

SAFETY DATA SHEET according to Regulation 1907/2006



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unichem@unichem.si, www.unichem.si

Product name: **Effect Ultimium PRO**

Creation date: **21.5.2020** · Revision: **2.6.2021** · Version: **1**

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

1.1. Product identifier

Product name

Effect Ultimium PRO



chemius.net/B7C4d

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

Relevant identified uses

Insecticide.

Uses advised against

Use only for the purposes specified in this safety data sheet or on the product label. Any other use is prohibited.

1.3. Details of the supplier of the safety data sheet

Supplier

UNICHEM D.O.O.
Address: Sinja Gorica 2, 1360 Vrhnika, Slovenia
Phone: +386 1 755 81 50
Fax: +386 1 755 81 55
www.unichem.si
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1.4. Emergency telephone number

112

+386 1 755 81 50

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Skin Irrit. 2; H315 Causes skin irritation.

Skin Sens. 1; H317 May cause an allergic skin reaction.

Eye Irrit. 2; H319 Causes serious eye irritation.

Aquatic Acute 1; H400 Very toxic to aquatic life.

Aquatic Chronic 1; H410 Very toxic to aquatic life with long lasting effects.

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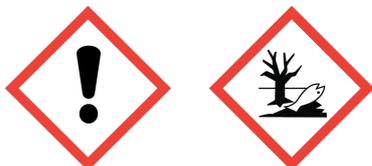
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2.2 Label elements

2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP]



Signal word: **Warning**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H410 Very toxic to aquatic life with long lasting effects.

P102 Keep out of reach of children.

P262 Do not get in eyes, on skin, or on clothing.

P273 Avoid release to the environment.

P280 Wear protective gloves/eye protection/face protection.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents/container in accordance with national regulation.

2.2.2. Contains:

permethrin (ISO) (CAS: 52645-53-1, EC: 258-067-9, Index: 613-058-00-2)

2.2.3. Special provisions

Special hazards are not known or expected.

2.3. Other hazards

No information.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

For mixtures see 3.2.

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3.2. Mixtures

Name	CAS EC Index	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Conc. Limits	REACH Registration No.
Alcohols C12-14, ethoxylated (>2-5EO)	68439-50-9 - -	25-30	Eye Irrit. 2; H319 Aquatic Acute 1; H400 Aquatic Chronic 3; H412		-
Alcohols, C16-18 and C18-unsatd., ethoxylated	68920-66-1 500-236-9 -	20-25	Skin Irrit. 2; H315 Aquatic Chronic 2; H411		-
piperonyl butoxide	51-03-6 200-076-7 -	18	Aquatic Acute 1; H400 Aquatic Chronic 1; H410		01-2119537431-46
Alcohols, C12-15, ethoxylated	68131-39-5 - -	10-15	Skin Irrit. 2; H315 Aquatic Acute 1; H400 Aquatic Chronic 3; H412		-
permethrin (ISO)	52645-53-1 258-067-9 613-058-00-2	6	Acute Tox. 4; H302 Skin Sens. 1; H317 Acute Tox. 4; H332 Aquatic Acute 1; H400 [M=1.000] Aquatic Chronic 1; H410 [M=1.000]		-
tetramethrin (ISO)	7696-12-0 231-711-6 607-727-00-8	0,9	Acute Tox. 4; H302 Carc. 2; H351 STOT SE 2; H371 (nervous system) (inhalation) Aquatic Acute 1; H400 [M=100] Aquatic Chronic 1; H410 [M=100]		01-2119480433-40

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

General notes

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Following inhalation

Remove patient to fresh air - move out of dangerous area. If victim is not breathing give artificial respiration. Seek medical help immediately.

Following skin contact

Immediately remove contaminated clothing. Wash affected skin areas thoroughly with plenty of water and soap. If symptoms develop and persist, seek medical attention.

Following eye contact

Immediately flush eyes with plenty of water while keeping eyelids apart (at least 15 minutes). After initial flushing, remove any contact lenses and continue flushing. If irritation persists, seek professional medical attention.

Following ingestion

Do not induce vomiting! Rinse mouth thoroughly with water. In case of doubt or if feeling unwell seek medical help. Show the physician the safety data sheet or label.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation

Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation.

