Product name: EFFECT MICROTECH CS

Creation date: 11.7.2014 · Revision: 25.5.2018 · Version: 1



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

1.1. Product identifier

Product name

EFFECT MICROTECH CS

Synonyms

MICROTECH CS, MICROTECH, Effect Microtech CS rovarirtó koncentrátum, Effect Microtech



chemius.net/mpqe7

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

Relevant identified uses

Insecticide (microencapsulated concentrate) against crawling insects such as ants and cockroaches. Biocide product type PT18.

Uses advised against

To be used only in accordance with instructions provided 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

Tel.: +386 1 755 81 50 Fax: +386 1 755 81 55 www.unichem.si

e-mail: unichem@unichem.si

1.4. Emergency telephone number

Emergency

112

<u>Supplier</u>

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

Aquatic Acute 1; H400 Very toxic to aquatic life.

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

...continued from previous page

WUNICHEM

UNICHEM d.o.o., Sinja Gorica 2, 1360 Vrhnika, Slovenia tel.: +386 1 7558 150, fax: +386 1 7558 155 unichem@unichem.si, www.unichem.si

Product name: EFFECT MICROTECH CS

Creation date: 11.7.2014 · Revision: 25.5.2018 · Version: 1

2.2 Label elements

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





Signal word: Warning

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

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

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local 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.

3.2. Mixtures

Name	CAS EC Index	% Classification according to Regulation (EC) No 1272/2008 (CLP)		REACH Registration No.		
piperonyl butoxide	51-03-6 200-076-7 -	8	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	01-2119537431-46		
258-067-9 613-058-00-2		8	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	7696-12-0 231-711-6 -	4	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	-		

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

General notes

Never give anything by mouth to an unconscious person. Place patient stably in side position for transportation.

Following inhalation

Remove patient to fresh air-move out of dangerous area. If symptoms occur it is necessary to search for medical help.

Product name: EFFECT MICROTECH CS

Creation date: 11.7.2014 · Revision: 25.5.2018 · Version: 1



Following skin contact

Take off all contaminated clothing. Wash affected skin areas thoroughly with plenty of water and soap! If symptoms persist seek medical attention.

Following eye contact

Immediately flush eyes with running water, keeping eyelids open. Seek medical help.

Following ingestion

Do not induce vomiting. Rinse mouth 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

_

Skin contact

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

Eye contact

Ingestion

-

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

-

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide. Dry chemical powder. Water spray. Alcohol resistant foam.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

-

5.3. Advice for firefighters

Protective actions

Cool containers at risk with water spray jet. If possible remove containers from endangered area.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective clothing for fire-fighters (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).

...continued from previous page

UNICHEM d.o.o., Sinja Gorica 2, 1360 Vrhnika, Slovenia tel.: +386 1 7558 150, fax: +386 1 7558 155 unichem@unichem.si, www.unichem.si

Product name: EFFECT MICROTECH CS

Creation date: 11.7.2014 · Revision: 25.5.2018 · Version: 1

Emergency procedures

Ensure adequate ventilation.

6.1.2. For emergency responders

_

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

6.3.1. For containment

6.3.2. For cleaning up

Absorb product (with inert material), collect it in special container and dispose it according to valid regulations on handling with waste. After cleaning, wash residues with plenty of water.

6.3.3. Other information

-

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

-

Measures to protect 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. Do not eat, drink or smoke while working. Avoid contact with skin and eyes. Do not breathe vapours/mist.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Technical measures and storage conditions

Keep in cool and well ventilated area. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children.

7.2.2. Packaging materials

-

7.2.3. Requirements for storage rooms and vessels

-

7.2.4. Storage class

-

7.2.5. Further information on storage conditions

_

...continued from previous page

UNICHEM d.o.o., Sinja Gorica 2, 1360 Vrhnika, Slovenia tel.: +386 1 7558 150, fax: +386 1 7558 155 unichem@unichem.si, www.unichem.si

Product name: EFFECT MICROTECH CS

Creation date: 11.7.2014 · Revision: 25.5.2018 · Version: 1

7.3. Specific end use(s)

Recommendations

-

Industrial sector specific solutions

_

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 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

8.1.3. DNEL values

No information.

8.1.4. PNEC values

No information.

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.

Technical measures to prevent exposure

Provide good ventilation and local exhaust in the area with increased concentration.

8.2.2. Personal protective equipment

Eye and face protection

Safety glasses with side protection (EN 166).

Hand protection

Protective gloves (EN 374).

Appropriate materials

Material	Thickness	Penetration Time	Remark
PVC		480 min	

Skin protection

Cotton protective clothing (EN ISO 13688) and shoes that cover the entire foot (EN ISO 20345).

Respiratory protection

In case of insufficient ventilation wear mask with filter FFP2 (EN 149).

Thermal hazards

-

8.2.3. Environmental exposure controls

-

Product name: EFFECT MICROTECH CS

Creation date: 11.7.2014 · Revision: 25.5.2018 · Version: 1



SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

-	Physical state:	liquid
-	Colour:	white
-	Odour:	characteristic

Important health, safety and environmental information

-	рН	No information.			
-	Melting point/Freezing point	No information.			
-	Initial boiling point/boiling range	No information.			
-	Flash point	No information.			
-	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	Water: Soluble			
-	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:

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

-

10.2. Chemical stability

Product is stable under normal conditions according to handling and storage.

10.3. Possibility of hazardous reactions

-

10.4. Conditions to avoid

Protect from heat, direct sunlight, open fire, free sparks. Do not expose to temperatures exceeding 35°C.

10.5. Incompatible materials

Strong oxidizing agents.

