according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## **BENEVIA® 10 OD**

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#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name BENEVIA® 10 OD

Other means of identification

Product code 50000912

Unique Formula Identifier

(UFI)

: GAF0-M3XD-WN4K-GKC1

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

Use of the Sub- : Insecticide

stance/Mixture

Recommended restrictions :

on use

Use as recommended by the label.

For professional users only.

#### 1.3 Details of the supplier of the safety data sheet

Supplier Address FMC Agricultural Solutions A/S

Thyborønvej 78 DK-7673 Harboøre

Denmark

Telephone: +45 9690 9690 Telefax: +45 9690 9691

E-mail address: SDS-Info@fmc.com .

1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call:

Ireland: 353-19014670 (CHEMTREC)

Medical emergency:

Ireland (Republic): +352 1 809 2166

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Short-term (acute) aquatic hazard, Cate-

gory 1

H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, Cat-

egory 1

H410: Very toxic to aquatic life with long lasting

effects.

#### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms





Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : P102 Keep out of reach of children.

**Prevention:** 

P261 Avoid breathing mist or vapours.

P270 Do not eat, drink or smoke when using this product.P280 Wear protective gloves/ protective clothing/ eye protective

tion/ face protection.

Response:

P333 + P313 If skin irritation or rash occurs: Get medical

advice/ attention.

P363 Wash contaminated clothing before reuse.

Disposal:

P501 Dispose of contents/container as hazardous waste in

accordance with local regulations.

## **Additional Labelling**

EUH401 To avoid risks to human health and the environment, comply with the instruc-

tions for use.

For special phrases (SP) and safety intervals, consult the label.

#### 2.3 Other hazards

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.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number		Concentration (% w/w)
calcium dodecylbenzenesulpho- nate	26264-06-2 247-557-8	6264-06-2 Acute Tox. 4; H302	
		Acute oral toxicity: 1,300 mg/kg	
Cyantraniliprole	736994-63-1	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 10 - < 20
		M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10	
2-ethylhexan-1-ol	104-76-7 203-234-3	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 (Respiratory system) Acute toxicity estimate	>= 1 - < 10
		Acute inhalation toxicity (dust/mist): 4.3 mg/l	
Fatty acids, C6-10, Me esters	68937-83-7 273-094-6	Skin Irrit. 2; H315	>= 1 - < 10
methanol	67-56-1	Flam. Liq. 2; H225	>= 0.1 - < 1

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		200-659-6 603-001-00-X	Acute Tox. 3; H301 Acute Tox. 3; H331 Acute Tox. 3; H311 STOT SE 1; H370 (Central nervous system, Eyes)  specific concentration limit STOT SE 1; H370 >= 10 % STOT SE 2; H371 3 - < 10 %
			Acute toxicity estimate  Acute oral toxicity: 100 mg/kg Acute inhalation toxicity (vapour): 5 mg/l Acute dermal toxicity: 300 mg/kg

For explanation of abbreviations see section 16.

#### **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

Protection of first-aiders : First Aid responders should pay attention to self-protection

and use the recommended protective clothing

Avoid inhalation, ingestion and contact with skin and eyes. If potential for exposure exists refer to Section 8 for specific

personal protective equipment.

If inhaled : Remove to fresh air.

If unconscious, place in recovery position and seek medical

advice.

If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambu-

lance.

In case of skin contact : If on clothes, remove clothes.

If on skin, rinse well with water.

Wash off with soap and plenty of water.

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Get medical attention immediately if irritation develops and

persists.

In case of eye contact Flush eyes with water as a precaution.

> Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed DO NOT induce vomiting unless directed to do so by a physi-

> cian or poison control center. Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

**Symptoms** Exposure to skin may result in mild symptoms include itching.

> hives or rash, and skin redness. More severe symptoms include sneezing, itchy watery eyes, and difficulty breathing.

Risks May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

**Treatment** Treat symptomatically.

Immediate medical attention is required in case of ingestion.

**SECTION 5: Firefighting measures** 

5.1 Extinguishing media

Suitable extinguishing media Dry chemical, CO2, water spray or regular foam.

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Unsuitable extinguishing

media

Do not spread spilled material with high-pressure water

streams.

High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion prod: :

ucts

Fire may produce irritating, corrosive and/or toxic gases.

Carbon oxides

Sulphur oxides

Chlorine compounds Nitrogen oxides (NOx) Bromine compounds

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Hydrogen cyanide

5.3 Advice for firefighters

Special protective equipment :

for firefighters

Firefighters should wear protective clothing and self-contained

breathing apparatus.

Specific extinguishing meth-

ods

Remove undamaged containers from fire area if it is safe to do

SO.

Use a water spray to cool fully closed containers.

Further information : Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.

Use personal protective equipment. If it can be safely done, stop the leak.

Do not touch or walk through the spilled material. Never return spills in original containers for re-use.

Mark the contaminated area with signs and prevent access to

unauthorized personnel.

Only qualified personnel equipped with suitable protective

equipment may intervene.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

## 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Never return spills in original containers for re-use.

Collect as much of the spill as possible with a suitable absor-

bent material.

