

TRAINING MANUAL AND REFERENCE GUIDE

## Family of Effective Flea, Tick and Mosquito Control

## **Difficulty with Flea Control**

- Lack of understanding of the flea life cycle
- Unique life cycle of the flea
- Understanding/Implementing a 2-Step Program
- Looking for "Quick Fix"
- Concern about
  pesticide exposure
- Product confusion

Flea, Tick and Mosquito Control When You Need It

## The Parasite Problem

"...it's a vicious cycle!"

## **Flea Facts**

Although there are over 2,000 species of fleas, the most commonly encountered today is the cat flea (Ctenocephalides felis). Despite its name, it is adaptable and is found on both cats and dogs.

Fleas are responsible for a variety of problems ranging from simple itching and infestation to allergic skin reactions, the spread of tapeworms and other disease.



The adult flea is a blood sucking parasite which feeds only on the host's blood, ingesting it through its piercing mouthpart. It represents only a small percentage of the infestation.

The vast majority of the flea population is actually in either the egg, larval or pupal stage, which you cannot see. Effective elimination of fleas requires control at all levels of the life cycle.

The female always lays her eggs on the pet. When on a pet, adult fleas feed vigorously but digest only a small percentage of ingested blood, the remaining is excreted as small black fecal "flea dirt".



Feeding stimulates egg laying while on the host. In just 30 days, 10 fleas can multiply into thousands of fleas.



The small white eggs do not adhere to skin and hair, but fall freely off the host to contaminate bedding, floors, carpets and the environment.



Any effective treatment must control flea larvae, since they are the largest percentage of any infestation. The larvae have long spines which allow them to cling to carpet fibres and furniture. This makes it difficult to simply vacuum them up.

The pupa is shielded by a cocoon. Fleas emerge from their cocoon with proper stimulation. Vibration, heat, motion and increased carbon dioxide levels 'awaken' the fleas and indicate the presence of life.

If you have an infestation you should treat your pets and your home.





# The Flea Life Cycle consists of four very distinct developmental stages...

Adult Flea	biting, reproducing, and most annoying. smooth, oval and white, fall from your	
Flea Eggs	biting, reproducing, and most annoying. smooth, oval and white, fall from your pet into your home and yard.	PET
Flea Larvae	worm-like, chewing mouth parts, settle deep within carpet fibros furniture and	1
Flea Pupae	pet bedding. shielded by a cocoon, no treatment can control flea pupae. $x_{PO}$	***

## **REMEMBER!**

- In as little as 15 days, the flea life cycle is completed.
- In 30 days, 10 fleas can multiply into thousands of fleas.
- If one pet in the household has fleas, assume that they all have fleas.
- To get rid of fleas for good, you have to kill both adult fleas and their offspring.







## "...it's a hormone thing."

The best way to stop the flea life cycle is to use flea control products containing the Insect Growth Regulator, Methoprene to kill flea eggs and flea larvae.

Because flea eggs and flea larvae make up approximately 90% of the average flea infestation, Insect Growth Regulators are an essential element of flea control.

#### Methoprene (PRECOR<sup>®</sup>)

- An Insect Growth Regulator (I.G.R.)
- By exposing the immature stages of fleas to this material, they are not able to develop properly or reproduce.

## **PRECOR**<sup>®</sup> Facts

- Precor<sup>®</sup> I.G.R. is not a conventional insecticide.
- Precor<sup>®</sup> I.G.R. is an imitation of a naturally occurring substance found in fleas.
- Precor<sup>®</sup> I.G.R. kills *pre-adult fleas* before they can cause another infestation.
- Precor<sup>®</sup> I.G.R. is not hazardous to man or the environment due to its mode of action's low toxicity.
- Precor<sup>®</sup> I.G.R. effectively controls fleas in the home for up to 7 months and up to 60 days on animals.
- Precor<sup>®</sup> I.G.R., when used on animals, is not affected by swimming or bathing.