Product name: EFFECT MICROTECH CS

Creation date: 11.7.2014 · Revision: 25.5.2018 · Version: 1



10.6. Hazardous decomposition products

In case of fire/explosion vapours dangerous for health are spread.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

11.1.1. Acute toxicity

For components

Name	exp. route	Туре	species	Time	value	Method	Remark
piperonyl butoxide (51-03-6)	oral	LD ₅₀	rat		4570 mg/kg		
piperonyl butoxide (51-03-6)	dermal	LD ₅₀	rabbit		> 2000 mg/kg		
piperonyl butoxide (51-03-6)	inhalation	LC ₅₀	rat	4 h	> 5,9 mg/m ³		
Permethrin (ISO) (52645-53-1)	oral	LD ₅₀	rat		> 2000 mg/kg		
Permethrin (ISO) (52645-53-1)	dermal	LD ₅₀	rat		> 2000 mg/kg		
Permethrin (ISO) (52645-53-1)	inhalation	LC ₅₀	rat	4 h	> 0,45 mg/l		
Tetramethrin (7696-12-0)	oral	LD ₅₀	rat		> 2000 mg/kg		
Tetramethrin (7696-12-0)	dermal	LD ₅₀	rat		> 2000 mg/kg		
Tetramethrin (7696-12-0)	inhalation	LC ₅₀	rat		> 5,63 mg/m ³		

11.1.2. Skin corrosion/irritation, serious eye damage/irritation

No information.

11.1.3. Respiratory or skin sensitisation

No information.

11.1.4. Carcinogenicity, Mutagenicity, Reproductive toxicity

Carcinogenicity

No information.

(Germ cell) mutagenicity

No information.

Reproductive toxicity

No information.

Summary of evaluation of the CMR properties

No information.

11.1.5. STOT - single and repeated exposure

No information.

11.1.6. Aspiration hazard

No information.

Product name: EFFECT MICROTECH CS

Creation date: 11.7.2014 · Revision: 25.5.2018 · Version: 1



SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Acute (short-term) toxicity

For components

Substance (CAS Nr.)	Туре	Value	Exposure time	Species	Organism	Method	Remark
piperonyl butoxide (51-03-6)	LC ₅₀	3,94 mg/L	96 h	fish	Cyprinodon variegatus		
	EC ₅₀	0,51 mg/L	48 h	crustaceans	Daphnia magna		
	LC50	2,09 mg/L	72 h	algae	Scenedesmus subspicatus		
Permethrin (ISO) (52645-53-1)	LC ₅₀	0,145 mg/L	96 h	fish	Cyprinus carpio		
	LC ₅₀	8,9 μg/l	96 h	fish	Poecilia reticulata		
	EC ₅₀	0,02 mg/L	24 h	crustacea	Daphnia magna		
	EC ₅₀	> 0,022 mg/L	72 h	algae	Scenedesmus subspicatus		
	EC ₅₀	> 1000 mg/L	3 h	bacteria	Activated sludge		
	LC50	> 1200 mg/kg			Lampito mauritii		
Tetramethrin (7696-12-0)	LC50	0,033 mg/L	96 h	fish	Brachydanio rerio		
	EC ₅₀	0,47 mg/L	48 h	crustaceans	Daphnia magna		
	LC50	> 1,36 mg/L	72 h	algae	Scenedesmus subspicatus		

12.1.2. Chronic (long-term) toxicity

No information.

12.2. Persistence and degradability

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

No information.

12.2.2. Biodegradation

No information.

12.3. Bioaccumulative potential

12.3.1. Partition coefficient

No information.

12.3.2. Bioconcentration factor (BCF)

No information.

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

No information.

12.5. Results of PBT and vPvB assessment

No evaluation.

12.6. Other adverse effects

No information.

Product name: EFFECT MICROTECH CS

Creation date: 11.7.2014 · Revision: 25.5.2018 · Version: 1



12.7. Additional information

For product

Very toxic to aquatic organisms.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

13.1.1. Product / Packaging disposal

Waste chemical

Disposal must be made according to official regulations: deliver it to authorized collector/remover/transformer of hazardous waste.

Packaging

Deliver completely emptied containers to approved waste disposal authorities.

13.1.2. Waste treatment-relevant information

13.1.3. Sewage disposal-relevant information

.

13.1.4. Other disposal recommendations

-

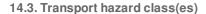
SECTION 14. TRANSPORT INFORMATION

14.1. UN number

UN 3082

14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Permethrin (ISO), piperonyl butoxide)



9

14.4. Packing group

Ш

14.5. Environmental hazards

Additional labeling: Dangerous for the environment

IMDG: MARINE POLLUTANT

14.6. Special precautions for user

IATA: Limited Quantity: Y964, 30 kg G; Cargo Packing Instruction: 964; Net Qty: 450 L; Passenger Packing Instruction:964; Net Qty: 30kg G L

Limited quantities

5 L

Tunnel restriction code

(-)

IMDG EmS

F-A, S-F





Product name: EFFECT MICROTECH CS

Creation date: 11.7.2014 · Revision: 25.5.2018 · Version: 1



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.

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-quideline)

not applicable

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

_

Key literature references and sources for data

.

List of relevant H phrases

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.



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

© BENS Consulting | www.bens-consulting.com

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.

Print date: 13.7.2018 Page 10 of 11 continued on next page...

...continued from previous page

The Unichem

UNICHEM d.o.o., Sinja Gorica 2, 1360 Vrhnika, Slovenia tel.: +386 1 7558 150, fax: +386 1 7558 155 unichem@unichem.si, **www.unichem.si**

Product name: **EFFECT MICROTECH CS**

Creation date: 11.7.2014 · Revision: 25.5.2018 · Version: 1

Print date: 13.7.2018 Page 11 of 11