

Build your bed bug business

Phantom[®]
Insecticides

□ - BASF

We create chemistry

Add new customers and generate recurring revenues by offering an effective, long-lasting bed bug prevention plan using genuine **Phantom** insecticides.

With their superior residual control, including on mattresses where bed bugs love to hide, **Phantom** insecticides are proven effective even on bed bugs that have become resistant to pyrethroid treatments. The active ingredient actually becomes more toxic once inside the insect, leading to reliable, proven control. The combination of efficacy against pyrethroid-resistant strains plus long residual control makes **Phantom** insecticides the ideal choice for your most effective bed bug control program.

Two different **Phantom** insecticide formulations, **Phantom**[®] **SC** Termiticide-Insecticide as a dilutable concentrate and **PT**[®] **Phantom**[®] **II** Pressurized Insecticide as a ready-to-use aerosol, control tough bed bug problems in residential and commercial settings.

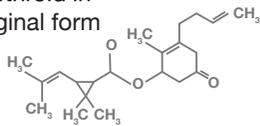
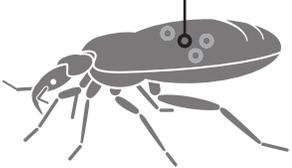
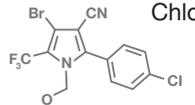
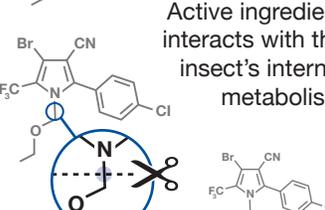
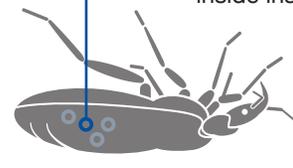
Rely on **Phantom** insecticides for superior preventive control and resistance management.

- **Resistance buster:** Novel mode of action shows great efficacy on pyrethroid-resistant bed bugs and pyrethroid-susceptible bed bug strains.
- **Long residual:** Kills new bed bugs entering the home as a preventive solution, even on mattress fabric, masonite and fiber-board surfaces.
- **Labeled for mattresses:** Gets at bed bugs residing in tufts, folds, sides and seams.

Overcome resistance with a novel mode of action

Phantom insecticides operate in stealth mode: bed bugs can't detect them, so they don't scatter or avoid contact when applied. The active ingredient enters insects unobstructed and goes to work, delivering greater control with fewer callbacks.

How Phantom, a pro-insecticide, helps manage resistance

Bed bugs may become resistant to traditional insecticides like pyrethroids	Bed bugs are less likely to develop resistance to a pro-insecticide like Phantom
<p>A pyrethroid in its original form</p>  <p>Pyrethroid processed within insect</p>   <p>Pyrethroid is neutralized by insect's own enzymes (or other avenues) as part of its metabolism</p>	<p>Chlorfenapyr in its original form</p>  <p>Active ingredient interacts with the insect's internal metabolism</p>  <p>More toxic version is created inside insect</p>  <p>Molecule is altered by the insect's own internal process</p>

Insect Survives

Limitations to pyrethroid insecticides:

- Insects use their internal enzymes to break down insecticides such as pyrethroids.
- Resistant strains may possess higher levels or more efficient forms of these enzymes.
- Insects destroy the toxin or neutralize the toxic molecules within their bodies.

Insect Dies

Advantages of a pro-insecticide like Phantom insecticide:

- After entering the insect, it is metabolized into a chemical form that is more toxic to the insect than in its original form.
- Since the insect's own chemical reaction creates the more toxic form of the active ingredient, the chance of developing resistance to the active ingredient is greatly minimized.

To learn more, visit pestcontrol.basf.us or contact your local BASF representative.

Phantom insecticides: Two effective formulations for wherever bed bugs hide

Phantom® SC Termiticide-Insecticide

Phantom Termiticide-Insecticide solves the toughest pest problems. Formulated as a dilutable, the powerful active ingredient chlorfenapyr is known for its long-lasting efficacy and novel mode of action.



PT® Phantom® II Pressurized Insecticide

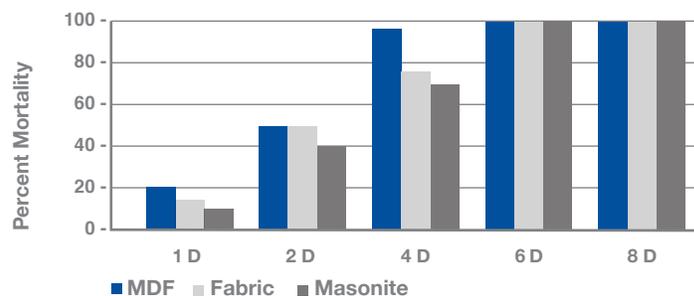


There is no better way to maximize the effect of a pesticide than to place it where pests spend a majority of their time – cracks and crevices. Ready-to-use and armed with injection straws, **PT® Phantom® II** Pressurized Insecticide is easy to apply directly to the sites where it works the hardest while using a minimal amount of product. You save time and money without sacrificing quality.

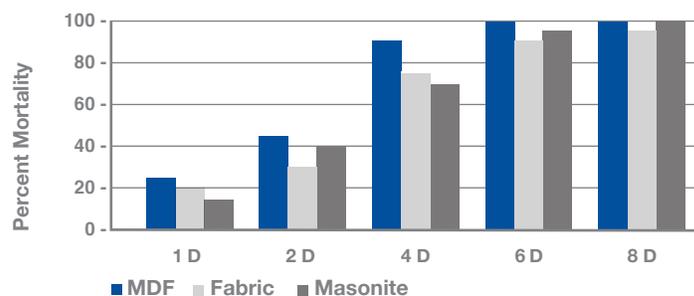
Long-lasting residual control

Phantom SC efficacy of 3 month and 6 month aged medium-density fiberboard, fabric and masonite on pyrethroid-resistant CIN1 bed bugs

3-month-aged dried residues



6-month-aged dried residues



The active ingredient in Phantom insecticides, chlorfenapyr, is often referred to as a resistance buster. These charts show excellent efficacy on the CIN1 pyrethroid-resistant strain of bed bugs. In addition to being a resistance buster, Phantom insecticides also show tremendous residual control with good efficacy on residues aged 3 months and 6 months.

Drs. Ken Haynes & Mike Potter University of KY

DO NOT apply to entire mattress; apply only to edges, tufts, folds, sides and seams. Always read and follow label directions.

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