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Skin contact

Itching, redness, pain.

May cause sensitisation by skin contact (symptoms: itching, redness, rashes).

Eye contact

Redness, tearing, pain.

Ingestion

May cause abdominal discomfort.

May cause nausea/vomiting and diarrhea.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

In case of a fire toxic gases can be generated; do not inhale gases/smoke. In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide (CO₂).

5.3. Advice for firefighters

Protective actions

In case of fire or heating do not breathe fumes/vapours. Cool containers at risk with water spray. If possible remove containers from endangered area. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for firefighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137).

Additional information

Contaminated firefighting water must be disposed of in accordance with the regulations; do not allow to reach the sewage system.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment

Use personal protective equipment (Section 8).

Emergency procedures

Ensure adequate ventilation. Prevent access to unauthorised personnel. Prevent access to unprotected personnel. Do not breathe vapour or mist. Avoid contact with skin and eyes. No action shall be taken involving any personal risk or without suitable training.

6.1.2. For emergency responders

During intervention, use personal protective equipment (Section 8).

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6.2. Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental large entry into water or ground occurs, inform responsible authorities.

6.3. Methods and material for containment and cleaning up

6.3.1. For containment

Stem the spill if this does not pose risks.

6.3.2. For cleaning up

Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor. Dispose in accordance with applicable regulations (see Section 13).

6.3.3. Other information

See Section 7: safe handling.

6.4. Reference to other sections

See also Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

7.1.1. Protective measures

Measures to prevent fire

Ensure adequate ventilation.

Measures to prevent aerosol and dust generation

Use general or local exhaust ventilation to prevent inhaling vapours and aerosols.

Measures to protect the environment

Avoid release to the environment.

7.1.2. Advice on general occupational hygiene

Use good personal hygiene practices – wash hands at breaks and when done working with material. Refer to instructions on label and regulations for safety and health at work. Ensure adequate ventilation. Do not eat, drink or smoke while working. Avoid contact with skin and eyes. Do not breathe vapours/mist. Consider measures required in Section 8 of this safety data sheet. Remove contaminated clothes and wash them before reuse.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Technical measures and storage conditions

Store in accordance with local regulations. Keep in tightly closed container. Keep in a dry place. Keep in cool and well ventilated area. Keep away from food, drink and animal feeding stuffs. Protect from direct sunlight. Keep out of the reach of children.

7.2.2. Packaging materials

The original container of producer.

7.2.3. Requirements for storage rooms and vessels

Close opened containers after use. Put the containers upright to prevent from leaking. Do not store in unlabelled containers.

7.2.4. Storage class

Store in accordance with local regulations.

7.2.5. Further information on storage conditions

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7.3. Specific end use(s)

Recommendations

Insecticide. Use only as directed.

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Industrial sector specific solutions

No specific data available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. Occupational exposure limit values

No information.

8.1.2. Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 482:2012+A1:2015 Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values.

8.1.3. DNEL/DMEL values

For components

Name	Type	Exposure route	Exposure frequency	Value	Remark
piperonyl butoxide (51-03-6)	Worker	inhalation	long term (systemic effects)	3,875 mg/m ³	
piperonyl butoxide (51-03-6)	Worker	inhalation	short term (systemic effects)	7,75 mg/m ³	
piperonyl butoxide (51-03-6)	Worker	inhalation	long term (local effects)	3,875 mg/m ³	
piperonyl butoxide (51-03-6)	Worker	inhalation	short term (local effects)	3,875 mg/m ³	
piperonyl butoxide (51-03-6)	Worker	dermal	long term (systemic effects)	27,7 mg/kg bw/day	
piperonyl butoxide (51-03-6)	Worker	dermal	short term (systemic effects)	55,5 mg/kg bw/day	
piperonyl butoxide (51-03-6)	Worker	dermal	long term (local effects)	0,44 mg/cm ²	
piperonyl butoxide (51-03-6)	Worker	dermal	short term (local effects)	0,888 mg/cm ²	
piperonyl butoxide (51-03-6)	Consumer	inhalation	long term (systemic effects)	1,94 mg/m ³	
piperonyl butoxide (51-03-6)	Consumer	inhalation	short term (systemic effects)	3,875 mg/m ³	
piperonyl butoxide (51-03-6)	Consumer	inhalation	long term (local effects)	1,94 mg/m ³	
piperonyl butoxide (51-03-6)	Consumer	inhalation	short term (local effects)	1,94 mg/m ³	
piperonyl butoxide (51-03-6)	Consumer	dermal	long term (systemic effects)	13,9 mg/kg bw/day	
piperonyl butoxide (51-03-6)	Consumer	dermal	short term (systemic effects)	27,8 mg/kg bw/day	
piperonyl butoxide (51-03-6)	Consumer	dermal	long term (local effects)	0,22 mg/m ³	
piperonyl butoxide (51-03-6)	Consumer	dermal	short term (local effects)	0,22 mg/cm ²	
piperonyl butoxide (51-03-6)	Consumer	oral	long term (systemic effects)	1,14 mg/kg bw/day	
piperonyl butoxide (51-03-6)	Consumer	oral	short term (systemic effects)	2,3 mg/kg bw/day	

