

**OPTIGARD COCKROACH BAIT**

Version 2 - This version replaces all previous versions.

Revision Date 13.01.2015

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**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier****Product name** : OPTIGARD COCKROACH BAIT**Design code** : A15276C**1.2 Relevant identified uses of the substance or mixture and uses advised against****Use** : Insecticide**1.3 Details of the supplier of the safety data sheet****Company** : Syngenta Crop Protection AG  
Postfach  
CH-4002 Basel  
Switzerland**Telephone** : +41 61 323 11 11**Telefax** : +41 61 323 12 12**E-mail address** : sds.ch@syngenta.com**1.4 Emergency telephone number****Emergency tele-  
phone number** : +44 1484 538444**SECTION 2: HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**Classification according to Regulation (EU) 1272/2008  
Chronic aquatic toxicity Category 2 H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

**N, Dangerous for the environment****R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.**

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### 2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008

Hazard pictograms



<b>Hazard statements</b>	: H411	Toxic to aquatic life with long lasting effects.
<b>Precautionary statements</b>	: P102 P270 P391 P501	Keep out of reach of children. Do not eat, drink or smoke when using this product. Collect spillage. Dispose of contents/ container to an approved waste disposal plant.
<b>Supplemental information</b>	: EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Hazardous components which must be listed on the label:

Labelling: EU Directives 67/548/EEC or 1999/45/EC

Symbol(s)



**Dangerous  
for the envi-  
ronment**

<b>R-phrase(s)</b>	: R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>S-phrase(s)</b>	: S 2 S13 S20/21 S35  S57	Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke. This material and its container must be disposed of in a safe way. Use appropriate container to avoid environmental contamination.

### 2.3 Other hazards

None known.

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### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

##### Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration
emamectin benzoate	155569-91-8	T, N R23/24/25 R39/23/24/25 R41 R48/25 R50/53	Acute Tox.3; H301 Acute Tox.3; H311 Acute Tox.3; H331 Eye Dam.1; H318 STOT SE1; H370 STOT RE1; H372 Aquatic Acute1; H400 Aquatic Chronic1; H410	0.1 % W/W
denatonium benzoate	3734-33-6 223-095-2	Xn R20/22 R38 R41 R52/53	Acute Tox.4; H302 Acute Tox.4; H332 Skin Irrit.2; H315 Eye Dam.1; H318 Aquatic Chronic3; H412	0.0002 % W/W

Substances for which there are Community workplace exposure limits.

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures

- General advice** : Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control center or physician, or going for treatment.
- Inhalation** : Move the victim to fresh air.  
If breathing is irregular or stopped, administer artificial respiration.  
Keep patient warm and at rest.  
Call a physician or poison control centre immediately.
- Skin contact** : Take off all contaminated clothing immediately.  
Wash off immediately with plenty of water.  
If skin irritation persists, call a physician.  
Wash contaminated clothing before re-use.
- Eye contact** : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Remove contact lenses.  
Immediate medical attention is required.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label.  
Do NOT induce vomiting.

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

**Symptoms** : Lack of coordination  
Tremors  
Dilatation of the pupil

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

**Medical advice** : This material is believed to enhance GABA activity in animals. It is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic mectin exposure.  
Toxicity can be minimized by early administration of chemical absorbents (e.g. activated charcoal).  
If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parental fluid replacement therapy should be given, along with other required supportive measures as indicated by clinical signs, symptoms and measurements.

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**SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing media**

Extinguishing media - small fires  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  
Extinguishing media - large fires  
Alcohol-resistant foam  
or  
Water spray

Do not use a solid water stream as it may scatter and spread fire.

**5.2 Special hazards arising from the substance or mixture**

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).  
Exposure to decomposition products may be a hazard to health.

**5.3 Advice for firefighters**

Wear full protective clothing and self-contained breathing apparatus.

Do not allow run-off from fire fighting to enter drains or water courses.  
Cool closed containers exposed to fire with water spray.

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### SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Refer to protective measures listed in sections 7 and 8.  
Avoid dust formation.

#### 6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system.

#### 6.3 Methods and materials for containment and cleaning up

Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

Do not create a powder cloud by using a brush or compressed air.  
Clean contaminated surface thoroughly.

If the product contaminates rivers and lakes or drains inform respective authorities.