Pick up and transfer to properly labelled containers. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

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#### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours/dust.

Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Dispose of rinse water in accordance with local and national

regulations.

Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

Advice on protection against

fire and explosion

Normal measures for preventive fire protection.

Hygiene measures : Avoid contact with skin, eyes and clothing. Do not inhale aer-

osol. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing and gloves, includ-

ing the inside, before re-use.

#### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological

safety standards.

Further information on stor-

age conditions

: The product is stable under normal conditions of warehouse storage. Protect from frost and extreme heat. Store in closed,

labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A

hand wash station should be available.

Recommended storage tem- :

perature

5 - 30 °C

Further information on stor-

age stability

No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Registered pesticide to be used in accordance with a label

approved by country-specific regulatory authorities.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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## **SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

## **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
2-ethylhexan-1-ol	104-76-7	TWA	1 ppm 5.4 mg/m3	2017/164/EU
	Further information: Indicative			
Silicon, amorphous	112945-52- 5	OELV - 8 hrs (TWA) (Respira- ble dust)	2.4 mg/m3 (Silica)	IE OEL
	Further information: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit value should be used			
		OELV - 8 hrs (TWA) (inhalable dust)	6 mg/m3 (Silica)	IE OEL
	Further information: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit value should be used			
methanol	67-56-1	TWA	200 ppm 260 mg/m3	2006/15/EC
	Further information: Indicative, Identifies the possibility of significant uptake through the skin			
		OELV - 8 hrs (TWA)	200 ppm 260 mg/m3	IE OEL
	Further information: Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body			

## Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
methanol	Workers	Inhalation	Long-term systemic effects	260 mg/m3
	Workers	Inhalation	Acute systemic effects	260 mg/m3
	Workers	Inhalation	Long-term local ef- fects	260 mg/m3
	Workers	Inhalation	Acute local effects	260 mg/m3
	Workers	Dermal	Long-term systemic effects	40 mg/kg
	Workers	Dermal	Acute systemic effects	40 mg/kg
	Consumers	Inhalation	Long-term systemic effects	50 mg/m3
	Consumers	Inhalation	Acute systemic effects	50 mg/m3
	Consumers	Inhalation	Long-term local ef- fects	50 mg/m3

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Consumers	Inhalation	Acute local effects	50 mg/m3
Consumers	Dermal	Long-term systemic effects	8 mg/m3
Consumers	Dermal	Acute systemic effects	8 mg/m3
Consumers	Oral	Long-term systemic effects	8 mg/kg
Consumers	Oral	Acute systemic ef- fects	8 mg/kg

#### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
methanol	Fresh water	20.8 mg/l
	Intermittent use/release	1.54 mg/l
	Marine water	2.08 mg/l
	Sewage treatment plant	100 mg/l
	Fresh water sediment	77 mg/kg
	Marine sediment	7.7 mg/kg

#### 8.2 Exposure controls

Personal protective equipment

Eye/face protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Hand protection

Material : Wear chemical resistant gloves, such as barrier laminate,

butyl rubber or nitrile rubber.

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Skin and body protection : Impervious clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : In case of mist, spray or aerosol exposure wear suitable per-

sonal respiratory protection and protective suit.

Protective measures : Plan first aid action before beginning work with this product.

Always have on hand a first-aid kit, together with proper in-

structions.

Wear suitable protective equipment. When using do not eat, drink or smoke.

In the context of professional plant protection use as recommended, the end user must refer to the label and the instruc-

tions for use.

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Physical state : liquid
Form : dispersion
Colour : off-white
Odour : mild, oily

Odour Threshold : No data available Melting point/freezing point : not determined

Boiling point/boiling range : 99 °C

Upper explosion limit / Upper : not determined

flammability limit

Lower explosion limit / Lower

flammability limit

Flash point : > 99 °C

Auto-ignition temperature : Method: closed cup

No data available

Decomposition temperature : not determined

pH : 5.1

Concentration: 10 g/l 1 %

(as a dispersion)

not determined

Viscosity

Viscosity, dynamic : 345 mPa.s

25 rpm 257 mPa.s 50 rpm 200 mPa.s 100 rpm 353 mm2/s 25 rpm

204 mm2/s 100 rpm

Solubility(ies)

Viscosity, kinematic

Water solubility : No data available Solubility in other solvents : No data available Partition coefficient: n- : No data available

octanol/water

Vapour pressure : Not available for this mixture.

Relative density : 0.978

Density : No data available Bulk density : 0.9 - 1.1 g/cm3

Relative vapour density : Not available for this mixture.

Particle characteristics

Particle size : Not applicable

9.2 Other information

Explosives : Not explosive Oxidizing properties : Non-oxidizing

Flammability (liquids) : Not highly flammable, may be ignitable, Based on available

information, the classification criteria for flammability hazard

are not met.

Self-ignition : 254 °C

Evaporation rate : No data available
Miscibility with water : dispersible
Molecular weight : Not applicable

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**SECTION 10: Stability and reactivity** 

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid : Avoid formation of aerosol.

Avoid extreme temperatures Heat, flames and sparks.

Protect from frost, heat and sunlight.

Heating of the product will produce harmful and irritant va-

pours.