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8.1.4. PNEC values

For components

Name	Exposure route	Value	Remark
piperonyl butoxide (51-03-6)	fresh water	0,001 mg/L	
piperonyl butoxide (51-03-6)	marine water	0 mg/L	
piperonyl butoxide (51-03-6)	water treatment plant	0,2 mg/L	
piperonyl butoxide (51-03-6)	fresh water sediment	0,18 mg/kg	dry weight
piperonyl butoxide (51-03-6)	marine water sediment	0,18 mg/kg	dry weight
piperonyl butoxide (51-03-6)	soil	0,032 mg/kg	dry weight
permethrin (ISO) (52645-53-1)	fresh water	0,00047 µg/l	
permethrin (ISO) (52645-53-1)	water treatment plant	0,00495 mg/L	
permethrin (ISO) (52645-53-1)	fresh water sediment	0,001 mg/kg	
permethrin (ISO) (52645-53-1)	soil	0,0876 mg/kg	
permethrin (ISO) (52645-53-1)	food chain	16,7 mg/kg	oral

8.2. Exposure controls

8.2.1. Appropriate engineering control

Substance/mixture related measures to prevent exposure during identified uses

Use good personal hygiene practices – wash hands at breaks and when done working with material. Handle in accordance with good industrial hygiene and safety practice. Observe normal precautions that apply for handling with chemicals. Do not breathe vapours/aerosols. Avoid contact with eyes and skin.

Organisational measures to prevent exposure

Do not eat, drink or smoke while working.

Technical measures to prevent exposure

Keep away from food, drink and animal feeding stuffs. Provide good ventilation and local exhaust in areas with increased concentration.

8.2.2. Personal protective equipment

Eye and face protection

Safety goggles (EN 166).

Hand protection

Protective gloves (EN 374). Observe the manufacturer's instructions regarding the use, storage, maintenance and replacement of gloves. In case of damage or at the first signs of wear and tear, change the gloves immediately.

Appropriate materials

Material	Thickness	Penetration Time	Remark
Nitrile	> 0,4 mm	> 30 min	
Butyl rubber	> 0,7 mm	> 480 min	

Skin protection

Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345). Protective work clothing resistant to liquid chemicals (EN 14605).

Respiratory protection

Not needed under normal use and adequate ventilation. At elevated concentrations of vapours/aerosols in the air wear a mask (EN 140) with filter A2-P2 (EN 14387). 'High/elevated concentrations' means that the occupational exposure limit values have been exceeded.

Thermal hazards

None under normal use conditions.

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8.2.3. Environmental exposure controls

Technical measures to prevent exposure

Do not allow product to reach drains, sewage systems or ground water.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

-	Physical state:	liquid
-	Colour:	light yellow
-	Odour:	characteristic

Important health, safety and environmental information

-	pH	No information.
-	Melting point/freezing point	No information.
-	Initial boiling point/boiling range	> 290 °C
-	Flash point	> 120 °C
-	Evaporation rate	No information.
-	Flammability (solid, gas)	No information.
-	Explosion limits (vol%)	No information.
-	Vapour pressure	No information.
-	Vapour density	No information.
-	Density	Density: 0,9 – 1,05 g/cm ³
-	Solubility	No information.
-	Partition coefficient	No information.
-	Auto-ignition temperature	No information.
-	Decomposition temperature	No information.
-	Viscosity	No information.
-	Explosive properties	No information.
-	Oxidising properties	No information.

