

The Powerful
Cockroach Bait
For Effective
Integrated Cockroach
Management
Programmes

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Optigard™ at a glance

Make the cockroaches disappear. When customers call about a cockroach problem, that's all they want. An effective cockroach control programme can be achieved with integrated pest management approaches. Optigard Cockroach Bait from Syngenta offers pest control managers additional tool to control cockroaches effectively.

Optigard[™] Cockroach Bait has little to no odour and won't stain treated surface. The consistency of the formulation matrix is designed to hold its shape after application and resist degradation due to high temperatures.

Its active ingredient, emamectin benzoate, is the advanced generation derivative of avermectin, a unique active ingredient not found in other cockroach baits. Emamectin has a dual mode of action that help reduce the potential for resistance.

Optigard™ Cockroach Bait is a non-repellent chemistry that is highly active against a wide range of pest cockroach species, including bait averse strains. Studies show Optigard™ Cockroach Bait retains its palatability for than two full weeks after baiting.



Mode of Action:

- The active ingredient in Optigard^w Cockroach Bait, emamectin benzoate, stimulates the release of gamma aminobutyric acid (GABA) in the insect, which is an inhibitory neurotransmitter, leading to paralysis and death.
- Cockroaches are attracted to the highly palatable bait matrix, which, on consumption delivers an insecticidal dose
 of emamectin benzoate. Cockroaches that feed on the bait will return to their harborage where the active ingredient
 may be passed to other cockroaches, including nymphs that do not actively forage for food. Thus a lager number of
 cockroaches than those originally feeding on the bait are controlled.

Product Description and Packaging:

Optigard™ Cockroach Bait is an easy-to-use, 0.1%, gel formulation packaged in a 30g syringe.

Product Profile For Optigard™ Cockroach Bait

- Excellent broad-spectrum control of many cockroach species including: German, normal and bait averse strains, Americans and Orientals.
- Non-repellent chemistry, unique dual mode of action with no documented resistance to the active ingredient.
- · Excellent handling characteristics.
- · Remains attractive to cockroaches even after aging for at least 2 weeks.
- · Resists staining and dripping.
- Secondary kill via coprophagy and necrophagy.

Product safetu

Common Name: Emamectin benzoate

Chemical Name: 4"-deoxu-4"-(methulamino)-(4"R)-avermectin B1 benzoate

CAS Registry No.: 155569-91-8 Chemical Class: Avermectin

Chemical Structure:

Toxicological Profile

Hazard indictor	Species	Optigard 0.1% Cockroach Bait	
Oral LD50	Female Rat	>5000 mg kg ⁻¹	
Dermal LD50	Rat	>5050 mg kg ⁻¹	
Inhalation	Rat	>1.049 mg/l,4 hours	
Eye Contact	Rabbit	Mildly-irritating	
Skin Contact	Guinea pig	Non irritating, non-sensitizing	

Application of Optigard™ Cockroach Bait

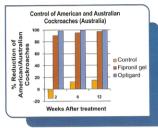
- Use spot treatments in the crack and crevices where cockroaches nest or forage and/or in areas of entry into structure.
- Apply up to 1 3 dots (1 dot about 0.5g) of bait per spot.
- This product can be applied using the syringe applicator or bait injector tools.

Pest infestation level	German cockroach (Blattella germanica)	American cockroach (Periplaneta americana,
Low	1 dot /m² treated area	2 dots /m² treated area
High	2 dots /m² treated area	3 dots /m² treated area
Each dot is 0.25 to 0.5g produ	ct. Bait may also be applied as a bead	approximately 5 cm long.
Monitor at every 14 days inte	rval and re-apply bait if necessary.	

Where to place Optigard™ Cockroach Bait.









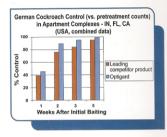


Table 1: Laboratory performance of Optigard versus imidacloprid gel bait against *Blattella germanica* (German cockroach), USM, Penang (Reference No: SGT/002/2006).

Formulation	Life stages	N	LT ₉₅	Mortality at 14 days (%)
Optigard 0.1%	Male	40	2.53	100.00
	Female	40	2.54	100.00
	Mid-instar nymph	78	3.59	100.00
Imidacloprid 2.15%	Male	40	4.96	100.00
	Female	40	5.44	100.00
	Mid-instar numph	80	47.33	78.75

Table 2: Laboratory performance of Optigard versus Imidacloprid against *Periplanetα americana* (American cockroach), USM, Penang (Reference No: SGT/001/2006).

Formulation	Life stages	N	LT ₉₅	Mortality at 14 days (%)
Optigard 0.1%	Male	40	8.38	100.00
	Female	40	7.95	100.00
	Mid-instar nymph	78	13.59	97.50
Imidacloprid 2.15%	Male	40	0.86	89.47
	Female	40	11.38	89.47
	Mid-instar numph	80	322.06	70.0



Why Choose Optigard™ Cockroach Bait?

- Odour-free and preferred formulation colour.
- Remains palatable for at least 14 days after baiting (indoors and outdoors).
- · Packaged in ready-to-use syringe with plunger for easy application.
- Attractive bait matrix for effective broad spectrum control of cockroaches.



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READ THE LABEL BEFORE USE: USE PESTICIDES SAFELY
Optigard™ Cockroach Bait contains emamectin benzoate
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2007 Symptoms Crop Protection AS, Schwarzwadaller 215, P.O. Broc CH-4000 Basel, Switzerland, Rie -44 61 61 232 1111, Rev. 41 61 322 5800. Whice swww.sympema.com. OPTIGABON's a trademark and the Symptoms to pool as a registreat forward and self-silvers sometimes and its alliens switzer with their products to be a registreat forward and self-silvers sometimes and its alliens switzers which their products to be a registreat forward and security and self-silvers and self-silvers sometimes and its alliens switzers and self-silvers and self-silvers and self-silvers and self-silvers sometimes and self-silvers and self-silvers and self-silvers self-silvers and self-silvers sometimes and self-silvers self-silvers and self-silvers se