10.5 Incompatible materials

Materials to avoid : Avoid strong acids, bases, and oxidizers

10.6 Hazardous decomposition products

Stable under recommended storage conditions.

**SECTION 11: Toxicological information** 

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

**Acute toxicity** 

Based on available data, the classification criteria are not met.

**Product:** 

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 425

GLP: yes

Assessment: The substance or mixture has no acute oral tox-

icity

Acute inhalation toxicity : LC50 (Rat): > 5.2 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

N. D. ....

GLP: yes

Assessment: The component/mixture is minimally toxic after

short term inhalation.

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg

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Method: OECD Test Guideline 402

GLP: yes

Assessment: The substance or mixture has no acute dermal

toxicity

#### **Components:**

calcium dodecylbenzenesulphonate:

Acute oral toxicity : LD50 (Rat, male and female): 1,300 mg/kg

Remarks: Based on data from similar materials

Acute inhalation toxicity : Remarks: Not classified

Acute dermal toxicity : LD50 (Rat, male and female): > 2000 milligram per kilogram

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: Based on data from similar materials

Cyantraniliprole:

Acute oral toxicity : LD50 (Mouse, female): > 5,000 mg/kg

Method: OECD Test Guideline 425

GLP: yes

Assessment: The substance or mixture has no acute oral tox-

icity

Remarks: no mortality

LD50 (Rat, female): > 5,000 mg/kg Method: OECD Test Guideline 425

GLP: yes

Assessment: The substance or mixture has no acute oral tox-

icity

Remarks: no mortality

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.2 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

GLP: yes

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Remarks: no mortality

Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: no mortality

#### 2-ethylhexan-1-ol:

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Acute oral toxicity : LD50 (Rat, male): 2,047 mg/kg

Acute inhalation toxicity : LC50 (Rat): 4.3 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat, male and female): > 3,000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Fatty acids, C6-10, Me esters:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

methanol:

Acute oral toxicity : LD50 (Rat): 1,187 mg/kg

Acute toxicity estimate (Humans): 100 mg/kg

Method: Expert judgement

Acute inhalation toxicity : LC50 (Rat, female): 82.1 mg/l

Exposure time: 4 h
Test atmosphere: vapour

LC50 (Rat, male): 92.6 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Acute toxicity estimate: 5 mg/l

Exposure time: 4 h
Test atmosphere: vapour
Method: Expert judgement

Acute dermal toxicity : LD50 (Rabbit): 17,100 mg/kg

Acute toxicity estimate: 300 mg/kg

Method: Expert judgement

#### Skin corrosion/irritation

Based on available data, the classification criteria are not met.

**Product:** 

Species : Rabbit

Assessment : Not classified as irritant
Method : OECD Test Guideline 404
Result : slight or no skin irritation.

GLP : yes

Remarks : May cause skin irritation and/or dermatitis.

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#### **Components:**

#### calcium dodecylbenzenesulphonate:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Skin irritation

**Cyantraniliprole:** 

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

2-ethylhexan-1-ol:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Skin irritation

Fatty acids, C6-10, Me esters:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Skin irritation

methanol:

Species : Rabbit

Result : No skin irritation

#### Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

**Product:** 

Species : Rabbit

Assessment : Not classified as irritant
Method : OECD Test Guideline 405
Result : Slight or no eye irritation

GLP : yes

#### **Components:**

#### calcium dodecylbenzenesulphonate:

Species : Rabbit

Method : OECD Test Guideline 405
Result : Irreversible effects on the eye

Remarks : Based on data from similar materials

Species : Rabbit

Method : OECD Test Guideline 405
Result : Irreversible effects on the eye

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Cyantraniliprole:

Species : Rabbit

Assessment : Not classified as irritant
Method : OECD Test Guideline 405

Result : slight irritation

GLP : yes

2-ethylhexan-1-ol:

Species : Rabbit

Method : OECD Test Guideline 405

Result : Irritation to eyes, reversing within 21 days

Fatty acids, C6-10, Me esters:

Species : Rabbit

Method : OECD Test Guideline 405

Result : slight irritation

methanol:

Species : Rabbit

Result : No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

**Product:** 

Test Type : Local lymph node test

Species : mice

Assessment : May cause sensitisation by skin contact.

Method : OECD Test Guideline 429
Result : Causes sensitisation.

GLP : yes

Remarks : Causes sensitisation.

**Components:** 

calcium dodecylbenzenesulphonate:

Test Type : Maximisation Test

Species : Guinea pig

Method : OECD Test Guideline 406
Result : Not a skin sensitizer.

Remarks : Based on data from similar materials

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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**Cyantraniliprole:** 

Test Type : Local lymph node test

Exposure routes : Dermal Species : Mouse

Method : OECD Test Guideline 429

Result : Does not cause skin sensitisation.

GLP : yes

Test Type : Maximisation Test

Exposure routes : Dermal Species : Guinea pig

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

GLP : yes

Test Type : Buehler Test Exposure routes : Dermal Species : Guinea pig

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

GLP : yes

Test Type : Magnussen-Kligman test

Exposure routes : Dermal Species : Guinea pig

Method : OECD Test Guideline 406
Result : Causes skin sensitization.