9.2. Other information

-	Remarks:	Vapour pressure (permethrin): 0.749 mPa at 25 °C.
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SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

10.3. Possibility of hazardous reactions

The product is stable under recommended storage and handling conditions.

10.4. Conditions to avoid

Do not expose to heat and direct sunlight.

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10.5. Incompatible materials

Not known.

10.6. Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

(a) Acute toxicity

Name	Exposure route	Type	Species	Time	Value	Method	Remark
Alcohols C12-14, ethoxylated (>2-5EO) (68439-50-9)	oral	LD ₅₀	rat		> 5000 mg/kg		
Alcohols, C16-18 and C18-unsatd., ethoxylated (68920-66-1)	oral	LD ₅₀	rat		> 4100 mg/kg		
piperonyl butoxide (51-03-6)	oral	LD ₅₀	rat		4570 mg/kg	OECD 401	
piperonyl butoxide (51-03-6)	dermal	LD ₅₀	rabbit		> 2000 mg/kg	OECD 402	
piperonyl butoxide (51-03-6)	inhalation	LC ₅₀	rat	4 h	> 5,9 mg/l	OECD 403	
permethrin (ISO) (52645-53-1)	oral	LD ₅₀	rat		554 mg/kg bw	OECD 401	
permethrin (ISO) (52645-53-1)	dermal	LD ₅₀	rat		> 2000 mg/kg	OECD 402	
permethrin (ISO) (52645-53-1)	inhalation (aerosol)	LC ₅₀	rat	4 h	> 4,638 mg/l	OECD 403	
tetramethrin (ISO) (7696-12-0)	oral	LD ₅₀	rat		> 2000 mg/kg	OECD 423	
tetramethrin (ISO) (7696-12-0)	dermal	LD ₅₀	rat		> 2000 mg/kg	OECD 402	
tetramethrin (ISO) (7696-12-0)	inhalation	LC ₅₀	rat	4 h	> 5,63 mg/l	OECD 403	

(b) Skin corrosion/irritation

Name	Species	Time	Result	Method	Remark
Alcohols, C16-18 and C18-unsatd., ethoxylated (68920-66-1)	rabbit		Irritating.		
permethrin (ISO) (52645-53-1)	rabbit		Non-irritant.	OECD 404	

Additional information: Causes skin irritation.

(c) Serious eye damage/irritation

Name	Species	Time	Result	Method	Remark
Alcohols C12-14, ethoxylated (>2-5EO) (68439-50-9)	rabbit		Severe irritation.		
Alcohols, C12-15, ethoxylated (68131-39-5)	rabbit		Severe irritation.		
permethrin (ISO) (52645-53-1)	rabbit		No irritant effect.	OECD 405	

Additional information: Causes serious eye irritation.

(d) Respiratory or skin sensitisation

Additional information: May cause an allergic skin reaction.

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Name	Type	Species	Time	Result	Method	Remark
permethrin (ISO) (52645-53-1)	in-vitro mutagenicity			Negative.	OECD 473	
permethrin (ISO) (52645-53-1)	in-vivo mutagenicity			Not mutagenic.	OECD 475	

(f) Carcinogenicity

Name	Exposure route	Type	Species	Time	Value	Result	Method	Remark
permethrin (ISO) (52645-53-1)	oral	NOAEL	rat		75 mg/kg bw/day	No effect	OECD 453	

(g) Reproductive toxicity

Name	Reproductive toxicity type	Type	Species	Time	Value	Result	Method	Remark
permethrin (ISO) (52645-53-1)	Developmental toxicity	NOAEL	rabbit		500 mg/kg bw/day	No effect	OECD 414	
permethrin (ISO) (52645-53-1)	Effects on fertility	NOAEL	rat		500 mg/kg bw/day	No effect	OECD 416	
permethrin (ISO) (52645-53-1)	Maternal toxicity	NOAEL	rabbit		250 mg/kg bw/day	No effect	OECD 414	

Summary of evaluation of the CMR properties

No information.

