

Fendona™ CS Insecticide

Breakthrough Technology Yields a Premier Perimeter Pest Solution

*A potent new active ingredient and
advanced encapsulation process from BASF that means business.*



BASF introduces Fendona™ CS controlled release insecticide: a product designed to help you beat tough-to-control spiders, scorpions and mosquitoes; everyday perimeter pests like ants and beetles; and occasional invaders like earwigs and pillbugs. Fendona CS insecticide is labeled for over 60 pests and a broad range of interior and exterior surfaces

and use sites. In trials, it outperformed competitive products, satisfying customers and PMPs alike.

“When a new insecticide comes to market, we look at efficacy, residual, knockdown and ease of use,” says Travis Aggson, vice president at American Pest Management in Manhattan, KS. “But the No. 1 question we ask when deciding whether to switch is this:

Does the new product reduce our callback rate? The answer with Fendona CS insecticide is a definite YES.” (See case study on pg. 4.)

Why is a company’s callback rate so important? Because fewer callbacks translate into not only labor and material savings for PMPs, but also customer satisfaction — arguably the ultimate measure of success. Dave



Biegacki, urban pest control product manager at BASF, says that helping PMPs develop positive relationships with customers is BASF's top priority.

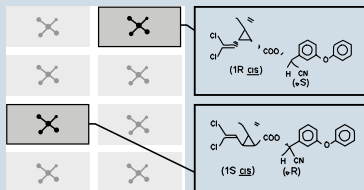
"When we say 'we create chemistry,' we're not just talking about the innovative physical chemistries that make our products work so well; we're also talking about the chemistry between you and your customers," Biegacki says. "We realize that you put your reputation on the line with every service call. Our role is to support you out there with products and solutions that meet or exceed your customers' growing demands for efficacy, safety and sustainability. We understand that customer satisfaction leads to your business' success."

Brian George, a general pest technician at Dayton's Pest Control, saw firsthand how Fendona CS insecticide creates positive chemistry when he tested it on a variety of residential accounts in Knoxville, TN.

"Fendona worked so well on our regular pest control accounts during last summer's trials that we decided to focus this spring's trials on problem accounts — properties where the environment is more conducive to infestations," he says. "And just as before, I achieved 100-percent control on every pest I treated: ants, spiders, silverfish, earwigs, ground beetles, and American and smokybrown roaches. Fendona is effective and offers great residual. We plan to continue using it for quarterly preventive perimeter treatments." ●

The Benefits of Fendona™ CS Insecticide

- **Potent New Active Ingredient** – With four times the strength of cypermethrin, a little alpha-cypermethrin goes a long way. Faster results, longer residual and fewer callbacks save you money and ensure an exceptional level of customer satisfaction.
- **Superior Efficacy** – Fendona™ CS insecticide is labeled to control over 60 pests.
- **Small but Mighty Capsules** – Tiny capsules broaden coverage and turn surfaces into "minefields" so that contact is virtually unavoidable.
- **Efficient Kill** – The active ingredient quickly diffuses through the advanced microcaps once they contact the lipophilic waxy cuticle of pests, resulting in efficient kill.
- **Rain Fastness** – Advanced capsule technology maintains and protects the integrity of the lipophilic capsules from water and sunlight, and they won't absorb into porous surfaces.
- **Technician Satisfaction** – Fendona CS insecticide is fully capped, helping to reduce the burning, itching skin irritation that many pyrethroids cause.



4x
as active as
cypermethrin

**Billions of
microcaps
with fast kill**

The activity of WL 85871 in topical application and life cycle assays against a range of insect species appropriate to non-crop outlets. R.J. Knight, Shell Research Limited, January 1983.



HOW IT WORKS:

Alpha-cypermethrin + Advanced Encapsulation Technology



Two innovations — a purified active ingredient (AI) and a unique microcap casing — differentiate Fendona™ CS insecticide. While the AI, the pyrethroid alpha-cypermethrin, isn't a brand-new active ingredient (it's been used in agricultural and public-health applications in other areas of the world), it is new to U.S. pest management markets. The product's encapsulation process is quite new. It produces smaller and many more capsules, and facilitates diffusion of the active ingredient from inside the capsule into the lipophilic cuticles of arthropod pests.

In short, says BASF Technical Service Representative Bob Hickman, "You have many more capsules, and what's inside is much more potent and gets delivered more efficiently."