## **Toxicity Ratio**



\*Based on standard rat oral toxicity tests

## What About...?

#### **Pyrethrins**

Natural insecticides extracted from certain species of the chrysanthemum. The natural pyrethrins are contact poisons which quickly penetrate the nervous system of the insect. A few minutes after application, the flea cannot move.

#### Permethrin

Referred to as a "synthetic pyrethroid insecticide"

- it is man-made (synthetic)
- resembles natural chemicals found in plants (pyrethrins)
- it kills adult fleas (adulticide)







## The ZODIAC<sup>®</sup> 2-STEP PROGRAM

## Topicals Step 1: Treat Your Pet

If you prefer the use of topicals, ZODIAC<sup>®</sup> Infestop<sub>m</sub> Cat and Dog Topicals offer an easy to use, effective and economical alternative. These products are designed to be used once a month.



#### Twist'n'Use Tube – Novel Tamper Evident Applicator



- One Step: Simple and easy to open & use
- Tube system which releases an internal pin with a twist of cap
- Unique applicator to minimize exposure so topical can be applied precisely to the area (targeted application of the product)
- No visible rupture points/risk of injury/loose parts



## to Stop Flea & Tick Infestation





## Topicals Step 1: Treat Your Pet

ZODIAC<sup>®</sup> POWERSPOT<sup>®</sup> and POWERSPOT<sup>®</sup> with SMART SHIELD<sup>®</sup> Topical for Dogs, SPOT ON<sup>®</sup> II and SPOT ON<sup>®</sup> II with SMART SHIELD<sup>®</sup> Topical for Cats will offer an easy to use, effective and economical alternative. These products are designed to be used once a month.



Available in 2 sizes: Under & Over 30 lbs/14kg



Available in 2 sizes: Under & Over 30 lbs/14kg

#### ZODIAC<sup>®</sup> POWERSPOT<sup>®</sup> with SMART SHIELD<sup>®</sup> Flea, Tick and Mosquito Control For Dogs with *PRECOR*<sup>®</sup>(I.G.R.)

- KILLS adult fleas and ticks on contact
- KILLS blacklegged ticks which may carry Lyme disease
- KILLS flea eggs laid on your pet for 4 weeks
- KILLS mosquitoes by contact
- Tip parts hair for direct application to pet's skin
- Spreads over complete body
- Helps keep liquid off hands and will not drip after opening if laid on a table, counter or other flat surface

**DO NOT USE ON CATS.** Cats that actively groom or engage in close physical contact with recently treated dogs may be at risk of harm.

#### ZODIAC<sup>®</sup> POWERSPOT<sup>®</sup> Flea, Tick and Mosquito Control For Dogs with (PRECOR)<sup>®</sup> (I.G.R.)

- KILLS adult fleas and ticks on contact
- KILLS blacklegged ticks which may carry Lyme disease
- KILLS flea eggs laid on your pet for 4 weeks
- KILLS mosquitoes by contact
- Spreads over complete body

**DO NOT USE ON CATS.** Cats that actively groom or engage in close physical contact with recently treated dogs may be at risk of harm.

## to Stop Flea & Tick Infestation



#### SPOT ON<sup>®</sup> II with SMART SHIELD<sup>®</sup> Flea Control for Cats and Kittens with **PRECOR** (I.G.R.)

- KILLS flea eggs before they hatch
- Remains effective for up to 4 weeks
- Spreads over complete body
- Tip parts hair for direct application to pet's skin
- Helps keep liquid off hands and will not drip after opening if laid on a table, counter or other flat surface



#### ZODIAC<sup>®</sup> SPOT ON<sup>®</sup> II Flea Control for Cats & Kittens with (**PRECOR**)<sup>®</sup> (I.G.R.)

- KILLS flea eggs before they hatch
- Remains effective for up to 4 weeks
- Easy to use and economical
- Spreads over complete body



## ZODIAC<sup>®</sup> TOPICALS Now Have Type of Consumer

## 3 TYPES OF CUSTOMERS:

Understanding/Differentiating between the 3 types of consumers that purchase Zodiac® Topicals is key:

1. Price Conscious: Customer buys mainly on price > Zodiac® Cat & Dog Shaped Topicals/Lowest Zodiac®-branded treatment cost per application

2. Knowledge Based: Customer seeking & buying based on knowledge & education > Zodiac® Smart Shield® Topicals – Broad based kill/ Innovative, effective topical delivery system/Liquid goes directly to pet's skin resulting in hair not sticking together/dries faster

3. Vet Technology: Customer who will only buy from the VET > Zodiac<sup>®</sup> Infestop<sup>™</sup> Topicals/Vet Technology At pricing drastically less than vet pricing and without a visit to the vet. Specific Ectoparasite kill. Treat what needs to be treated!



#### PRICE CONSCIOUS CUSTOMER

#### **Cat/Dog Shaped Topicals**

- Mass Market Customer
- Price Sensitive/Conscious Customer
- Lowest Zodiac®-branded Treatment Cost Per Tube/Month
- Species Specific Shaped Tube For Identification/Safety
- Wide Spectrum Kill (Proactive/Preventative)
- Have Been Effective Actives/Products For Last 16 Years (Loyal Customer Base)





## the Potential to Capture Every in the Market

# 

#### KNOWLEDGE BASED CUSTOMER

#### **Smart Shield® Topicals**

- Customer Who Wants Simplicity & Innovation (Customer & Vet Driven Innovation)
- Convenient/Confident/Effective Control Delivery System (No Contact/Dosage)
- Helps dispense the correct amount for each application spot
- Gadget-Oriented & Novelty Customer (Functionality)
- Razor/Razor Blade Buyer With Refill Packs (Repeat Customer)
- Unique Only To The Pet Market
- Average/Low Treatment Cost Per Tube/Month (Applicator & Tube/Refill Pack)
- Species Specific Applicator & Tubes For Identification/Safety
- Wide Spectrum Kill
  (Proactive/Preventative)



#### VET TECHNOLOGY CUSTOMER

#### Infestop... Topicals

- Vet Technology Customer Without Vet Visit
- Pet Specialty/OTC Customer For Adult Flea Kill For Cats/Dogs
- Multi-Pet Household Customer Peace Of Mind (Same Active For Dog/Cat)
- Size Specific Packaging/Various Sizes For Accurate Dosage (6 Weight Classes)
- Lowest Zodiac®-branded Vet Technology Treatment Cost Per Tube/Month
- Specific Ectoparasite Kill/Minimal Active For Chemical Conscious Customer
- May Reduce FAD & Rapidly Kills (Customer Concerned for Fast Relief/ Pet Comfort)
- Specialized Twist Tube Technology (Easy, High Quality, Hygienic, Tamper-Evident)



## The ZODIAC<sup>®</sup> 2-STEP PROGRAM

## Collars Step 1: Treat Your Pet

**ZODIAC®** Flea & Tick Dog and Cat Collars offer excellent protection against flea and ticks and provide long term continuing protection.







#### ZODIAC<sup>®</sup> POWER BAND<sup>®</sup> Plus II Dual Action Flea & Tick Collar for Dogs & Puppies with *PRECOR*<sup>®</sup> (I.G.R.)

- KILLS adult fleas
- KILLS adult ticks
- KILLS flea eggs for 7 months
- Slow-release generator
- Stretch collar to activate

# ZODIAC<sup>®</sup> Flea & Tick Collars for Dogs

- KILLS fleas for 5 months
- KILLS ticks for 4 months
- Slow-release generator
- Stretch collar to activate

#### ZODIAC<sup>®</sup> Flea Egg Collar for Dogs with *PRECOR*/<sup>\*</sup>(I.G.R.)

- Effectively breaks the flea life cycle by KILLING flea eggs laid on your dog for up to 8 months
- Designed to prevent flea population build up in your home by KILLING flea eggs before they hatch
- Green collar features an Integral Buckle
- Unique molded one piece design



## to Stop Flea & Tick Infestation

Collars continually release a new supply of ingredients for several months, replenishing the coat to provide protection from head to tail, even if your pet gets wet or is bathed.







