

122000001437

Bayticol® pour on 1% - Bulk

Version 6.0 Revision Date 04.01.2018 Print Date 12.05.2020

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

1.1 Product identifier

Bayticol® pour on 1% - Bulk Flumethrin pour on 1% - Bulk

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

Use of the : veterinary medicine, unfinished

Substance/Mixture

1.3 Details of the supplier of the safety data sheet

Company

Bayer AG CHS - SCR

D-51368 LEVERKUSEN Tel.: +49 (0) 214 30 52482 Mail: bhc-md-oeko@bayer.com

1.4 Emergency telephone number

In case of emergency: +49 (0) 214 30 99300 (Central Emergency Response Center Bayer)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS-Classification (according to EC 1272/2008):

Aspiration hazard, Category 1 (H304)

Hazardous to the aquatic environment - acute hazard, Category 1 (H400) Hazardous to the aquatic environment - chronic hazard, Category 1 (H410)

2.2 Label elements

GHS-Labelling (according to EC 1272/2008):





Danger

Hazard statements:

H304 May be fatal if swallowed and enters airways. H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:



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Prevention:

P273 Avoid release to the environment.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P331 Do NOT induce vomiting.

P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

8042-47-5 White mineral oil (petroleum), viscosity <=20,5 mm²/s

2.3 Other hazards

Other hazards which do not result in classification:

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture within the meaning of Regulation (EC) No. 1907/2006.

Hazardous components

White mineral oil (petroleum), viscosity <=20,5 mm²/s

Concentration [Weight percent] >= 70 - < 90

CAS-No.: 8042-47-5

CAS name: White mineral oil (petroleum)

EINECS-No.: 232-455-8

Synonyms: White mineral oil (petroleum)

GHS Classification:



Asp. Tox. 1 H304

Flumethrin

Concentration [Weight percent] >= 1 - < 2,5

CAS-No.: 69770-45-2

CAS name: Cyclopropanecarboxylic acid, 3-(2-chloro-2-(4-chlorophenyl)ethenyl)-2,2-dimethyl-,

cyano(4-fluoro-3-phenoxyphenyl)methyl ester

EINECS-No.: 274-110-4

Synonyms: alpha-cyano-4-fluoro-3-phenoxybenzyl 3-[2-chloro-2-(4-chlorophenyl)vinyl]-2,2-dimethylcyclopropanecarboxylate, alpha-cyano-4-fluoro-3-phenoxybenzyl 3-[2-chloro-2-(4-chlorophenyl)vinyl]-2,2-dimethylcyclopropanecarboxylate (Unstated stereochemistry)



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GHS Classification:



Acute Tox. 3 H301 Acute Tox. 3 H331 Acute Tox. 4 H312 Aquatic Acute 1 H400 Aquatic Chronic 1 H410

M-Factor: 100

contains

2-Octyldodecan-1-ol

Concentration [Weight percent] 5 - 20

CAS-No.: 5333-42-6

CAS name: 1-Dodecanol, 2-octyl-

EINECS-No.: 226-242-9

Synonyms: 2-octyldodecan-1-ol

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Take off all contaminated clothing immediately.

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.

4.2 Most important acute symptoms/effects

Symptoms: No information available.

Risks: No information available.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.



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5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting: Fire may cause evolution of: Hydrogen cyanide (hydrocyanic acid) Hydrogen fluoride Hydrogen chloride gas Nitrogen oxides (NOx) Carbon oxides

Further information: Prevent fire extinguishing water from contaminating surface water or the ground water system.

5.3 Advice for firefighters

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Use with adequate ventilation.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Methods for 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.

6.4 Reference to other sections

Additional advice: No special precautions required.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling:

Avoid formation of aerosol. Use with local exhaust ventilation. Avoid contact with skin, eyes and clothing.



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No special protective measures against fire required.

7.2 Conditions for safe storage, including any incompatibilities

For storage suitable stores with adequate product-reception volume must be used. During handling local official regulations must be observed in order to avert impairment of water by the product.

