

PRODUCT DETAILS. The polymer in Suspend PolyZone protects deltamethrin from the degrading forces of substrates, explained Bayer Product Development

Manager Byron Reid. Porous wood and mulch can absorb an active ingredient, making it unavailable to pests. High-alkaline surfaces like cement can accelerate the rate at which the chemical breaks down. The polymer shields the active ingredient from these surfaces, making it more available to pests.

It also helps the active ingredient stay put, significantly reducing wash-off from rain and irrigation systems. This means less pyrethroid migrates to inappropriate and unproductive areas, like urban water systems. Suspend PolyZone will be labeled in California, where

this is of particular concern, said Reid.

“We’re hopeful PolyZone can provide a more environmentally sensitive form of pyrethroid” that PMPs can use to deliver “the caliber of service they and their customers expect but without unintended consequences,” said Reid.

Using “softer products” often requires more service visits to satisfy the customer, he added.

Because Suspend PolyZone’s longer residual maintains control with fewer applications, PMPs “can use less of it and still get the efficacy they require to satisfy their customers’ needs,” said Eric Lentz, head of marketing for Bayer pest products. This may let PMPs adjust service frequency, such as shifting from a bi-monthly to same-priced quarterly service or from quarterly to tri-annual visits.

By removing one service from the interval, “your efficiencies are compounded tremendously,” said Reid, resulting in an enhanced bottom line.

IN THE FIELD. Aging and field tests show the potential. Bayer treated concrete, wood, glazed and unglazed tiles, left them outdoors exposed to weather, irrigation systems and sunlight, and then analyzed the surfaces periodically for residual deposits.

Using a polymer developed for a completely different market, Bayer has created a slow-release delivery system for deltamethrin that withstands aggressive surfaces and adverse weather conditions for at least 90 days.

As a perimeter spray, Suspend PolyZone stays where it is applied to reduce wash-off and target a broad spectrum of pests. It may even let pest management professionals extend the time between scheduled service visits to improve profit.

Richie Kidwell, managing partner of Florida Pest & Lawn in Orlando, field tested the product and found it “significantly lowered our labor costs.” So did Charlie Asberry, service manager of All-Rite Pest Control in Lexington, Ky. He had four callbacks in 150 applications compared to 23 callbacks with a different pyrethroid product.

By Anne Nagro

IN THE ZONE

This pyrethroid concentrate uses a polymer to deliver a 90-day outdoor residual, plus environmental and business benefits, Bayer says.



Polymers surround and protect the crystallized particles of active ingredient (deltamethrin) in Suspend PolyZone.

How Does It Work?

Suspend PolyZone is one of the first liquid formulation innovations to come along in some time. What makes this new product so unique?

First the Poly... Bayer researchers, working with material science colleagues, analyzed countless polymers for one that would protect deltamethrin from erosion and surface degradation and slowly make it available to pests over a long period.

Most didn't pass muster, until they found a patented class of polymers developed by another Bayer division for a different market. "We just deployed them in a different utility than they were originally conceived for," explained Bayer Product Development Manager Byron Reid.

The polymer is what makes the product different. The Suspend insecticide is the same the market has been using for many years, said Reid.

Then the Zone... The combination of the two allows deltamethrin to disperse evenly while a polymer layer adheres it to the target surface.

When the liquid application evaporates, a lattice pattern of polymer and active ingredient is left behind. This is the controlled release kill zone.

The polymer surrounds crystallized particles of active ingredient, protecting them like a shield from weather, irrigation systems and other environmental conditions.

As thinner and thicker layers of polymer wear away, the deltamethrin remains secure and available over 90 days to a broad spectrum of pests, including ants, spiders, cockroaches and ticks.

Suspend PolyZone was designed primarily for outdoor perimeter use, but is well suited for harsh interior environments like commercial kitchens, said Eric Lentz, head of marketing for Bayer pest products.

A New Insect Delivery System. Years of research and trial-and-error went into creating the PolyZone technology.

It's not the same as grabbing a polymer off the shelf and pouring it into the tank, said Reid. "You're not going to have look-alike products that perform the same way."

Bayer prides itself on anticipating trends and providing solutions specific to the pest management industry, said Lentz. The PolyZone technology is a good example of bridging "the synergies of the larger Bayer."

The polymer molecule is still under patent protection. The combination product also will be protected under additional intellectual property applications.

Want to "see" how Suspend PolyZone technology works? Watch this video: www.pctonline.com/Suspend-Polyzone.aspx

Tests in multiple countries found Suspend PolyZone performed well in a variety of harsh environments, providing "documented outdoor residual activity of 90 days or more," said Volker Gutschmann, Bayer product development manager, Monheim, Germany. "This is not a microcap. This is a unique formulation featuring a proprietary polymer that offers some real benefits to the industry." Bayer also gave the product to PMPs to determine how it would perform under actual field conditions.

Florida Pest & Lawn's Kidwell saved hours on spider control jobs. It's common for spider webs to accumulate on commercial building exteriors, requiring monthly sweeping, especially near lights. With Suspend PolyZone, callbacks and web reports were "way down," he said.

"The efficacy and elasticity seems to be much greater with the new formulation as it does not break down as fast as stand-alone products," Kidwell reported.

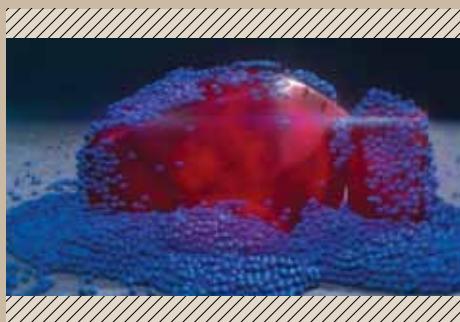
He also had good results with ants. Kidwell was receiving weekly callbacks at a multi-building campus. He said he hadn't received a callback in three months after applying the product to the buildings' exteriors.

Suspend PolyZone was used successfully in mosquito vector control and malaria programs in Africa where the harsh environment destroys un-

protected pyrethroids. Suspend PolyZone reduced labor costs, allowing the government to extend its funds for spraying.

Suspend won't be the only Bayer pest product to go high-tech. "We are looking at utilizing PolyZone in other brands," said Lentz. **PCT**

The author is a frequent contributor to PCT magazine. She can be reached at anagro@giemedia.com.



As thinner and thicker layers of polymer wear away, the deltamethrin remains secure and available for 90 days to a variety of pests.



Because Suspend PolyZone has been formulated to stand up to weather and other environmental conditions, it is ideal for outdoor use.