#### 6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8.  
Refer to disposal considerations listed in section 13.

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### SECTION 7: HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

No special protective measures against fire required.  
Avoid contact with skin and eyes.  
When using do not eat, drink or smoke.  
For personal protection see section 8.

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

No special storage conditions required.  
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 feedingstuffs.

#### 7.3 Specific end use(s)

Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

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### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
emamectin benzoate	0.02 mg/m <sup>3</sup>	8 h TWA	SYNGENTA

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product.

#### 8.2 Exposure controls

- Engineering measures** : Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.  
The extent of these protection measures depends on the actual risks in use.  
If airborne dust is generated, use local exhaust ventilation controls.  
Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.  
Where necessary, seek additional occupational hygiene advice.
- Protective measures** : The use of technical measures should always have priority over the use of personal protective equipment.  
When selecting personal protective equipment, seek appropriate professional advice.  
Personal protective equipment should be certified to appropriate standards.
- Respiratory protection** : No personal respiratory protective equipment normally required.  
A particulate filter respirator may be necessary until effective technical measures are installed.
- Hand protection** : Chemical resistant gloves are not usually required.  
Select gloves based on the physical job requirements.
- Eye protection** : Eye protection is not usually required.  
Follow any site specific eye protection policies.
- Skin and body protection** : No special protective equipment required.  
Select skin and body protection based on the physical job requirements.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

- Physical state** : solid
- Form** : No data available
- Colour** : No data available
- Odour** : No data available
- Odour Threshold** : No data available

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<b>pH</b>	: No data available
<b>Melting point/range</b>	: No data available
<b>Boiling point/boiling range</b>	: No data available
<b>Flash point</b>	: No data available
<b>Evaporation rate</b>	: No data available
<b>Flammability (solid, gas)</b>	: No data available
<b>Lower explosion limit</b>	: No data available
<b>Upper explosion limit</b>	: No data available
<b>Vapour pressure</b>	: No data available
<b>Relative vapour density</b>	: No data available
<b>Density</b>	: No data available
<b>Solubility in other solvents</b>	: No data available
<b>Partition coefficient:</b>	: No data available
<b>n-octanol/water</b>	
<b>Auto-ignition temperature</b>	No data available
<b>Thermal decomposition</b>	: No data available
<b>Viscosity, dynamic</b>	: No data available
<b>Viscosity, kinematic</b>	: No data available
<b>Explosive properties</b>	: No data available
<b>Oxidizing properties</b>	: No data available

**9.2 Other information****Bulk density** : 1 g/ml**SECTION 10: STABILITY AND REACTIVITY****10.1 Reactivity**

See section 10.3 "Possibility of hazardous reactions".

**10.2 Chemical stability**

The product is stable when used in normal conditions

**10.3 Possibility of hazardous reactions**

No hazardous reactions by normal handling and storage according to provisions.

**10.4 Conditions to avoid**

No decomposition if used as directed.

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**10.5 Incompatible materials**

No substances are known which lead to the formation of hazardous substances or thermal reactions.

**10.6 Hazardous decomposition products**

Combustion or thermal decomposition will evolve toxic and irritant vapors.

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**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects**

**Acute oral toxicity** : LD50 female Rat, > 5,000 mg/kg

Acute inhalation toxicity  
emamectin benzoate : LC50 male Rat, > 1.049 mg/l , 4 h  
LC50 female Rat, 0.663 mg/l , 4 h

**Acute dermal toxicity** : LD50 male and female Rat, > 5,050 mg/kg

**Skin corrosion/irritation** : Rabbit: Practically non-irritating.

**Serious eye damage/eye irritation** : Rabbit: Moderately irritating

**Respiratory or skin sensitisation** : Guinea pig: Not a skin sensitizer in animal tests.

Germ cell mutagenicity  
emamectin benzoate : Did not show mutagenic effects in animal experiments.

Carcinogenicity  
emamectin benzoate : Did not show carcinogenic effects in animal experiments.

Teratogenicity  
emamectin benzoate : Did not show teratogenic effects in animal experiments.

Reproductive toxicity  
emamectin benzoate : Did not show reproductive toxicity effects in animal experiments.

STOT - single exposure  
emamectin benzoate : Exposure routes: Ingestion, Inhalation, Skin contact  
A single exposure may damage the central and peripheral nervous systems.