GLP : yes

Remarks : see user defined free text

Fatty acids, C6-10, Me esters:

Exposure routes : Skin contact Species : Guinea pig

Result : Not a skin sensitizer.

methanol:

Test Type : Maximisation Test Species : Guinea pig

Result : Not a skin sensitizer.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

**Product:** 

Genotoxicity in vitro : Test Type: Ames test

Method: OECD Test Guideline 471

Result: negative

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Genotoxicity in vivo : Test Type: Bone marrow chromosome aberration

Species: Mouse

Method: OECD Test Guideline 474

Result: negative

Germ cell mutagenicity- As-

sessment

Contains no ingredient listed as a mutagen

#### **Components:**

#### calcium dodecylbenzenesulphonate:

Genotoxicity in vitro : Test Type: reverse mutation assay

Method: OECD Test Guideline 471

Result: negative

Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: chromosome aberration assay

Species: Rat (male and female)

Application Route: Oral Exposure time: 90 d Result: negative

Remarks: Based on data from similar materials

Germ cell mutagenicity- As-

sessment

Weight of evidence does not support classification as a germ

cell mutagen.

#### Cyantraniliprole:

Genotoxicity in vitro : Test Type: reverse mutation assay

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: reverse mutation assay Test system: Escherichia coli

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Human lymphocytes

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## **BENEVIA® 10 OD**

Version Revision Date: SDS Number: Date of last issue: -

5.1 17.12.2024 50000912 Date of first issue: 01.03.2020

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse

Application Route: Oral

Method: OECD Test Guideline 474

Result: negative

GLP: yes

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

2-ethylhexan-1-ol:

Genotoxicity in vitro : Test Type: reverse mutation assay

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse

Application Route: Intraperitoneal injection

Result: negative

Fatty acids, C6-10, Me esters:

Genotoxicity in vitro : Test Type: Ames test

Result: negative

Germ cell mutagenicity- As-

sessment

In vitro tests did not show mutagenic effects

methanol:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster fibroblasts

Result: negative

Test Type: reverse mutation assay Test system: Salmonella typhimurium Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse

Application Route: Intraperitoneal injection

Result: negative

Carcinogenicity

Based on available data, the classification criteria are not met.

**Product:** 

Carcinogenicity - Assess-

ment

: Contains no ingredient listed as a carcinogen

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## **BENEVIA® 10 OD**

Version Revision Date: SDS Number: Date of last issue: -

5.1 17.12.2024 50000912 Date of first issue: 01.03.2020

#### **Components:**

#### calcium dodecylbenzenesulphonate:

Species : Rat, male and female

Application Route : Oral Exposure time : 720 d

NOAEL : 250 mg/kg body weight

Result : negative

Remarks : Based on data from similar materials

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

Cyantraniliprole:

Species : Rat, male and female

Application Route : Ingestion Exposure time : 2 Years

NOAEL : 200 - 2,000 ppm

Method : OECD Test Guideline 453

Result : negative

Species : Mouse, male and female

Application Route : Ingestion Exposure time : 18 month(s) NOAEL : 7,000 ppm

Method : OECD Test Guideline 451

Result : negative

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

2-ethylhexan-1-ol:

Species : Rat Application Route : Oral

Exposure time : 24 month(s)
Result : negative

methanol:

Species : Mouse, male and female Application Route : inhalation (vapour)

Exposure time : 18 month(s)
NOAEC : 1.3 mg/l
Result : negative

Species : Rat, male and female Application Route : inhalation (vapour)

Exposure time : 2 Years
NOAEC : 1.3 mg/l
Result : negative

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## **BENEVIA® 10 OD**

Version Revision Date: SDS Number: Date of last issue: -

5.1 17.12.2024 50000912 Date of first issue: 01.03.2020

#### Reproductive toxicity

Based on available data, the classification criteria are not met.

**Product:** 

Reproductive toxicity - As-

sessment

: Contains no ingredient listed as toxic to reproduction

#### **Components:**

#### calcium dodecylbenzenesulphonate:

Effects on fertility : Test Type: Fertility/early embryonic development

Species: Rat, male and female Application Route: Ingestion

General Toxicity - Parent: NOAEL: 400 mg/kg body weight

Method: OECD Test Guideline 422

Result: negative

Effects on foetal develop-

ment

Test Type: reproductive and developmental toxicity study

Species: Rat

Application Route: Ingestion

General Toxicity Maternal: NOAEL: 300 mg/kg body weight Developmental Toxicity: NOAEL: 600 mg/kg body weight

Method: OECD Test Guideline 422

Result: negative

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive toxicity

Cyantraniliprole:

Effects on foetal develop-

ment

: Test Type: Pre-natal

Species: Rat

Application Route: Oral

General Toxicity Maternal: NOAEL: 1,000 mg/kg bw/day Embryo-foetal toxicity: NOAEL: 1,000 mg/kg bw/day

Method: OECD Test Guideline 414

Result: negative

Test Type: Pre-natal Species: Rabbit Application Route: Oral

General Toxicity Maternal: NOAEL: 25 mg/kg bw/day Embryo-foetal toxicity: NOAEL: 100 mg/kg bw/day

