment of water by the product.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
White mineral oil (petroleum), viscosity $\leq 20,5 \text{ mm}^2/\text{s}$	8042-47-5	WES-TWA (Mist)	5 mg/m ³	NZ OEL
	Further information: Sampled by a method that does not collect vapour.			
		WES-STEL (Mist)	10 mg/m ³	NZ OEL
		TWA (Inhalable fraction)	5 mg/m ³	ACGIH
Flumethrin	69770-45-2	Bayer OES	0,02 mg/m ³	

Personal protective equipment

Respiratory protection : Recommended respiratory protection: full mask with filter ABEK-ST (ABEK-P3)

Hand protection
Material : Hand protection: protective gloves for chemicals made of Baypren, nitrile rubber or PVC wear

Remarks : Breakthrough time not tested; dispose of immediately after contamination. Advice: The gloves should not be reused.

Eye protection : Safety glasses

Protective measures : No special safety precautions are required during handling of pharmaceuticals in their intended finished form (tablets or liquid formulations) by chemists, the hospital's medical staff or patients.
For the intake of ready for use pharmaceuticals or the external use on the skin please read the label and the package leaflet. The personal protective equipment is applicable for the handling of bulk material without packaging and for incidents if an exposure by the active ingredient or hazardous components can be expected.
Wear suitable protective equipment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : yellowish

Odour : weak

Density : 0,86 g/cm³ (20 °C)

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Decomposition temperature : No data available

Explosive properties : No statements available.

Oxidizing properties : No statements available.

Impact sensitivity : No data available

SECTION 10. STABILITY AND REACTIVITY

Chemical stability : No statements available.

Possibility of hazardous reactions : No data available

Conditions to avoid : No data available

Incompatible materials : Oxidizing agents

Hazardous decomposition products : Hydrogen cyanide (hydrocyanic acid)
Hydrogen fluoride
Hydrogen chloride gas
Nitrogen oxides (NO_x)
Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate (ATE): 431,11 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate (ATE): 6,02 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist/aerosol
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate (ATE): 2.830 mg/kg
Method: Calculation method

Components:

White mineral oil (petroleum), viscosity $\leq 20,5$ mm²/s:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD 401
Assessment: No adverse effect has been observed in acute toxicity tests.

2-Octyldodecan-1-ol:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

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Method: OECD 401
Assessment: No adverse effect has been observed in acute toxicity tests.

Acute inhalation toxicity : Assessment: No adverse effect has been observed in acute toxicity tests.

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg
Method: OECD 402
Assessment: No adverse effect has been observed in acute toxicity tests.

Flumethrin:

Acute oral toxicity : LD50 (Rat): 175 mg/kg
Test substance: in corn oil

Acute inhalation toxicity : LC50 (Rat): 0,572 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist/aerosol
Method: OECD 403

Acute dermal toxicity : LD50 (Rat, female): 1.436 mg/kg

Skin corrosion/irritation

Components:

White mineral oil (petroleum), viscosity $\leq 20,5 \text{ mm}^2/\text{s}$:

Species: Rabbit
Method: OECD 404
Result: No skin irritation

2-Octyldodecan-1-ol:

Species: Rabbit
Method: OECD 404
Result: No skin irritation

Flumethrin:

Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation

Components:

White mineral oil (petroleum), viscosity $\leq 20,5 \text{ mm}^2/\text{s}$:

Species: Rabbit
Result: No eye irritation
Method: OECD 405

2-Octyldodecan-1-ol:

Species: Rabbit

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Result: No eye irritation
Method: Draize Test

Flumethrin:

Species: Rabbit
Result: No eye irritation

Respiratory or skin sensitisation

Components:

White mineral oil (petroleum), viscosity $\leq 20,5 \text{ mm}^2/\text{s}$:

Species: Guinea pig
Method: OECD 406
Result: Did not cause sensitisation on laboratory animals.

2-Octyldodecan-1-ol:

Species: Guinea pig
Method: OECD 406
Result: Does not cause skin sensitisation.

Assessment: An acute toxic effect is not expected.

Flumethrin:

Test Type: Skin sensitisation
Species: Guinea pig
Method: Magnusson and Kligmann maximization test
Result: Did not cause sensitisation on laboratory animals.

Chronic toxicity

Germ cell mutagenicity

Components:

White mineral oil (petroleum), viscosity $\leq 20,5 \text{ mm}^2/\text{s}$:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Method: OECD 471
Result: No indication of mutagenic effects.

2-Octyldodecan-1-ol:

Genotoxicity in vitro : Test Type: Ames test
Method: OECD 471
Result: negative

Flumethrin:

Genotoxicity in vitro : Result: No evidence of a genotoxic effect.

Genotoxicity in vivo : Result: No evidence of a genotoxic effect.

