

SAFETY DATA SHEET according to Regulation 1907/2006



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: **19.8.2019** · 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



chemius.net/1Bwa2

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
Phone: +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

Supplier

+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.

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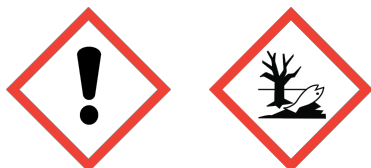
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2.2 Label elements

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



Signal word: **Warning**

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 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.

3.2. Mixtures

Name	CAS EC Index	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Conc. Limits	REACH Registration No.
piperonyl butoxide	51-03-6 200-076-7 -	8	Aquatic Acute 1; H400 Aquatic Chronic 1; H410		01-2119537431-46
permethrin (ISO)	52645-53-1 258-067-9 613-058-00-2	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 in recovery position and ensure airway patency.

Following inhalation

Remove patient to fresh air - move out of dangerous area. If symptoms occur, seek medical advice.

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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 apart. Seek medical help.

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

-

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. If possible remove containers from endangered area.

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.

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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.

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 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

-

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. 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 feeding stuffs. Keep out of the reach of children.

7.2.2. Packaging materials

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7.2.3. Requirements for storage rooms and vessels

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7.2.4. Storage class

-

7.2.5. Further information on storage conditions

-

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 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

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 areas 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 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

-

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8.2.3. Environmental exposure controls

-

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

-	pH	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:	
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SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

-

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

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10.4. Conditions to avoid

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

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10.5. Incompatible materials

Strong oxidising agents.

10.6. Hazardous decomposition products

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
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		

(b) Skin corrosion/irritation

No information.

(c) Serious eye damage/irritation

No information.

(d) Respiratory or skin sensitisation

No information.

(e) (Germ cell) mutagenicity

No information.

(f) Carcinogenicity

No information.

(g) Reproductive toxicity

No information.

Summary of evaluation of the CMR properties

No information.

(h) STOT-single exposure

No information.

(i) STOT-repeated exposure

No information.

(j) Aspiration hazard

No information.

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>		
	EC ₅₀	0,51 mg/L	48 h	crustacea	<i>Daphnia magna</i>		
	LC ₅₀	2,09 mg/L	72 h	algae	<i>Scenedesmus subspicatus</i>		
permethrin (ISO) (52645-53-1)	LC ₅₀	0,145 mg/L	96 h	fish	<i>Cyprinus carpio</i>		
	LC ₅₀	8,9 µg/l	96 h	fish	<i>Poecilia reticulata</i>		
	EC ₅₀	0,02 mg/L	24 h	crustacea	<i>Daphnia magna</i>		
	EC ₅₀	> 0,022 mg/L	72 h	algae	<i>Scenedesmus subspicatus</i>		
	EC ₅₀	> 1000 mg/L	3 h	bacteria	Activated sludge		
	LC ₅₀	> 1200 mg/kg			<i>Lampito mauritii</i>		
	LC ₅₀	> 1,36 mg/L	72 h	algae	<i>Scenedesmus subspicatus</i>		
Tetramethrin (7696-12-0)	LC ₅₀	0,033 mg/L	96 h	fish	<i>Brachydanio rerio</i>		
	EC ₅₀	0,47 mg/L	48 h	crustacea	<i>Daphnia magna</i>		
	LC ₅₀	> 1,36 mg/L	72 h	algae	<i>Scenedesmus subspicatus</i>		

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.

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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 authorised 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. (piperonyl butoxide, permethrin (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

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



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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-guideline)

Not applicable.

15.1.2. Special instructions**15.2. Chemical Safety Assessment**

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

SECTION 16. OTHER INFORMATIONIndication of changes

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Abbreviations and acronyms

ATE - Acute Toxicity Estimate
ADR - European 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
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

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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.
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

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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.