(h) STOT-single exposure

No information.

(i) STOT-repeated exposure

Name	Exposure route	Type	Species	Time	Organ	Value	Result	Method	Remark
permethrin (ISO) (52645-53-1)	oral	NOAEL	rat	90 days		8,6 mg/kg bw/day	No effect.	OECD 408	
permethrin (ISO) (52645-53-1)	dermal	NOAEL	rat	13 weeks		1000 mg/kg bw/day		OECD 411	6 h per day, 5 days per week
permethrin (ISO) (52645-53-1)	inhalation (aerosol)	NOAEL	rat	13 weeks		0,2201 mg/L	No effect.	OECD 413	6 h per day, 5 days per week

(j) Aspiration hazard

No information.

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SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Acute (short-term) toxicity

For components

Substance (CAS Nr.)	Type	Value	Exposure time	Species	Organism	Method	Remark
piperonyl butoxide (51-03-6)	LC ₅₀	3,94 mg/L	96 h	fish	<i>Cyprinodon variegatus</i>	OECD 203	
	EC ₅₀	0,51 mg/L	48 h	crustacea	<i>Daphnia magna</i>	OECD 202	
	EC ₅₀	3,89 mg/L	72 h	algae	<i>Selenastrum capricornutum</i>	OECD 201	
Alcohols, C12-15, ethoxylated (68131-39-5)	EC ₅₀	0,7 mg/L	96 h	algae	<i>Pseudokirchneriella subcapitata</i>		
	EC ₅₀	0,39 mg/L	48 h	crustacea	<i>Ceriodaphnia dubia</i>		
	EC ₅₀	302 µg/l	48 h	crustacea	<i>Daphnia magna</i>		
	LC ₅₀	1400 µg/l	96 h	fish	<i>Pimephales promelas</i>		
permethrin (ISO) (52645-53-1)	LC ₅₀	8,9 µg/l	96 h	fish	<i>Poecilia reticulata</i>	OECD 203	
	LC ₅₀	0,145 mg/L	96 h	fish	<i>Cyprinus carpio</i>	OECD 203	
	EC ₅₀	0,00127 mg/L	48 h	crustacea	<i>Daphnia magna</i>	OECD 202	
	EC ₅₀	> 1,13 mg/L	72 h	algae	<i>Pseudokirchneriella subcapitata</i>	OECD 201	
	NOEC	> 0,0131 mg/L	72 h	algae	<i>Pseudokirchneriella subcapitata</i>	OECD 201	
	EC ₁₀	0,0023 mg/L	72 h	algae	<i>Pseudokirchneriella subcapitata</i>		
	EC ₅₀	> 1000 mg/L	3 h	microorganisms	Activated sludge	OECD 209	
	NOEC	0,00495 mg/L	3 h	microorganisms		OECD 209	
tetramethrin (ISO) (7696-12-0)	LD ₅₀	0,163 µg/l		bee	<i>Apis mellifera</i>		
	LC ₅₀	0,033 mg/L	96 h	fish	<i>Brachydanio rerio</i>	OECD 203	
	EC ₅₀	0,47 mg/L	48 h	crustacea	<i>Daphnia magna</i>	OECD 202	
	EC ₅₀	1,36 mg/L	72 h	algae	<i>Scenedesmus subspicatus</i>	OECD 201	

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12.1.2. Chronic (long-term) toxicity

For components

Substance (CAS Nr.)	Type	Value	Exposure time	Species	Organism	Method	Remark
piperonyl butoxide (51-03-6)	NOEC	0,053 mg/l		fish	<i>Cyprinodon variegatus</i>	OECD 210	
	NOEC	0,03 mg/l	21 days	crustacea	<i>Daphnia magna</i>		
	NOEC	0,824 mg/l		algae	<i>Selenastrum capricornutum</i>	OECD 201	
permethrin (ISO) (52645-53-1)	NOEC	0,00041 mg/l	35 days	fish	<i>Danio rerio</i>	OECD 210	
	NOEC	0,0047 µg/L	21 days	crustacea	<i>Daphnia magna</i>	OECD 211	
	EC50	126 mg/kg	14 days	Soil macro-organisms	Lampito mauritii		
tetramethrin (ISO) (7696-12-0)	NOEC	0,72 mg/l		algae	<i>Scenedesmus subspicatus</i>	OECD 201	