STOT - repeated exposure  
emamectin benzoate : Central nervous system effects in chronic/subchronic animal tests.

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**SECTION 12: ECOLOGICAL INFORMATION**



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**12.1 Toxicity**

**Toxicity to fish** : LC50 *Lepomis macrochirus* (Bluegill sunfish), > 100 mg/l , 96 h  
Derived from components.

**Toxicity to aquatic invertebrates** : EC50 *Daphnia magna* (Water flea), 1 mg/l , 48 h  
Derived from components.

**Toxicity to aquatic plants** : EC50 *Pseudokirchneriella subcapitata* (green algae), > 3.9 mg/l , 5 d  
Derived from components.

**12.2 Persistence and degradability**Biodegradability

emamectin benzoate : Not readily biodegradable.

## Stability in water

emamectin benzoate : Degradation half life: 0.4 - 1.74 d  
Not persistent in water.

## Stability in soil

emamectin benzoate : Degradation half life: 0.335 - 2.56 d  
Not persistent in soil.

**12.3 Bioaccumulative potential**

emamectin benzoate : Does not bioaccumulate.

**12.4 Mobility in soil**

emamectin benzoate : Emamectin benzoate is immobile in soil.

**12.5 Results of PBT and vPvB assessment**

emamectin benzoate : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).  
This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**12.6 Other adverse effects**

None known.

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**SECTION 13: DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods**

**Product** : Do not contaminate ponds, waterways or ditches with chemical or used container.  
Do not dispose of waste into sewer.  
Where possible recycling is preferred to disposal or incineration.  
If recycling is not practicable, dispose of in compliance with local regulations.

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**Contaminated packaging** : Empty remaining contents.  
Triple rinse containers.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.  
Do not re-use empty containers.

**SECTION 14: TRANSPORT INFORMATION****Land transport (ADR/RID)**

**14.1 UN number:** UN 3077  
**14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (EMAMECTIN BENZOATE)  
**14.3 Transport hazard class(es):** 9  
**14.4 Packing group:** III  
Labels: 9  
**14.5 Environmental hazards :** Environmentally hazardous  
**Tunnel restriction code:** E

**Sea transport(IMDG)**

**14.1 UN number:** UN 3077  
**14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (EMAMECTIN BENZOATE)  
**14.3 Transport hazard class(es):** 9  
**14.4 Packing group:** III  
Labels: 9  
**14.5 Environmental hazards :** Marine pollutant

**Air transport (IATA-DGR)**

**14.1 UN number:** UN 3077  
**14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (EMAMECTIN BENZOATE)  
**14.3 Transport hazard class(es):** 9  
**14.4 Packing group:** III  
Labels: 9

**14.6 Special precautions for user**

none

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**SECTION 15: REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

GHS-Labeling

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Hazard pictograms



<b>Hazard statements</b>	:	H411	Toxic to aquatic life with long lasting effects.
<b>Precautionary statements</b>	:	P102 P270 P391 P501	Keep out of reach of children. Do not eat, drink or smoke when using this product. Collect spillage. Dispose of contents/ container to an approved waste disposal plant.
<b>Supplemental information</b>	:	EUH401	To avoid risks to human health and the environment, comply with the instructions for use.
<b>Remarks</b>	:	Classified using all GHS hazard classes and categories. Where the GHS contains options, the most conservative option has been chosen. Regional or national implementations of GHS may not implement all hazard classes and categories.	

Hazardous components which must be listed on the label:

### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

## SECTION 16: OTHER INFORMATION

### Further information

Full text of R-phrases referred to under sections 2 and 3:

R20/22	Harmful by inhalation and if swallowed.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R38	Irritating to skin.
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R41	Risk of serious damage to eyes.
R48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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Full text of H-Statements referred to under sections 2 and 3.

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H370	Causes damage to the nervous system.
H372	Causes damage to the nervous system through prolonged or repeated exposure.
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.

Full text of other abbreviations

ADR:	European Agreement Concerning the International Carriage of Dangerous Goods by Road	RID:	Regulations concerning the International Carriage of Dangerous Goods by Rail
IMDG:	International Maritime Code for Dangerous Goods	IATA-DGR:	International Air Transport Association Dangerous Goods Regulations
LC50:	Lethal concentration, 50%	LD50:	Lethal dose, 50%
EC50:	Effective dose, 50%	GHS:	Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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