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Reproductive toxicity

Components:

White mineral oil (petroleum), viscosity $\leq 20,5 \text{ mm}^2/\text{s}$:

Effects on fertility : Species: Rat
Application Route: Oral
General Toxicity F1: NOAEL: $> 4.350 \text{ mg/kg}$
Result: Animal studies have produced no evidence of toxic effects on reproduction.

2-Octyldodecan-1-ol:

Flumethrin:

Effects on fertility : Species: Rat
Result: Animal testing did not show any effects on fertility.

STOT - single exposure

Components:

Flumethrin:

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Components:

2-Octyldodecan-1-ol:

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Flumethrin:

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

White mineral oil (petroleum), viscosity $\leq 20,5 \text{ mm}^2/\text{s}$:

Species: Rabbit
NOAEL: 1.000 mg/kg
Application Route: Dermal
Method: OECD Test Guideline 410

2-Octyldodecan-1-ol:

Repeated dose toxicity - : An acute toxic effect is not expected.
Assessment

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Aspiration toxicity

Components:

White mineral oil (petroleum), viscosity $\leq 20,5 \text{ mm}^2/\text{s}$:

May be fatal if swallowed and enters airways.

Further information

Components:

White mineral oil (petroleum), viscosity $\leq 20,5 \text{ mm}^2/\text{s}$:

Remarks: Risk of serious damage to the lungs (by aspiration).
Aspiration of mineral oil dust may cause lipid pneumonia.

Flumethrin:

Pharmaceutic effects

Remarks: Antiparasitic agent

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

White mineral oil (petroleum), viscosity $\leq 20,5 \text{ mm}^2/\text{s}$:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): $> 1.000 \text{ mg/l}$
Exposure time: 96 h
Test Type: Acute Fish toxicity
Method: OECD 203

Toxicity to daphnia and other : EC50 (Daphnia pulex (Water flea)): $> 100 \text{ mg/l}$
aquatic invertebrates
Exposure time: 48 h
Method: OECD 202

Toxicity to algae : NOEL (Pseudokirchneriella subcapitata (green algae)): $> 100 \text{ mg/l}$
Exposure time:
Method: OECD 201

Ecotoxicology Assessment

Acute aquatic toxicity : slightly water endangering

2-Octyldodecan-1-ol:

Toxicity to microorganisms : EC0 (Bacteria): $> 100 \text{ mg/l}$
Method: OECD 209

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Flumethrin:

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Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,17 mg/l
Exposure time: 96 h
Test Type: Acute Fish toxicity
Method: OECD 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,0027 mg/l
Exposure time: 48 h
Method: OECD 202

Toxicity to algae : IC50 (Desmodesmus subspicatus (green algae)): 0,59 mg/l
Exposure time: 72 h
Method: OECD 201

M-Factor (Acute aquatic toxicity) : 100

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:

White mineral oil (petroleum), viscosity $\leq 20,5 \text{ mm}^2/\text{s}$:

Biodegradability : Result: Partially biodegradable.
Biodegradation: > 31,3 %
Exposure time: 28 d
Method: OECD 301F

2-Octyldodecan-1-ol:

Biodegradability : Biodegradation
Result: rapidly biodegradable
Biodegradation: > 60 %
Exposure time: 28 d

Flumethrin:

Biodegradability : Result: Not rapidly biodegradable
Biodegradation: 0 %
Exposure time: 28 d
Method: OECD 301F

Bioaccumulative potential

Components:

2-Octyldodecan-1-ol:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : Pow: > 8 (23 °C)
Method: OECD 117

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Flumethrin:

Partition coefficient: n-octanol/water : log Pow: 6,2

Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological information : Do not allow to enter surface waters or groundwater.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of as hazardous waste in compliance with local and national regulations.

Contaminated packaging : Contaminated, empty containers are to be treated in the same way as the contents.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No. : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FLUMETHRIN)

Class : 9

Packing group : III

Labels : 9

Packing instruction (cargo aircraft) : 964

Packing instruction (passenger aircraft) : 964

Environmentally hazardous : yes

IMDG-Code

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FLUMETHRIN)

Class : 9

Packing group : III

Labels : 9

EmS Code : F-A, S-F

Marine pollutant : yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

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National Regulations

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

No statements available.

HSNO Approval Number

HSR001801

HSNO Controls

Approved handler certificate not required.

HSNO tracking not required.

Refer to EPA user guide to the HSNO control regulations for further information.

The components of this product are reported in the following inventories:

NZIoC : On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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ACGIH : USA. ACGIH Threshold Limit Values (TLV)

NZ OEL : New Zealand. Workplace Exposure Standards for Atmospheric Contaminants

ACGIH / TWA : 8-hour, time-weighted average

NZ OEL / WES-TWA : Workplace Exposure Standard - Time Weighted average

NZ OEL / WES-STEL : Workplace Exposure Standard - Short-Term Exposure Limit

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

NZ / EN