Hickman explains the potency: "We isolated two of cypermethrin's eight isomers — a powerful combo

— essentially eliminating any 'dead weight' to arrive at a formulation that's four times more active than cypermethrin. You can use significantly less alpha-cypermethrin and achieve superior results."

Next, BASF scientists developed an advanced encapsulation technology that encases the active ingredient in tiny lipophilic capsules. "The smaller size means that a greater number of capsules are distributed over an area, increasing the chance of contact with insects," Hickman continues. "Once contact is made with the pest, the alpha-cypermethrin quickly diffuses through the capsule wall into the lipophilic cuticle of the pest." (Lipophilic, or "fat-loving," substances dissolve in fats and other lipophilic substances, so as soon as these microcaps come into contact with the lipophilic insect cuticle, the AI penetrates the pest.)

Fendona CS insecticide features a unique microcap casing that facilitates diffusion of the active ingredient from inside the capsule into the lipophilic cuticles of arthropod pests.

Encapsulation offers other benefits as well: It can reduce paresthesia, the skin irritation technicians can experience when handling pyrethroids; it protects the AI from rain and the sun's UV rays; and it does not absorb into porous surfaces, thus increasing its residual.

"At BASF, we are constantly working to improve our products, making them more efficacious and environmentally sound," Hickman says. "Fendona CS insecticide is the type of innovation we get very excited about, because we know that we're helping our customers build their businesses by bringing another safe, sustainable, effective solution to their customers." ●

Protecting the World — And Now, Your Customers — From Mosquitoes



ALTHOUGH ONLY RECENTLY registered by the EPA for urban pest management in the United States, Fendona™ insecticide has been used around the world to protect citizens of countries plagued by malaria, Zika virus, West Nile virus and other mosquito-borne diseases. In fact, the World Health Organization (WHO) recommends alpha-cypermethrin, the active ingredient in Fendona, as well as Interceptor® bed nets from BASF, for malaria control, based on its low-dose requirements, strong

safety profile and efficacy.¹

"Fendona has been used with great success in countries around the world where the risk of vector-borne diseases is high," says Dave Biegacki of BASF. "Now PMPs can use Fendona CS insecticide here in the U.S. to kill the mosquitoes that spread diseases. Our studies show that Fendona CS insecticide offers better rain fastness and months of residual control of mosquitoes on their resting surfaces than some popular competitive products."

¹ http://www.who.int/whopes/Insecticides_IRS_2_March_2015.pdf?ua=1

[CASE STUDY]

American Pest Management Puts Fendona™ CS Insecticide to the Test

When American Pest Management participated in Fendona™ CS insecticide trials over a 90-day period last fall, they noted its outstanding efficacy and residual, and ease of use. What stood out the most for them, though, according to Vice President Travis Aggson, ACE, was the positive impact Fendona CS insecticide had on their callback rate.

“We take care of a development with 4,415 homes divided into six very similar neighborhoods. The main issues in these homes are ants, spiders and beetles. We used Fendona CS insecticide in two of the six neighborhoods and continued using a competing product in the other four,” explains Aggson.

“Our callback rate in those four was 8 percent (239 callbacks from 2,984 homes). The callback rate for the Fendona CS insecticide neighborhoods was only 5 percent (71 callbacks from 1,431 homes),” he said. “That 3-percent difference saved us 43 service calls — more than a full day’s work that we were able to reallocate. Had we used Fendona CS insecticide in all of the homes, we could have saved more than three days’ work. To us, that’s reason to switch.”

Aggson says that American Pest



J & C IMAGING

When servicing residential neighborhoods, a modest decline in a company's callback rate can have a positive impact on its bottom line. (Above) Travis Aggson, vice president, American Pest Management.

Management typically selects brand-name products that provide a residual of at least 90 days. He likes the broad label of Fendona CS insecticide, and looks forward to trying it on black widow and brown recluse spiders, and scorpions. He also plans to try it in the company’s new mosquito program.

“The technicians who used Fendona

CS insecticide are really excited about it: In addition to its efficacy and residual, it’s easy to calculate and to clean out of equipment; they can use it for interior and exterior applications; and it doesn’t irritate their skin,” he shares. “They can’t wait to try it in other types of accounts to see how much of a difference it can make.” ●

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