#### ZODIAC<sup>®</sup> POWER BAND<sup>®</sup> Plus BreakAway<sup>®</sup> Dual Action Flea & Tick Collar for Cats and Kittens with *PRECOR*<sup>®</sup> (I.G.R.)

- KILLS adult fleas
- KILLS adult ticks
- KILLS flea eggs for 7 months
- Slow-release generator
- Safety release collar design for cats
- Stretch collar to activate

# ZODIAC<sup>®</sup> BreakAway<sup>®</sup> Flea & Tick Collar for Cats & Kittens

- KILLS fleas for 5 months
- KILLS ticks for 4 months
- Slow-release generator
- Safety release collar design for cats
- Stretch collar to activate

#### ZODIAC<sup>®</sup> Flea Egg Collar for Cats with *PRECOR*<sup>®</sup>(I.G.R.)

- Effectively breaks the flea life cycle by KILLING flea eggs laid on your cat for up to 12 months
- Designed to prevent flea population build up in your home by KILLING flea eggs before they hatch
- Safety release collar design for cats
- Unique molded one piece design



## The ZODIAC<sup>®</sup> 2-STEP PROGRAM

## Shampoos & Pet Sprays Step 1: Treat Your Pet

The quickest way to kill a flea and tick is to expose them directly to a wet insecticide product such as a pet shampoo or spray that is applied directly to the animal's entire coat, penetrating to the skin, where fleas and ticks are usually found.

#### ZODIAC<sup>®</sup> Dual Action Flea & Tick Spray for Cats & Kittens and ZODIAC<sup>®</sup> Flea & Tick Spray for Dogs and Cats with *PRECOR*<sup>®</sup> (I.G.R.)

- KILLS adult fleas and ticks
- KILLS American Dog Ticks and Brown Dog Ticks
- Prevents flea eggs from hatching for 2 months
- One treatment controls **adult fleas** and **ticks**
- For severe flea problems, treatments can be performed weekly
- Precor<sup>®</sup> (I.G.R.) is unaffected by regular bathing or swimming

#### ZODIAC<sup>®</sup> Flea & Tick Shampoo for Dogs & Cats

- KILLS cat fleas, dog fleas
- KILLS American Dog Ticks
- KILLS Brown Dog Ticks
- Gentle, alcohol free formula
- Cleans and conditions the hair
- Reapply once every two weeks (where there is an ongoing risk of pest infestation)

#### ZODIAC<sup>®</sup> Double Action Flea & Tick Shampoo for Dogs & Cats with *PRECOR*/<sup>®</sup>(I.G.R.)

- KILLS cat fleas, dog fleas
- KILLS American Dog Ticks
- KILLS Brown Dog Ticks
- KILLS flea eggs for up to 4 weeks
- Enriched to condition and soothe sensitive skin
- Leaves pet's coat soft, shining and manageable
- Given the residual control, apply once a month
- · For severe flea problems, treatments can be performed weekly







## to Stop Flea & Tick Infestation

#### **Home Sprays**

## **Step 2: Treat Your Home**

By using ZODIAC<sup>®</sup> Premise 1000/2000 or ZODIAC<sup>®</sup> Premise Plus flea sprays, you will kill adult fleas, flea larvae, eggs and ticks hidden in carpets, cracks, crevices, upholstery, furniture, pet bedding and other areas.



#### ZODIAC<sup>®</sup> Premise 1000/2000 with *PRECOR*<sup>®</sup> (I.G.R.) and ZODIAC<sup>®</sup> Premise Plus with *PRECOR*<sup>®</sup> (I.G.R.)

- KILLS adult fleas and ticks
- KILLS American Dog Ticks
- KILLS Brown Dog Ticks
- KILLS pre-adult dog and cat fleas
- Provides 7 months residual action against **pre-adult fleas**
- Economical, with the ZODIAC® Premise 2000 treating 2,000 square feet
- · Convenient and easy to use
- Water based and low in odour
- Regular use of Zodiac<sup>®</sup> Premise Plus with Precor<sup>®</sup> will reduce the need for topical treatment of pets for ectoparasites
- If pest problems persist, a second treatment of Zodiac<sup>®</sup> Premise Plus with Precor<sup>®</sup> 2-3 weeks after the initial treatment may be necessary
- Can be used in conjunction with any on-animal products.
- DO NOT TREAT PETS WITH THESE PRODUCTS.