Symptoms: Maternal effects Method: OECD Test Guideline 414

Result: negative

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive toxicity

2-ethylhexan-1-ol:

Effects on foetal develop- : Test Type: Embryo-foetal development

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## **BENEVIA® 10 OD**

Version Revision Date: SDS Number: Date of last issue: -

5.1 17.12.2024 50000912 Date of first issue: 01.03.2020

ment Species: Mouse

Application Route: Oral

Method: OECD Test Guideline 414

Result: negative

methanol:

Effects on fertility : Test Type: one-generation reproductive toxicity

Species: Monkey, female

Application Route: inhalation (vapour)
General Toxicity F1: NOAEC: 2.39 mg/l

Result: negative

Test Type: Two-generation study Species: Rat, male and female Application Route: inhalation (vapour) General Toxicity F1: LOAEC: 1.3 mg/l General Toxicity F2: LOAEC: 1.3 mg/l

Result: negative

Effects on foetal develop-

ment

Test Type: Pre-natal Species: Mouse

Application Route: inhalation (vapour)

Developmental Toxicity: NOAEC: 6.65 mg/L

Result: Embryotoxic effects and adverse effects on the offspring were detected only at high maternally toxic doses

Test Type: Pre-natal

Species: Rat

Application Route: inhalation (vapour)
Developmental Toxicity: NOAEC: 1.33 mg/L

Result: Embryotoxic effects and adverse effects on the offspring were detected only at high maternally toxic doses

#### STOT - single exposure

Based on available data, the classification criteria are not met.

**Product:** 

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

**Components:** 

**Cyantraniliprole:** 

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

2-ethylhexan-1-ol:

Assessment : May cause respiratory irritation.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## **BENEVIA® 10 OD**

Version Revision Date: SDS Number: Date of last issue: -

5.1 17.12.2024 50000912 Date of first issue: 01.03.2020

methanol:

Target Organs : Central nervous system, Eyes

Assessment : The substance or mixture is classified as specific target organ

toxicant, single exposure, category 1.

STOT - repeated exposure

Based on available data, the classification criteria are not met.

**Product:** 

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

**Components:** 

**Cyantraniliprole:** 

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

Repeated dose toxicity

**Components:** 

calcium dodecylbenzenesulphonate:

Species : Rat, male and female

NOAEL : 85 mg/kg LOAEL : 145 mg/kg Application Route : Oral Exposure time : 9 Months

Remarks : Based on data from similar materials

Species : Rat, male
LOAEL : 286 mg/kg
Application Route : Skin contact
Exposure time : 15 Days

Remarks : Based on data from similar materials

Species : Rat, male and female
NOAEL : 100 mg/kg bw/day
LOAEL : 200 mg/kg bw/day
Application Route : Oral - gavage
Exposure time : 28 - 54 Days

Method : OECD Test Guideline 422

Remarks : Based on data from similar materials

**Cyantraniliprole:** 

Species : Rat

NOAEL : > 1,000 mg/kg

Application Route : Oral Exposure time : 28 Days

Method : OECD Test Guideline 407 Symptoms : increased liver weight

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according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## **BENEVIA® 10 OD**

Version Revision Date: SDS Number: Date of last issue: -

5.1 17.12.2024 50000912 Date of first issue: 01.03.2020

Remarks : Based on available data, the classification criteria are not met.

Species : Rat, male and female NOAEL : 6.9 - 168 mg/kg bw/day

Application Route : Ingestion Exposure time : 90 Days

Method : OPPTS 870.3100

Remarks : Effects are of limited toxicological significance.

Species : Mouse, male and female NOAEL : 1091.8 mg/kg bw/day

Application Route : Ingestion Exposure time : 90 Days

Method OPPTS 870.3100

Remarks : Effects are of limited toxicological significance.

Species : Dog, male and female NOAEL : 3.08 - 3.48 mg/kg bw/day

Application Route : Ingestion Exposure time : 90 Days

Method : OPPTS 870.3150

Remarks : Effects are of limited toxicological significance.

Species : Rat, male and female NOAEL : 8.3 - 106.6 mg/kg bw/day

Application Route : Ingestion Exposure time : 2 yr

Method : OPPTS 870.4300

Remarks : Effects are of limited toxicological significance.

Species : Mouse, male and female NOAEL : 768.8 - 903.8 mg/kg bw/day

Application Route : Ingestion Exposure time : 18 Months

Method : OPPTS 870.4200

Remarks : Effects are of limited toxicological significance.

Species : Dog, male and female NOAEL : 5.67 - 6 mg/kg bw/day

Application Route : Ingestion Exposure time : 1 yr

Method : OPPTS 870.4100

Remarks : Effects are of limited toxicological significance.

