



smartsolutions |



fleas

BASF Pest Control Solutions
The Evolution of Better Pest Control

 **BASF**

The Chemical Company

The Problem with Fleas

Once among the top reasons for calls to pest management professionals (PMPs), flea problems appeared to decline significantly toward the end of the 20th century. With improved flea control products, and new on-animal products introduced, homeowners began relying more on vets than PMPs for flea control.

Compared to just a few years ago, however, flea business is up throughout the United States. Homeowner complacency in treating their pets and an increase in urbanization, displacing wildlife such as raccoons, skunks, and opossums may well have been factors in this flea resurgence.

Whatever the cause, fleas are again a problem no PMP should be ill-prepared to effectively and efficiently control.

The SmartSolution for Fleas from BASF Corporation was designed to help you not only reliably control fleas, but also to minimize technician time and labor and homeowner inconvenience. It combines a strategic inspection and application plan with the latest pressurized technology and advanced products for quick knockdown and residual control.

The SmartSolution for Fleas



Getting a

Identify The Flea

Knowing which flea species to develop an effective control for more than 2,000 species of fleas commonly encountered in the

By far the most common are *Ctenocephalides felis*. Namely, not exclusive to cats. It is the domestic dogs and other domestic aggressive human biter. The *canis*, is also frequently encountered among feral dogs and cats

When attempting to identify a flea doesn't have a specimen to examine, a method may be helpful. Simply pulling them up over the carpet around the home in areas where fleas will quickly jump onto a host captured for identification.

Know the Flea Life

Fleas undergo complete metamorphosis. white, oval, eggs about .5mm in size, finally 2-4mm adults. A single flea lays a dozen eggs per day for three days on a host animal may fall off the host has been. The eggs hatch depending on temperature

Newly emerged larvae are sparsely covered with hairs, light and actively burrow deep into organic debris. Larvae feed on a micro-environment but must be in an environment which contains partially digested food. 2 molts over a period of 5 to 7 days they double in size. The larvae appear to darken due to ingested

Determine and Address the Source (Primary Host)

It is important to determine the source of infestation (host). Common sources of infestation in a home include:

- House pets that become infested outdoors.
- Pest animals (squirrels, raccoons, mice, etc) living in the home.
- Feral cats or dogs that drop fleas in areas where they are picked up by humans.
- Former occupants with a flea infested pet (fleas can remain in the vacant home).

Each of these scenarios has different implications for addressing the primary host. The first requires treating



the house pet for fleas, the second and third require controlling or removing the pest animals. And the last doesn't require any animal-related actions.

Identify Larval Development Sites

Based on the primary host, identify the most likely larval development sites in and around the home. In the case of house pets, ask homeowners about the pet's sleeping, resting, and activity patterns. Keep in mind that cats sometimes explore into more elevated areas and more secluded areas, making these places an important part of your treatment strategy. Crawl spaces, soffits over cabinets, inside box springs, and behind clothes in closets are often overlooked places where cats may rest.



Assess Sensitive Situations and Involve the Homeowner

Your flea inspection should include an assessment of floor surfaces and fabrics on furniture and rugs that need treatment. Some floor finishes and fabrics are prone to staining or damage and extra care should be taken to treat these areas appropriately. Develop a list of things that the homeowner needs to do to help solve the problem, and communicate everything that relates to the flea problem and treatment. Identify pet bedding, human bedding or other articles that need to be laundered and indicate other preparations for treatment like removing clutter from floors, vacuuming, removing pet food bowls, and precautions for birds, fish or other pets.



Treating Another Common Bloodsucker: Ticks

One of the products in the SmartSolution for Fleas is also particularly effective on ticks, too. Prescription Treatment® brand **Cy-Kick® CS** Controlled Release Cyfluthrin is well suited for tick treatments involving applications to a variety of heavily foliated outdoor areas because of its low phytotoxicity. Studies have shown that, thanks to SmartCap™ technology, **Cy-Kick CS** can provide residual control of fleas for more than 90 days.

This residual is important because adult ticks can survive for months without feeding. Depending on the species (more than 80 have been identified), adult female ticks can lay clusters of hundreds or thousands of eggs in protected cracks and crevices. These eggs soon develop into six-legged larvae.

