

**UNICHEM d.o.o.**

Sinja Gorica 2, 1360 Vrhnika  
Tel: 01/7558-150  
Fax: 01/7558-155

**SAFETY DATA SHEET**  
**EFFECT MICROTECH CS**

Date of compilation:  
06.10.2010  
Revision: 19.01.2012  
Version no.: 001

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

**1.1. Product identifier:**

EFFECT MICROTECH CS

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

Insecticide (microencapsulated concentrate) for professional use against crawling insects such as ants and cockroaches.

Uses advised against: use only for intentions listed in this safety data sheet or on product label.  
Any other use is forbidden.

**1.3. Details of the supplier of the safety data sheet:**

UNICHEM d.o.o., Sinja Gorica 2, 1360 Vrhnika, Slowenien

**Telephone:** +386 (01) 75 58 150, **fax:** +386 (01) 75 58 155

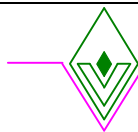
E-Mail address for a competent person responsible for the safety data sheet:

marko.devetak@unicchem.si

**1.4. Emergency telephone number:**

Consult a personal or emergency physician. In case of a life endangerment call 112.

Information about the emergency measures: tel.: +386 (01) 75 58 150, fax: +386 (01) 75 58 155  
(from 7:00 to 15:00)



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## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture:

#### Classification of the substance/ mixture according to Directive 67/548/EEC and 1999/45/EG:

N - Dangerous for the environment

Xn - Harmful

R20/22 Harmful by inhalation and if swallowed.

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 2.2. Label elements:

#### According to Directive 67/548/EEC and 1999/45/EG:



Dangerous for  
the environment



Harmful

R20/22 Harmful by inhalation and if swallowed.

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S2 Keep out of the reach of children.

S13 Keep away from food, drink and animal feeding stuffs.

S24/25 Avoid contact with skin and eyes.

R36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S60 This material and its container must be disposed of as hazardous waste.

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

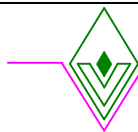
#### Other information:

Contents: Permethrin (ISO), tetramethrin

For use only by professional operators. Avoid excessive contamination of coveralls. Do not contaminate foodstuffs, eating utensils or food contact surfaces. Wash hands and exposed skin before meals and after use. Keep in a safe place. Remove or cover all fish tanks and bowls before application. Unprotected persons and animals should be kept away from treated areas until surfaces are dry. Cover all water storage tanks before application. Hazardous to bees. Do not apply to clothing and bedding. All bats are protected under the Wildlife and Countryside Act 1981. Before treating any structure used by bats, consult Natural England, Scottish Natural Heritage or the Countryside Council for Wales.

### 2.3. Other hazards:

No other hazards.



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### SECTION 3: Composition/information on ingredients

#### 3.1. Mixtures:

Name of the substance	EC No. CAS No. Index No.	Conc. (%)	Classification according to Regulation (EC) No 1272/2008	Classification according to Directive 67/548/EEC
Permethrin (ISO)	258-067-9 52645-53-1 613-058-00-2	8	Acute Tox. 4, H332 Acute Tox. 4, H302 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	Xn, N; R20/22-43- 50/53
2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether	200-076-7 51-03-6 /	8	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	N; R50/53
Tetramethrin	231-711-6 7696-12-0 /	4	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	N; R50/53

**Additional information:** Full text of R-, H- phrases: see section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures:

**Inhalation:**

Take affected persons out into the fresh air. Seek medical attention if symptoms persist.

**Skin contact:**

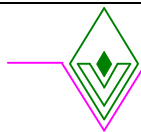
Take off contaminated clothing. Immediately wash with water and soap and rinse thoroughly. Seek medical advice.

**Eye contact:**

Rinse opened eye for several minutes under running water. Seek medical attention if symptoms persist.

**Ingestion:**

Rinse out mouth with water. Do not induce vomiting. Never give anything by mouth to affected person. Keep patient warm at rest. Seek medical advice immediately.



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

In the case of permethrin poisoning can occur hyperactivity, convulsions, paralysis and respiratory arrest.

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

Symptomatic treatment.

#### General advice:

If in doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media:

##### Suitable extinguishing media:

Carbon dioxide (CO<sub>2</sub>).

Dry chemical powder.

Water fog.

Alcohol resistant foam.

##### Unsuitable extinguishing media:

Water jet.

#### 5.2. Special hazards arising from the substance or mixture:

In case of fire, the product emits toxic and irritating fumes.

#### 5.3. Advice for firefighters:

Wear suitable protective equipment including self-contained breathing apparatus. Do not allow run-off from fire fighting to enter drains or water courses. Use water spray to cool unopened containers.

### SECTION 6: Accidental release measures

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

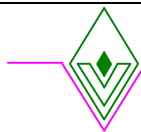
Refer to protective measures listed in sections 7 and 8. Use personal protective equipment.

#### 6.2. Environmental precautions:

Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

#### 6.3. Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, earth, diatomite) and collect into labeled containers for disposal. Contaminated areas wash with water. Contaminated residues dispose according to recommendations given in section 13.



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#### **6.4. Reference to other sections:**

Protective equipment and clothing - see section 8.

Disposal of waste - see section 13.

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

#### **7.1. Precautions for safe handling:**

Always use good personal hygiene procedures when handling chemicals. Ensure good ventilation. Use local ventilation at the source of formation of vapours. Eating, drinking, smoking, as well as food-storage, is prohibited in work-room. Wash hands before breaks and at end of work. Observe directions on label and instruction for use.

#### **7.2. Conditions for safe storage, including any incompatibilities:**

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs.

#### **7.3. Specific end use(s):**

Insecticide use against crawling insects.

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

#### **8.1. Control parameters:**

Not applicable.