Species : Rat, male and female

NOAEL : 1000 mg/kg Application Route : Dermal Exposure time : 28 Days

Method : OECD Test Guideline 410

GLP : yes Symptoms : Irritation

Remarks : Effects are of limited toxicological significance.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## **BENEVIA® 10 OD**

Version Revision Date: SDS Number: Date of last issue: -

5.1 17.12.2024 50000912 Date of first issue: 01.03.2020

2-ethylhexan-1-ol:

Species : Rat

: 250 mg/kg

Application Route : Oral Exposure time : 13 Weeks

Method : OECD Test Guideline 408

methanol:

Species : Monkey
LOAEL : 2,340 mg/kg
Application Route : Ingestion
Exposure time : 3 days

 Species
 : Rat

 NOEC
 : 0.13 mg/l

 LOAEL
 : 1.3 mg/l

Application Route : inhalation (vapour)

Exposure time : 12 months

Remarks : No toxicologically significant effects were found.

#### **Aspiration toxicity**

Based on available data, the classification criteria are not met.

#### **Product:**

No aspiration toxicity classification

#### **Components:**

#### Cyantraniliprole:

The substance does not have properties associated with aspiration hazard potential.

#### 11.2 Information on other hazards

#### **Endocrine disrupting properties**

**Product:** 

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

Components:

**Cyantraniliprole:** 

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## **BENEVIA® 10 OD**

Version Revision Date: SDS Number: Date of last issue: -

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## Experience with human exposure

**Components:** 

methanol:

Ingestion : Target Organs: Eyes

Remarks: Based on Human Evidence

**Neurological effects** 

**Components:** 

**Cyantraniliprole:** 

No neurotoxicity observed in animal studies

**Further information** 

**Product:** 

Remarks : No data available

#### **SECTION 12: Ecological information**

## 12.1 Toxicity

**Product:** 

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 37 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.215 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

GLP: yes

EC50 (Daphnia magna (Water flea)): 0.00947 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

GLP: yes

EC50 (Daphnia magna (Water flea)): 20.4 μg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): 63.8

mg/l

Exposure time: 72 h

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## **BENEVIA® 10 OD**

Version Revision Date: SDS Number: Date of last issue: -

5.1 17.12.2024 50000912 Date of first issue: 01.03.2020

Method: OECD Test Guideline 201

GLP: yes

Toxicity to soil dwelling or-

ganisms

LC50: > 1,000 mg/kg

Species: worms

Toxicity to terrestrial organ-

isms

LD50: 3.79 µg/bee Exposure time: 72 h

End point: Acute oral toxicity Species: Apis mellifera (bees)

LD50: 6.31 µg/bee Exposure time: 96 h

End point: Acute contact toxicity Species: Apis mellifera (bees)

**Ecotoxicology Assessment** 

Acute aquatic toxicity : Very toxic to aquatic life.

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

**Components:** 

calcium dodecylbenzenesulphonate:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 10 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

LC50 (Pimephales promelas (fathead minnow)): 4.6 mg/l

Exposure time: 96 h

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 3.5 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

NOEC (Pseudokirchneriella subcapitata (green algae)): 7.9

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

EC50 (Pseudokirchneriella subcapitata (green algae)): 65.4

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

Toxicity to microorganisms : EC50 (activated sludge): 500 mg/l

Exposure time: 3 h

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## **BENEVIA® 10 OD**

Version Revision Date: SDS Number: Date of last issue: -

5.1 17.12.2024 50000912 Date of first issue: 01.03.2020

Method: OECD Test Guideline 209

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 1.65 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Remarks: Based on data from similar materials

NOEC: 1.18 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Remarks: Based on data from similar materials

Toxicity to soil dwelling or-

ganisms

LC50: 1,000 mg/kg Exposure time: 14 d

Species: Eisenia fetida (earthworms)

Method: OECD Test Guideline 207

Toxicity to terrestrial organ-

isms

LD50: 1,356 mg/kg Exposure time: 14 d

Species: Colinus virginianus (Bobwhite quail)

Method: OECD Test Guideline 223

**Ecotoxicology Assessment** 

Chronic aquatic toxicity : May cause long lasting harmful effects to aquatic life.

Cyantraniliprole:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 12.6 mg/l

Exposure time: 96 h

Method: US EPA Test Guideline OPP 72-1

GLP: yes

LC50 (Ictalurus punctatus (channel catfish)): > 10 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.0204 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): > 13

mg/l

Exposure time: 72 h

ErC50 (Lemna gibba (duckweed)): 0.278 mg/l

Exposure time: 7 d

EyC50 (Lemna gibba (duckweed)): 0.060 mg/l

Exposure time: 7 d

M-Factor (Acute aquatic tox-

icity)

10

Toxicity to fish (Chronic tox-

icity)

NOEC: 2.9 mg/l Exposure time: 28 d

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according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## **BENEVIA® 10 OD**

Version Revision Date: SDS Number: Date of last issue: -

5.1 17.12.2024 50000912 Date of first issue: 01.03.2020

Species: Cyprinodon variegatus (sheepshead minnow)

NOEC: 0.11 mg/l Exposure time: 21 d

Species: Oncorhynchus mykiss (rainbow trout)

NOEC: 1.01 mg/l Exposure time: 90 d

Species: Oncorhynchus mykiss (rainbow trout)

Test Type: Early Life-Stage

Method: US EPA Test Guideline OPP 72-4

GLP: yes

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0.00656 mg/l End point: Growth

Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test Type: Static-Renewal

Method: US EPA Test Guideline OPPTS 850.1300

GLP: yes

LOEC: 0.00969 mg/l End point: Growth Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test Type: Static-Renewal

Method: US EPA Test Guideline OPPTS 850.1300

GLP: yes

NOEC: 0.00447 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

NOEC: 0.72 mg/l End point: reproduction Exposure time: 35 d

Species: Americamysis bahia (mysid shrimp)

Test Type: flow-through test

Method: US EPA Test Guideline OPP 72-4

GLP: yes

M-Factor (Chronic aquatic

toxicity)

10

Toxicity to soil dwelling or-

ganisms

NOEC: 1,000 mg/kg Exposure time: 14 d

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 222

GLP:yes

Method: OECD Test Guideline 216

Remarks: No significant adverse effect on nitrogen mineraliza-

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## **BENEVIA® 10 OD**

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5.1 17.12.2024 50000912 Date of first issue: 01.03.2020

tion.

Method: OECD Test Guideline 217

Remarks: No significant adverse effect on carbon mineraliza-

tion.

Toxicity to terrestrial organ-

isms

LD50: > 0.0934 µg/bee Exposure time: 72 h

End point: Acute contact toxicity Species: Apis mellifera (bees) Method: OECD Test Guideline 214

GLP:yes

LD50:  $> 0.1055 \mu g/bee$  Exposure time: 48 h

End point: Acute oral toxicity Species: Apis mellifera (bees) Method: OECD Test Guideline 213

GLP:yes

LD50: > 2,250 mg/kg End point: Acute oral toxicity Species: Colinius virginianus

Method: US EPA Test Guideline OPPTS 850.2100

GLP:yes

NOEC: 1,000 ppm

End point: Reproduction Test

Species: Anas platyrhynchos (Mallard duck)

Method: OECD Test Guideline 206

GLP:yes

2-ethylhexan-1-ol:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 17.1 - 28.2 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 39 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC10 (Desmodesmus subspicatus (green algae)): 3.2 mg/l

Exposure time: 72 h

EC50 (Desmodesmus subspicatus (green algae)): 11.5 mg/l

Exposure time: 72 h

Toxicity to microorganisms : EC50 (Anabaena flos-aquae (cyanobacterium)): 16.6 mg/l

Exposure time: 72 h

Fatty acids, C6-10, Me esters:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 95 mg/l

Exposure time: 48 h

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## **BENEVIA® 10 OD**

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5.1 17.12.2024 50000912 Date of first issue: 01.03.2020

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Gammarus fasciatus (freshwater shrimp)): 14.7 mg/l

Remarks: Based on data from similar materials

methanol:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 15,400 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 18,260 mg/l

Exposure time: 96 h

Toxicity to algae/aquatic

plants

EC50 (Selenastrum capricornutum (green algae)): ca. 22,000

mg/l

Exposure time: 96 h

Toxicity to microorganisms : EC50 (activated sludge): 19,800 mg/l

Exposure time: 96 h

Toxicity to fish (Chronic tox-

icity)

NOEC: 450 mg/l Exposure time: 28 d

Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 208 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

## 12.2 Persistence and degradability

**Product:** 

Biodegradability : Remarks: Product contains minor amounts of not readily bio-

degradable components, which may not be degradable in

waste water treatment plants.

## **Components:**

calcium dodecylbenzenesulphonate:

Biodegradability : Result: Readily biodegradable.

Method: OECD Test Guideline 301E

Cyantraniliprole:

Biodegradability : Remarks: Not readily biodegradable.

2-ethylhexan-1-ol:

Biodegradability : Result: Readily biodegradable.

Fatty acids, C6-10, Me esters:

Biodegradability : Result: Readily biodegradable.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## **BENEVIA® 10 OD**

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methanol:

Biodegradability Result: Readily biodegradable.

12.3 Bioaccumulative potential

**Product:** 

Bioaccumulation : Remarks: No data is available on the product itself.

**Components:** 

calcium dodecylbenzenesulphonate:

Bioaccumulation Species: Fish

Bioconcentration factor (BCF): 70.79

Method: QSAR

Partition coefficient: n-

octanol/water

log Pow: 4.77 (25 °C)

Cyantraniliprole:

Bioaccumulation Species: Lepomis macrochirus (Bluegill sunfish)

> Bioconcentration factor (BCF): < 1 Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-

octanol/water

log Pow: 1.97 (22 °C)

pH: 4

log Pow: 2.07 (22 °C)

pH: 7

log Pow: 1.74 (22 °C)

pH: 9

2-ethylhexan-1-ol:

Partition coefficient: n-

octanol/water

log Pow: 2.9 (25 °C)

methanol:

Partition coefficient: n-

octanol/water

log Pow: -0.77 (20 °C)

12.4 Mobility in soil

**Product:** 

mental compartments

Distribution among environ- : Remarks: No data is available on the product itself.