Larvae will crawl onto a host animal and begin feeding on its blood. When the larva is fully engorged, it drops off the animal and, several weeks later, emerges as a nymph. The nymph then repeats the process of crawling onto and feeding on a host animal. Adult ticks then repeat this process again.

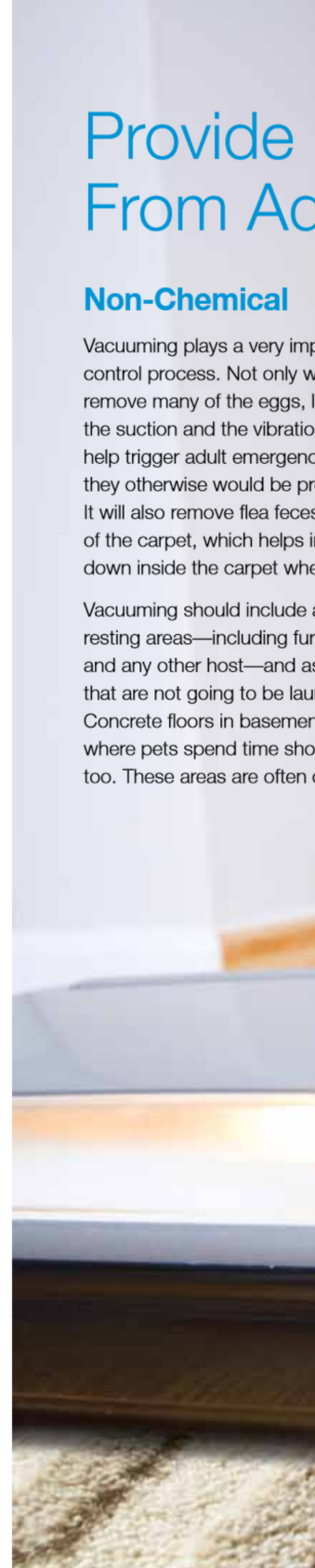
Thorough residual surface application with **Cy-Kick CS** should be made to structure perimeters and to areas on property most likely to harbor ticks. These harborages usually include foundation plantings, dense garden beds, bushes, weedy areas, leaf litter or debris, tall grass areas, foundations, and fences. If animal hosts are present, treat places where they may encounter ticks as they rest or roam.

Provide From Ac

Non-Chemical

Vacuuming plays a very important role in the control process. Not only does it help to remove many of the eggs, but the suction and the vibration help trigger adult emergence. They otherwise would be present. It will also remove flea feces from the carpet, which helps in cleaning down inside the carpet when

Vacuuming should include a thorough cleaning of resting areas—including furniture and any other host—and areas that are not going to be laundered. Concrete floors in basements where pets spend time should also be vacuumed. These areas are often



Insecticides for Quick Knockdown and Residual Control

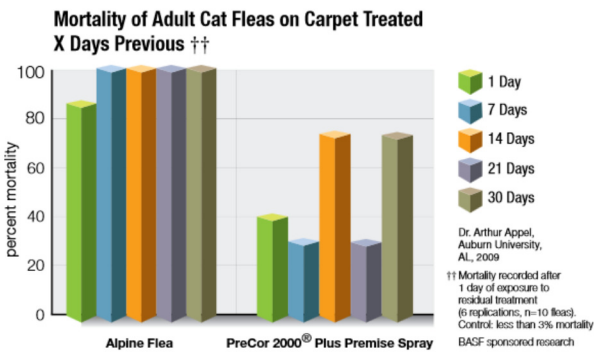
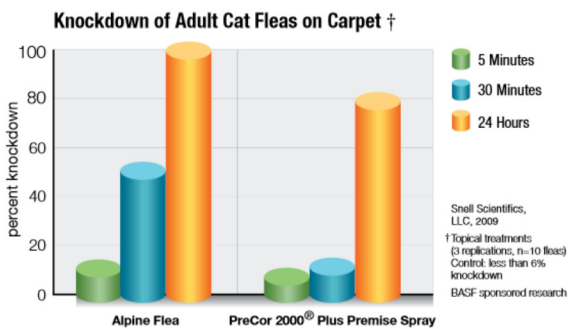
Factors to consider when choosing the right combination of flea control products include the need for quick knockdown, residual control, homeowner convenience, and application time and labor. The **SmartSolution for Fleas** combines four powerful BASF insecticides that deliver on all of these counts.