12.2. Persistence and degradability

12.2.1. Abiotic degradation, physical- and photo-chemical elimination

For components

Substance (CAS Nr.)	Environment	Type / Method	Half Time	Evaluation	Method	Remark
permethrin (ISO) (52645-53-1)	Air	photodegradation	0,701 days		half-life	Concentration of OH radicals: 500,000 / cm ³
permethrin (ISO) (52645-53-1)	water		> 365 days		half-life	pH < 7
permethrin (ISO) (52645-53-1)	water		> 365 days		half-life	pH 7
permethrin (ISO) (52645-53-1)	water		35 – 42 days		half-life	pH > 7
permethrin (ISO) (52645-53-1)	Soil		11 – 21,2 days		half-life	

12.2.2. Biodegradation

For components

Substance (CAS Nr.)	Type	Rate	Time	Evaluation	Method	Remark
Alcohols C12-14, ethoxylated (>2-5EO) (68439-50-9)	biodegradability	72,5 %	28 days		OECD 301 F	
Alcohols, C16-18 and C18-unsatd., ethoxylated (68920-66-1)	biodegradability	83 %	28 days		OECD 301 D	
piperonyl butoxide (51-03-6)	-			Not rapidly biodegradable.		
Alcohols, C12-15, ethoxylated (68131-39-5)	biodegradability	79 %	28 days		OECD 301 F	
permethrin (ISO) (52645-53-1)	Biodegradation in water	5 %	28 days		OECD 301 B	
tetramethrin (ISO) (7696-12-0)	-			readily biodegradable	OECD 302 C	

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12.3. Bioaccumulative potential

12.3.1. Partition coefficient

For components

Substance (CAS Nr.)	Media	Value	Temperature	pH	Concentration	Method
Alcohols, C16-18 and C18-unsatd., ethoxylated (68920-66-1)	Octanol-water (log Pow)	4,2				
piperonyl butoxide (51-03-6)	Octanol-water (log Pow)	4,8		6,5		OECD 117
permethrin (ISO) (52645-53-1)	Octanol-water (log Pow)	4,67	25 °C			
tetramethrin (ISO) (7696-12-0)	Octanol-water (log Pow)	> 4,09				OECD 107

12.3.2. Bioconcentration factor (BCF)

For components

Substance (CAS Nr.)	species	Organism	Value	Duration	Evaluation	Method	Remark
Alcohols C12-14, ethoxylated (>2-5EO) (68439-50-9)	BCF		237				
piperonyl butoxide (51-03-6)	BCF		91 – 380			OECD 305 E	
permethrin (ISO) (52645-53-1)	BCF	Cyprinodon variegatus	290 – 620				
permethrin (ISO) (52645-53-1)	BCF	fish	< 2000				

12.4. Mobility in soil

12.4.1. Known or predicted distribution to environmental compartments

No information.

12.4.2. Surface tension

No information.

12.4.3. Adsorption/Desorption

For components

Substance (CAS Nr.)	Type	Criterion	Value	Evaluation	Method	Remark
permethrin (ISO) (52645-53-1)	Soil	Henry constant (H)	0,0046 – 0,045 Pa.m ³ / mol			
tetramethrin (ISO) (7696-12-0)	Soil	log KOC	3,3 – 3,4		OECD 121	

12.5. Results of PBT and vPvB assessment

No evaluation.

12.6. Other adverse effects

No information.

12.7. Additional information

For product

Very toxic to aquatic life with long lasting effects.
Avoid release to the environment.

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SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

13.1.1. Product / Packaging disposal

Waste chemical

Do not allow product to reach drains/sewage systems. Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.

Packaging

Dispose of in accordance with applicable waste disposal regulation. Deliver completely emptied containers to approved waste disposal authorities.

13.1.2. Waste treatment-relevant information

Disposal in accordance with the Rules on the management of waste.

13.1.3. Sewage disposal-relevant information

Do not discharge into drains.

13.1.4. Other disposal recommendations

Comply with the applicable legislation.