**Components:** 

**Cyantraniliprole:** 

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



#### **BENEVIA® 10 OD**

Version Revision Date: SDS Number: Date of last issue: -

5.1 17.12.2024 50000912 Date of first issue: 01.03.2020

Distribution among environ-

mental compartments

Koc: 241 ml/g, log Koc: 2.38

Kd: 3.73 ml/g

Remarks: Mobile in soils

#### 12.5 Results of PBT and vPvB assessment

#### **Product:**

Assessment : 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 Endocrine disrupting properties

#### **Product:**

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

#### Components:

#### **Cyantraniliprole:**

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

#### 12.7 Other adverse effects

#### **Product:**

Additional ecological infor-

mation

See product label for additional application instructions relat-

ing to environmental precautions.

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Send to a licensed waste management company.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## **BENEVIA® 10 OD**

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Contaminated packaging : Empty remaining contents.

Do not re-use empty containers.

Packaging that is not properly emptied must be disposed of as

the unused product.

Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

#### **SECTION 14: Transport information**

#### 14.1 UN number or ID number

ADN : UN 3082
ADR : UN 3082
RID : UN 3082
IMDG : UN 3082
IATA : UN 3082

#### 14.2 UN proper shipping name

**ADN** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Cyantraniliprole)

**ADR** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Cyantraniliprole)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Cyantraniliprole)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Cyantraniliprole)

IATA : Environmentally hazardous substance, liquid, n.o.s.

(Cyantraniliprole)

#### 14.3 Transport hazard class(es)

Class Subsidiary risks

 ADN
 : 9

 ADR
 : 9

 RID
 : 9

 IMDG
 : 9

 IATA
 : 9

#### 14.4 Packing group

ADN

Packing group : III

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Classification Code : M6 Hazard Identification Number : 90 Labels : 9

**ADR** 

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9
Tunnel restriction code : (-)

**RID** 

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9

**IMDG** 

Packing group : III
Labels : 9
EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo : 964

aircraft)

Packing instruction (LQ) : Y964
Packing group : III

Labels : Miscellaneous

IATA (Passenger)

Packing instruction (passen- : 964

ger aircraft)

Packing instruction (LQ) : Y964
Packing group : III

Labels : Miscellaneous

14.5 Environmental hazards

**ADN** 

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

**IMDG** 

Marine pollutant : yes

IATA (Passenger)

Environmentally hazardous : yes

IATA (Cargo)

Environmentally hazardous : yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

## **SECTION 15: Regulatory information**

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) Conditions of restriction for the following entries should be considered: Number on list 75, 3

If you intend to use this product as tattoo ink, please contact your vendor.

dor.

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

Not applicable

Regulation (EC) on substances that deplete the ozone

layer

: Not applicable

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (recast)

Not applicable

Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import

of dangerous chemicals

Not applicable

REACH - List of substances subject to authorisation

(Annex XIV)

: Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

**ENVIRONMENTAL HAZARDS** 

#### Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

E1

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

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

TSCA : Product contains substance(s) not listed on TSCA inventory.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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AIIC : Not in compliance with the inventory

DSL : This product contains the following components that are not

on the Canadian DSL nor NDSL.

3-BROMO-1-(3-CHLORO-2-PYRIDYL)-4'-CYAN-2'-METHYL-

6'-(METHYLCARBAMOYL)-1H-PYRAZOLE-5-

CARBOXANILIDE

Fatty acids, C6-10, Me esters

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

KECI : Not in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : Not in compliance with the inventory

NZIoC : Not in compliance with the inventory

TECI: Not in compliance with the inventory

#### 15.2 Chemical safety assessment

A chemical safety assessment is not required for this product (mixture).

#### **SECTION 16: Other information**

#### **Full text of H-Statements**

H225 : Highly flammable liquid and vapour.

H301 : Toxic if swallowed.
H302 : Harmful if swallowed.
H311 : Toxic in contact with skin.
H315 : Causes skin irritation.

H318 : Causes serious eye damage. H319 : Causes serious eye irritation.

H331 : Toxic if inhaled.
H332 : Harmful if inhaled.

H335 : May cause respiratory irritation.
H370 : Causes damage to organs.
H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long lasting effects.H413 : May cause long lasting harmful effects to aquatic life.

## Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Acute : Short-term (acute) aquatic hazard
Aquatic Chronic : Long-term (chronic) aquatic hazard

Eye Dam. : Serious eye damage

Eye Irrit. : Eye irritation

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Flam. Liq. Flammable liquids Skin Irrit. Skin irritation

STOT SE Specific target organ toxicity - single exposure Europe. Indicative occupational exposure limit values 2006/15/EC 2017/164/EU Europe. Commission Directive 2017/164/EU establishing a fourth list of indicative occupational exposure limit values

Ireland. List of Chemical Agents and Carcinogens with Occu-

IE OEL pational Exposure Limit Values - Code of Practice, Schedule 1

and 2

2006/15/EC / TWA Limit Value - eight hours 2017/164/EU / TWA Limit Value - eight hours

IE OEL / OELV - 8 hrs (TWA) : Occupational exposure limit value (8-hour reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; 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; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

#### Classification of the mixture: Classification procedure:

Skin Sens. 1 H317 Based on product data or assessment H400 Aquatic Acute 1 Based on product data or assessment Aquatic Chronic 1 H410 Based on product data or assessment

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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#### **Prepared by**

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