Prescription Treatment® brand **Alpine®** Flea Insecticide with IGR delivers quicker knockdown, longer-lasting control, and better affordability than many competitive

flea control products. It includes the Reduced Risk* active ingredient dinotefuran for fast control of adult fleas, prallethrin for quick knockdown, and the IGR pyriproxyfen, which kills hatching eggs for up to seven months.

Because **Alpine** Flea Insecticide with IGR utilizes an advanced pressurized formulation, it won't soak carpets, reduces treatment time and labor (application can take just 15 minutes), and minimizes homeowner re-entry time.



*Dinotefuran, the active ingredient in Alpine insecticides, has been granted Reduced Risk status for public health use by the EPA.



Prescription Treatment® brand **Cy-Kick® CS** Controlled Release Cyfluthrin kills adult fleas and

on-animal treatment can break up the flea development cycle in outdoor areas. Its microencapsulated formulation provides 90-day residual control on tough outdoor surfaces.

Prescription Treatment® brand **565 Plus XLO®** Contact Insecticide aids in knockdown and flushing. It's low-odor, synergized pyrethrin formula is ideal for use as a directed contact and space treatment.

Prescription Treatment® brand **Tri-Die®** Silica & Pyrethrum Dust is a naturally derived, fast acting desiccant dust with synergized pyrethrum. It aids in long-term residual control by creating an environment unsuitable for fleas.

Follow-Up

Once treatment is complete

Several days to a week or more after treatment, it is common to have some flea activity. This is due to protective cocoons and flea eggs that have hatched. Customers or their pets. This is especially if your customer has not been counseled on this common occurrence. In some cases, a follow-up treatment with an insecticide such as **565 Plus XLO** can help to quickly knock down emerging fleas. However, the residual and IGR in **Alpine** Flea Insecticide with IGR should help to prevent a reoccurrence.



Help Your Customer Help You

Communication plays a very important role in the **SmartSolution for Fleas**. You should help homeowners understand the big picture situation of the solution and give them specific guidance on preparations prior to treatment and realistic expectations following treatment.

It is an excellent idea to develop a checklist of preparations for your customer to follow with guidance on even simple things like what to do with the vacuum cleaner bag following vacuuming, how long to stay out of the home after treatment, what to do with fish tanks, birds or other pets during treatment, etc.

Sharing information about the biology and behavior of fleas is also worthwhile. It will give customers an appreciation for the importance of the preparations they need to make and help them understand the symptoms they see both before and following the treatment.

smart science + smart support = smartsolutions

As always, BASF Corporation is committed to giving you everything you need to tackle your toughest pest control challenges—not just in terms of products, but in terms of expertise and support as well.

You can always find helpful information, training, homeowner marketing support, and more at [PestControl.basf.us](#)

The **SmartSolution for Fleas** is just one of many BASF SmartSolutions that address the pest control challenges and issues that have the greatest impact on our industry and the success of your business. To learn about additional SmartSolutions for termites, ants, bed bugs, cockroaches, rodents, occasional invaders, German cockroaches and flies, visit [PestControl.basf.us](#) or contact your BASF Pest Control Solutions sales specialist.



The Prescription Treatment® Approach

BASF Corporation believes a sound Integrated Pest Management strategy is the cornerstone of successful pest control and good stewardship. Our five-step Prescription Treatment® approach includes the core IPM practices you should always employ in conjunction with any BASF SmartSolution.

- 1 Inspect** to gather the information that leads to good decisions
- 2 Prescribe** a treatment strategy to achieve specific goals in the account
- 3 Communicate** with the client to promote cooperation, establish expectations and convey value
- 4 Treat** using effective techniques and materials that support the strategy
- 5 Follow up** to assess results

Always read and follow label directions

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