Storage class in accordance to TRGS 510: 10 Combustible liquids not in Storage Class 3

7.3 Specific end use(s)

No statements available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
White mineral oil (petroleum), viscosity <=20,5 mm²/s	8042-47-5	AGW (Alveolate fraction)	5 mg/m3	DE TRGS 900
Peak-limit: excursion factor (category)	4;(II)			
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission)., When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
Flumethrin	69770-45-2	Bayer OES	0,02 mg/m ³	
2,6-Di-tert-butyl-p- cresol	128-37-0	AGW (Vapour and aerosols, inhalable fraction)	10 mg/m3	DE TRGS 900
Peak-limit: excursion factor (category)	4;(II)			
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission)., Sum of vapor and aerosols., When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			



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8.2 Exposure controls

Personal protective measures:

Respiratory protection:

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

Hand protection:

Hand protection: protective gloves for chemicals made of Baypren, nitrile rubber or PVC wear Breakthrough time not tested; dispose of immediately after contamination. Advice: The gloves should not be reused.

Eye protection:

Safety glasses

Hygiene measures:

Cleanliness Guidelines (GMP) for manufacturing of drugs must be observed!

Other protective measures:

Wear suitable protective equipment.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form: liquid
Colour: yellowish
Odour: weak

Melting point/range: No statements available.

Boiling point/boiling range: No statements available.

Density: 0,86 g/cm³ at 20 °C

Bulk density: Not applicable

No statements available. Vapour pressure: Viscosity, dynamic: No statements available. Viscosity, kinematic: No statements available. Flow time: No statements available. Surface tension: No statements available. Water solubility: No statements available. Solubility(ies): No statements available. No statements available. pH: Corrosive to metal: No statements available.



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

Flash point: No statements available.

Inflammability (solid, gaseous): Not applicable

Explosion limits: No statements available.

9.2 Other information

Miscibility with water: immiscible

10. STABILITY AND REACTIVITY

10.1 Reactivity

No statements available.

Reactions with water / air:

No statements available.

Ignition temperature:

White mineral oil (petroleum), viscosity <=20,5 mm²/s

>= 325 °C

Flumethrin

450 °C DIN 51794

Burning number:

No statements available.

10.2 Chemical stability

No statements available.

Thermal decomposition:

No data available

Dust explosion characteristic number:

Not applicable

Dust explosion class:

Not applicable

Impact sensitivity:

No data available

Hazardous reactions:

No data available

Explosive properties:



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No statements available.

10.3 Possibility of hazardous reactions

deflagration ability:

No statements available.

Smoldering combustion:

No statements available.

10.4 Conditions to avoid

No data available

Minimum ignition energy:

No data available

Oxidizing properties:

No statements available.

10.5 Incompatible materials

Materials to avoid:

Oxidizing agents

10.6 Hazardous decomposition products

Hydrogen cyanide (hydrocyanic acid), Hydrogen fluoride, Hydrogen chloride gas, Nitrogen oxides (NOx), Carbon oxides

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Other information on toxicity:

White mineral oil (petroleum), viscosity <=20,5 mm²/s

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

Acute oral toxicity:

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Acute toxicity estimate (ATE) > 2.000 mg/kg

Method: Calculation method

White mineral oil (petroleum), viscosity <=20,5 mm²/s

LD50 Rat: > 5.000 mg/kg

No adverse effect has been observed in acute toxicity tests.

Method: OECD 401

Flumethrin

LD50 Rat: 175 mg/kg Test substance: in corn oil



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Acute inhalation toxicity:

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Acute toxicity estimate (ATE) > 5 mg/l, 4 h

dust/mist/aerosol

Method: Calculation method

White mineral oil (petroleum), viscosity <=20,5 mm²/s

LC50 Rat: > 5 mg/l, 4 h

dust/mist/aerosol

The component/mixture is minimally toxic after short term inhalation.

Method: OECD 403

Flumethrin

LC50 Rat: 0,572 mg/l, 4 h

dust/mist/aerosol Method: OECD 403

Acute dermal toxicity:

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Acute toxicity estimate (ATE) > 2.000 mg/kg

Method: Calculation method

White mineral oil (petroleum), viscosity <=20,5 mm²/s

LD50 Rabbit: > 2.000 mg/kg

The component/mixture is minimally toxic after single contact with skin.