#### **8.2. Exposure controls:**

##### **8.2.1. Appropriate engineering controls:**

Ensure good ventilation.

##### **8.2.2. Individual protection measures, such as personal protective equipment:**

###### **Eye/face protection:**

Tightly fitting protective goggles with side protection (EN 166).

###### **Skin protection:**

Wear suitable gloves, solvent resistant. Wear suitable cloth.

###### **Respiratory protection:**

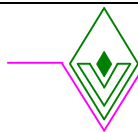
Use local ventilation at the source of formation of vapours. Wear personal respiratory protection with filter for organic vapours (EN149 FFP2S).

###### **Thermal hazards:**

Not applicable.

##### **8.2.3. Environmental exposure controls:**

Avoid release to the environment.



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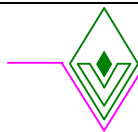
## SECTION 9: Physical and chemical properties

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

Appearance:	White liquid
Odour:	Specific
Odour threshold:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Initial boiling point/boiling range:	No data available
Flash point:	No data available
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	0,9-1,05 g/mL
Solubility(ies):	Miscible with water
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available
Explosive properties:	No data available
Oxidising properties:	No data available

### 9.2. Other information:

No other information.



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**SECTION 10: Stability and reactivity**

**10.1. Reactivity:**

No data available.

**10.2. Chemical stability:**

The product is stable in normal conditions of use and storage.

**10.3. Possibility of hazardous reactions:**

No data available.

**10.4. Conditions to avoid:**

High temperature and fire.

**10.5. Incompatible materials:**

Strong oxidizers.

**10.6. Hazardous decomposition products:**

In the event of thermal decomposition or fire, vapours potentially dangerous to health may be released.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects:**

Permethrin (ISO):

LD50 (oral, Rat): >2000 mg/kg

LD50 (dermal, Rat): >2000 mg/kg

LC50 (inhalation, Rat): >0,45 mg/L

Tetramethrin:

LD50 (oral, Rat): >2000 mg/kg

LD50 (dermal, Rat): >2000 mg/kg

LC50 (inhalation, Rat): >5,63 mg/L

2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether:

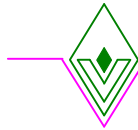
LD50 (oral, Rat): 4570 mg/kg

LD50 (dermal, Rat): >2000 mg/kg

LC50 (inhalation, Rat): >5,9 mg/L (4h)

Primary irritant effect: No irritant effect.

Sensitization: May cause sensitization by skin contact.



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## **SECTION 12: Ecological information**

### **12.1. Toxicity:**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Permethrin (ISO):

LC50 (96 h, Guppy, *Poecilia reticulata*): 8,9 µg/L

LC50 (96h, Common Carp, *Cyprinus carpio*): 0,145 mg/L

EC50 (24 h, *Daphnia magna*): 0,020 mg/L

EC50 (72 h, *Scenedesmus subspicatus*): > 0,022 mg/L

EC50 (3 h, Activated sewage sludge): > 1000 mg/L

LC50 (Acute toxicity Earthworm, *Lampito mauritii*): > 1200 mg/kg

Tetramethrin:

EC50 (48 h) (*Daphnia magna*): 0,47 mg/l

IC50 (72 h) (*Scenedesmus subspicatus*): > 1,36 mg/l

LC50 (96 h, *Brachydanio rerio*), (Fisch): 0,033 mg/l

2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether:

EC50 (48 h, *Daphnia magna*): 0,51 mg/l

IC50 (72 h, *Scenedesmus subspicatus*): 2,09 mg/l

LC50 (96 h, *Cyprinodon variegatus*), (Fisch): 3,94 mg/l

### **12.2. Persistence and degradability:**

No data available.

### **12.3. Bioaccumulative potential:**

No data available.

### **12.4. Mobility in soil:**

No data available.

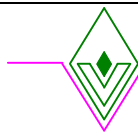
### **12.5. Results of PBT and vPvB assessment:**

No data available.

### **12.6. Other adverse effects:**

Do not flush into surface water or sanitary sewer system.





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**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods:**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations. Disposal must be performed through an authorized waste management firm, in compliance with national and local regulations.

**CONTAMINATED PACKAGING**

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

**SECTION 14: Transport information**

**14.1. UN number:**

UN 3082

**14.2. UN proper shipping name:**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID

**14.3. Transport hazard class(es):**

9,M6

**14.4. Packing group:**

III

**14.5. Environmental hazards:**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**14.6. Special precautions for user:**

No data available.

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:**

No data available.

It is valid for ADR/RID, IMDG/ADN.

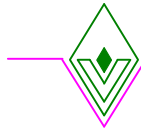
**SECTION 15: Regulatory information**

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

No data available.

**15.2. Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.



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

##### **Legend to abbreviations and acronyms used in the safety data sheet:**

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

RID - Regulations Concerning the International Transport of Dangerous Goods by Rail

CAS - Chemical Abstracts Service

IMDG - International Maritime Code for Dangerous Goods

LC50 - Lethal concentration, 50 percent

LD50 - Lethal dose, 50 percent

##### **Literature references and sources for data:**

- Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

- Regulation (EC) no 1907/2006 of the European parliament and of the council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

- Regulation (EC) No 1272/2008 of the European parliament and of the council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006).

##### **List of relevant R-phrases and hazard statements:**

N - Dangerous for the environment

Xn - Harmful

R20/22 Harmful by inhalation and if swallowed.

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

H332 Harmful if inhaled.

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction..

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

##### **Advice on any training appropriate for workers to ensure protection of human health and the environment:**

Workers should be trained avoid skin contact.

All the information of this safety data sheet is based on our actual knowledge as well as on EEC regulations.

The product has not to be employed for different uses than those indicated in section 1.