SECTION 14. TRANSPORT INFORMATION

14.1. UN number

UN 3082

14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (permethrin (ISO), tetramethrin (ISO))

14.3. Transport hazard class(es)

9

14.4. Packing group

III

14.5. Environmental hazards

Additional labeling: ENVIRONMENTALLY HAZARDOUS

IMDG: MARINE POLLUTANT

14.6. Special precautions for user

Limited quantities

5 L

Tunnel restriction code

(-)

IMDG flashpoint

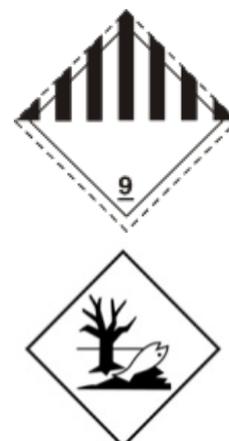
120 °C, c.c.

IMDG EmS

F-A, S-F

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Goods may not be carried in bulk in bulk containers, containers or vehicles.



Product name: **Effect Ultimium PRO**Creation date: **21.5.2020** · Revision: **2.6.2021** · Version: **1****SECTION 15. REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2015/830)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

15.1.1. Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)

Not applicable.

15.1.2. Special instructions

-

Observe the regulations on employment and protection against dangerous substances for young people, pregnant women and nursing mothers.

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16. OTHER INFORMATION**Indication of changes**

-

Abbreviations and acronyms

ATE - Acute Toxicity Estimate
ADR - Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CEN - European Committee for Standardisation
C&L - Classification and Labelling
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CAS# - Chemical Abstracts Service number
CMR - Carcinogen, Mutagen, or Reproductive Toxicant
CSA - Chemical Safety Assessment
CSR - Chemical Safety Report
DMEL - Derived Minimal Effect Level
DNEL - Derived No Effect Level
DPD - Dangerous Preparations Directive 1999/45/EC
DSD - Dangerous Substances Directive 67/548/EEC
DU - Downstream User
EC - European Community
ECHA - European Chemicals Agency
EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)
EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)
EEC - European Economic Community
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
EN - European Standard
EQS - Environmental Quality Standard
EU - European Union
Euphrac - European Phrase Catalogue
EWC - European Waste Catalogue (replaced by LoW – see below)
GES - Generic Exposure Scenario
GHS - Globally Harmonized System
IATA - International Air Transport Association

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ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
IMSBC - International Maritime Solid Bulk Cargoes
IT - Information Technology
IUCLID - International Uniform Chemical Information Database
IUPAC - International Union for Pure Applied Chemistry
JRC - Joint Research Centre
Kow - octanol-water partition coefficient
LC₅₀ - Lethal Concentration to 50 % of a test population
LD₅₀ - Lethal Dose to 50% of a test population (Median Lethal Dose)
LE - Legal Entity
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)
LR - Lead Registrant
M/I - Manufacturer / Importer
MS - Member States
MSDS - Material Safety Data Sheet
OC - Operational Conditions
OECD - Organization for Economic Co-operation and Development
OEL - Occupational Exposure Limit
OJ - Official Journal
OR - Only Representative
OSHA - European Agency for Safety and Health at work
PBT - Persistent, Bioaccumulative and Toxic substance
PEC - Predicted Effect Concentration
PNEC(s) - Predicted No Effect Concentration(s)
PPE - Personal Protection Equipment
(Q)SAR - Qualitative Structure Activity Relationship
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
RIP - REACH Implementation Project
RMM - Risk Management Measure
SCBA - Self-Contained Breathing Apparatus
SDS - Safety data sheet
SIEF - Substance Information Exchange Forum
SME - Small and Medium sized Enterprises
STOT - Specific Target Organ Toxicity
(STOT) RE - Repeated Exposure
(STOT) SE - Single Exposure
SVHC - Substances of Very High Concern
UN - United Nations
vPvB - Very Persistent and Very Bioaccumulative

Key literature references and sources for data

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List of relevant H phrases

H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H351 Suspected of causing cancer .
H371 May cause damage to organs .
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

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- Provided correct labelling of the product
- Compliance with the local legislation
- Provided correct classification of the product
- Provided adequate transport data

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The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under Section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.