

PROFESSIONAL PEST MANAGEMENT

Cockroach Bait For Integrated Cockroach Management Programmes

FOR LIFE UNINTERRUPTED™

 **Optigard® Cockroach**
Bait

syngenta.

TM

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 more than two full weeks after baiting.

Mode of Action:

- ▶ The active ingredient in Optigard® 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 larger number of cockroaches than those originally feeding on the bait are controlled.

Product Description and Packaging:

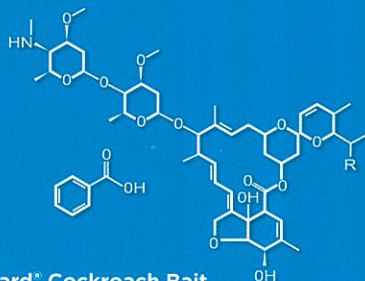
Optigard® Cockroach Bait is an easy-to-use, 0.1%, gel formulation packaged in a 30g syringe.

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 safety

Common Name: Emamectin benzoate
Chemical Name: 4"-deoxy-4"-(methylamino)-(4"R)-avermectin B1 benzoate
CAS Registry No.: 155569-91-8
Chemical Class: Avermectin
Chemical Structure:



Application of Optigard® Cockroach Bait

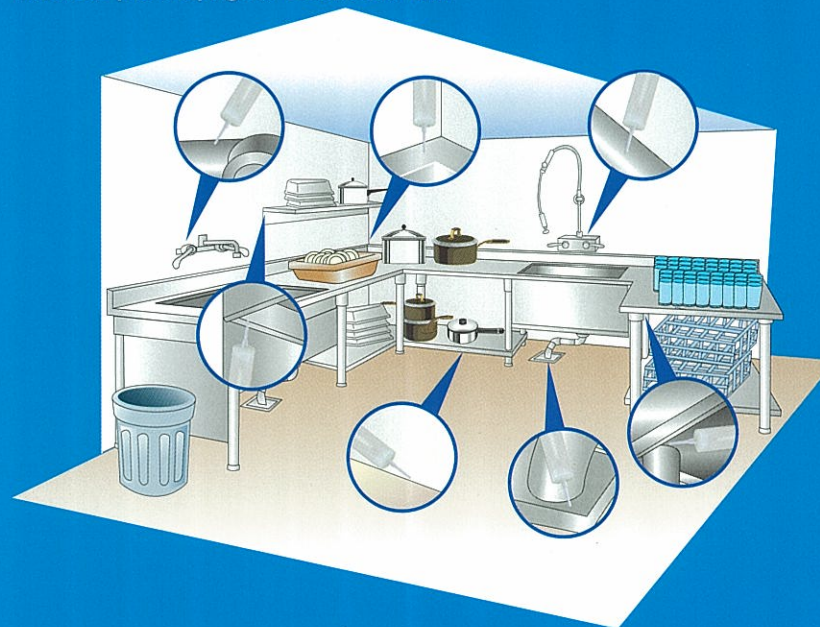
- Use spot treatments in the crack and crevices where cockroaches nest or forage and/or in areas of entry into structure.
- Apply up to 1 – 3 dots of bait per spot.
- This product can be applied using the syringe applicator or bait injector tools.

Toxicological Profile

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

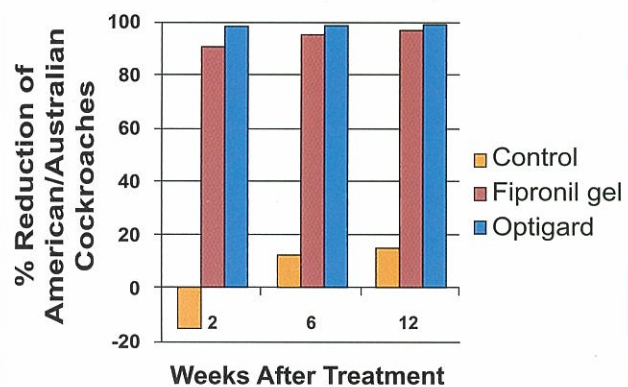
Pest infestation level	German cockroach (<i>Blattella germanica</i>)	American cockroach (<i>Periplaneta americana</i>)
Low	1 dot /m ² treated area	2 dots /m ² treated area
High	2 dot /m ² treated area	3 dots /m ² treated area
Each dot is 0.25 to 0.5g product. Bait may also be applied as a bead approximately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

Where to place Optigard® Cockroach Bait

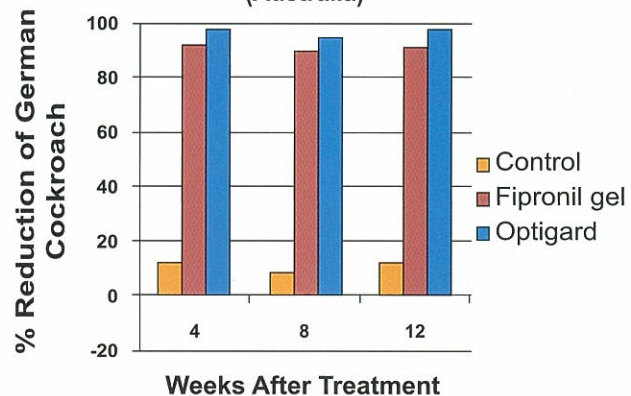


Product performance

Control of American and Australian Cockroaches (Australia)



Control of German Cockroach (Australia)



German Cockroach Control (vs. pretreatment counts) in Apartment Complexes - IN, FL, CA (USA, combined data)

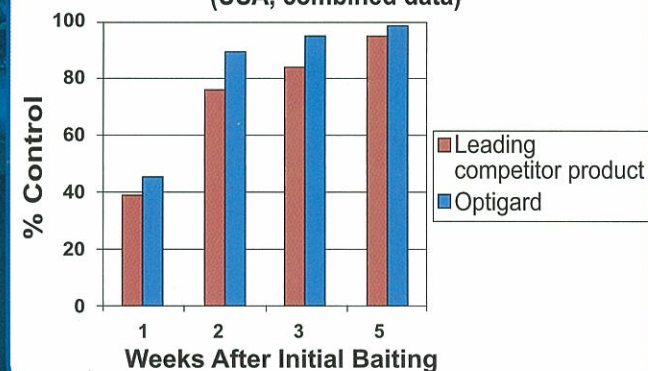


Table 1: Laboratory performance of Optigard versus imidacloprid gel bait against *Blattella germanica* (German cockroach), USM, Penang (Reference No: SGT/002/2006).

Formulation	Life stages	N	LT95	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 nymph	80	47.33	78.75

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

Formulation	Life stages	N	LT95	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 nymph	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..

FOR LIFE UNINTERRUPTED™



USE INSECTICIDES SAFELY. ALWAYS READ THE LABEL AND PRODUCT INFORMATION BEFORE USE.
Optigard® Cockroach Bait is a trademark of a Syngenta Group Company.
© Syngenta Asia Pacific Pte.Ltd, No. 1 Harbour Front Avenue, #03-03 Keppel Bay Tower, Singapore 098632.
Tel: +65 6333 6400 Fax: +65-6338 1594 Email: ppm.eame@syngenta.com Web: www.syngenta.com