Method: OECD 402

Flumethrin

LD50 Rat, female: 1.436 mg/kg

Acute toxicity (other routes of administration):

No statements available.

Corrosivity:

No statements available.

Skin irritation:

White mineral oil (petroleum), viscosity <=20,5 mm²/s

Rabbit

Result: No skin irritation Method: OECD 404

Flumethrin

Rabbit

Result: No skin irritation

Eye irritation:

White mineral oil (petroleum), viscosity <=20,5 mm²/s

Rabbit

Result: No eye irritation



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Method: OECD 405

Flumethrin

Rabbit

Result: No eye irritation

Sensitisation:

White mineral oil (petroleum), viscosity <=20,5 mm²/s

Guinea pig

Result: Did not cause sensitisation on laboratory animals.

Method: OECD 406

Flumethrin

test Type: Skin sensitization Guinea pig

Result: Did not cause sensitisation on laboratory animals. Method: Magnusson and Kligmann maximization test

Phototoxicity:

No statements available.

Subacute, subchronic and prolonged toxicity:

White mineral oil (petroleum), viscosity <=20,5 mm²/s

NOAEL 1.000 mg/kg Rabbit, Dermal

Method: OECD Test Guideline 410

STOT - single exposure:

Flumethrin

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

STOT - repeated exposure:

Flumethrin

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

Aspiration toxicity:

White mineral oil (petroleum), viscosity <=20,5 mm²/s

May be fatal if swallowed and enters airways.

Genotoxicity in vitro:

White mineral oil (petroleum), viscosity <=20,5 mm²/s

Ames test Salmonella typhimurium

Result: No indication of mutagenic effects.

Method: OECD 471

Flumethrin

Result: No evidence of a genotoxic effect.

Genotoxicity in vivo:



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Result: No evidence of a genotoxic effect.

Carcinogenicity:

White mineral oil (petroleum), viscosity <=20,5 mm²/s

Result: Animal testing did not show any carcinogenic effects.

Method: OECD 453

Flumethrin

Rat

Result: Animal testing did not show any carcinogenic effects.

Fertility:

White mineral oil (petroleum), viscosity <=20,5 mm²/s

Application Route: Oral RatTest period: 35 d NOAEL (F1): > 4350 mg/kg

Result: Animal studies have produced no evidence of toxic effects on reproduction.

Flumethrin

RatResult: Animal testing did not show any effects on fertility.

Developmental toxicity:

White mineral oil (petroleum), viscosity <=20,5 mm²/s

Application Route: Oral

Rat, female:

Test period: 35 dResult: Showed no teratogenic effect in animal studies.

Flumethrin

Result: Did not show teratogenic effects in animal experiments.

Human experience:

No statements available.

Neurotoxicity:

No statements available.

Neurological symptoms:

No statements available.

Pharmaceutic effects:

Flumethrin

Antiparasitic agent



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12. ECOLOGICAL INFORMATION

Ecotoxicology Assessment

Flumethrin

Acute aquatic toxicity: Very toxic to aquatic life.

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

12.1 Toxicity

Toxicity to fish:

White mineral oil (petroleum), viscosity <=20,5 mm²/s

Acute Fish toxicity: LC50 > 1.000 mg/l

Test species: Leuciscus idus (Golden orfe) Duration of test: 96 h

Method: OECD 203

Flumethrin

Acute Fish toxicity: LC50 0,17 mg/l

Test species: Oncorhynchus mykiss (rainbow trout) Duration of test: 96 h

Method: OECD 203

Toxicity to daphnia and other aquatic invertebrates:

White mineral oil (petroleum), viscosity <=20,5 mm²/s

EC50 > 100 mg/l

Test species: Daphnia pulex (Water flea) Duration of test: 48 h

Method: OECD 202

Flumethrin

EC50 0,0027 mg/l

Test species: Daphnia magna (Water flea) Duration of test: 48 h

Method: OECD 202

Toxicity to algae:

White mineral oil (petroleum), viscosity <=20,5 mm²/s

NOEL > 100 mg/l

Test species: Pseudokirchneriella subcapitata (green algae)

Method: OECD 201

Flumethrin

IC50 0,59 mg/l

Test species: Desmodesmus subspicatus (green algae) Duration of test: 72 h

Method: OECD 201

Toxicity to bacteria:

No statements available.

Toxicity to fish (Chronic toxicity):

No statements available.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):

No statements available.



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Toxicity on soil-dwelling organisms:

No statements available.

Toxicity on other terrestrial non-mammal:

No statements available.

12.2 Persistence and degradability

Biodegradability:

White mineral oil (petroleum), viscosity <=20,5 mm²/s

> 31,3 %, 28 d Partially biodegradable.

Method: OECD 301F

Flumethrin

0 %, 28 d Not rapidly biodegradable

Method: OECD 301F

Biochemical Oxygen Demand (BOD):

No statements available.

Chemical Oxygen Demand (COD):

No statements available.

BSB in proportion to CSB:

No statements available.

Dissolved organic carbon (DOC):

No statements available.

Adsorbed organic bound halogens (AOX):

No statements available.

Theoretical biological oxygen requirement:

No statements available.

BSB in proportion to ThSB:

No statements available.

Total organic carbon (TOC):

No statements available.

Physico-chemical removability:

No statements available.

Stability in water:

No statements available.

Important degradation pathways:

No statements available.

Photodegradation:

No statements available.



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M-Factor:

Flumethrin

100

12.3 Bioaccumulative potential

Bioaccumulation:

No statements available.

Partition coefficient (n-octanol/water):

Flumethrin

log Pow: 6,2

12.4 Mobility in soil

Environmental distribution:

No statements available.

Surface tension:

No statements available.

Stability in soil:

No statements available.

12.5 Results of PBT and vPvB assessment

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This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

General advice:

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Do not allow to enter surface waters or groundwater.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

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.



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14. TRANSPORT INFORMATION

The hazardous goods classification refers to the transportation of bulk goods. Under certain circumstances, regulation-specific relaxations and exemptions may be applied for the transportation of packaged goods intended for sale. This may lead to a labeling of the goods that differs from the classification listed here.

ADR/RID

14.1 UN Number : 3082

14.2 Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(FLUMETHRIN)

14.3 Hazard Identification : 90

Number

14.4 Packaging group : III
Dangerous goods labels : 9
14.5 Environmentally : yes

hazardous

GGVS/GGVE

14.1 UN Number : 3082

14.2 Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. 90

14.3 Hazard Identification

Number

Dangerous goods labels : 9
14.4 Packaging group : III
14.5 Environmentally : yes

hazardous

ADNR

14.1 UN Number : 3082

14.2 Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(FLUMETHRIN)

14.3 Hazard Identification : 90

Number

14.4 Packaging group: IIIDangerous goods labels: 914.5 Environmentally: yes

hazardous

IATA

14.1 UN Number : 3082

14.2 Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(FLUMETHRIN)



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14.3 Class: 914.4 Packaging group: IIIDangerous goods labels: 914.5 Environmentally: yes

hazardous

IMDG

14.1 UN Number : 3082

14.2 Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(FLUMETHRIN)

14.3 Class: 914.4 Packaging group: IIIIMDG-Labels: 9EmS Number: F-A14.5 Marine pollutant: yes

14.6 Special precautions for user

For personal protection see section 8.

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

not applicable

Limited quantity regulations applicable in accordance with chapter 3.4 RID/ADR in compliance with threshold value.

Other information : Environmentally hazardous substance

Keep separated from foodstuffs

Keep away from cargo susceptible to odour

15. REGULATORY INFORMATION

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

National legislation

Water contaminating class (Germany):

WGK 2 (water endangering)

VwVwS (German Regulation) supplement 4

Major accidents regulations appendix I no.:

Ε1

Guidelines and information sheets issued by the Chemical Industry Employers' Insurance Association:

M 053 /BGI 660 ("Protective measures when handling hazardous substances at work"), DGUV



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Information 213-083

15.2 Chemical safety assessment

No statements available.

16. OTHER INFORMATION

Full text of H-Statements mentioned in chapters 2 and 3

H301 Toxic if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H331 Toxic if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Further information

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.