## Frequently Asked Questions About Flea and Tick Prevention

#### Flea and/or Tick Control

## Which of your products provide my pet with the fastest relief from fleas and/or from ticks?

The quickest way to kill a flea and tick is to apply an insecticide product directly to it. Shampoos and sprays work fast because they are applied directly to the entire coat, penetrating to the skin, where fleas and ticks are usually found. Some products, like Zodiac® Flea & Tick Collars or Topicals, will generally take about 24 hours for the active ingredients to spread completely throughout the coat. While relief may not be seen immediately, these products provide long term continuing protection.

## How long does it take before your product starts working on fleas?

When a flea comes into contact with the insecticide on a treated pet, it will typically take only a few minutes for the flea to die. However, some products, like our PowerSpot® and PowerSpot® with Smart Shield® topical for Dogs, will take about 24 hours to spread throughout the entire coat before it can give your dog whole body protection. We also have on-animal products containing Precor®, an Insect Growth Regulator to kill the flea eggs that are laid right on your pet, before they can infest your home. All of our premise control products for your home contain an adulticide to quickly kill adult fleas and ticks, and an Insect Growth Regulator to prevent flea eggs and larvae from developing into adult fleas in your home.

#### Will using two products on my pet kill fleas faster?

Using two insecticide products on your pet, at the same time, will not kill fleas twice as fast. Each product is designed to contain just the right dosage of active ingredient to kill the fleas that come in contact with the insecticide. If you are continually seeing fleas, this usually means that your pet is being regularly exposed to infested areas. Rather than doubling up on the insecticide, we recommend the additional use of an Insect Growth Regulator, to kill flea eggs and larvae. All of our premise control products, and many of our on-animal products, contain an Insect Growth Regulator for long-term control of flea infestations.

#### What if my pet gets wet in the rain or shampooed?

Getting wet in the rain during a short walk should not interfere with the efficacy of any Zodiac<sup>®</sup> product. The effectiveness of some products such as sprays and topicals could be reduced if bathed with a detergent soap or shampoo. We recommend using a Zodiac<sup>®</sup> Flea & Tick Collar if your pet is frequently bathed. Collars continually release a new supply of ingredients for several months, replenishing the coat even if your pet gets wet or is bathed.

#### How often should I bathe my pet for flea control?

When fleas are first seen, bathing with a flea and tick shampoo is a great way to give your pet immediate relief. Bathing will quickly kill fleas, while cleansing the coat and removing flea dirt or waste product. Once the lather is rinsed, it will not continue to kill any new fleas that jump on your pet. Shampoos are designed for short term, quick results against adult pests. For longer term protection, we recommend following up with a product like a topical or collar to provide residual control of adult fleas. One special Zodiac<sup>®</sup> shampoo formulation contains an Insect Growth Regulator to control flea eggs. Our Zodiac<sup>®</sup> Double Action Flea and Tick Shampoo will quickly kill adult fleas and ticks, while killing flea eggs for 28 days.

#### How long before my pet/home is flea free?

While most existing fleas can be killed fairly quickly, it is the newly emerging fleas that can delay complete control. If you already have a pretty advanced infestation both on your pet and in your home, it may take about 2–3 weeks after the initial application before complete flea eradication is realized. A second treatment of your home in about 2 weeks may be needed to kill the new fleas as they emerge from the protective cocoon of the pupal stage.

#### Why do I sometimes see fleas after I've treated?

It's not unusual to continue to see fleas for approximately 2–3 weeks after you've begun treating your pet and your home. This is known as the pupal window period. The protective cocoon of the pupal flea often enables it to survive home treatment. In order to be killed, fleas must first emerge from their cocoons and come in direct contact with the insecticide. These new adult fleas will be seen while they are being exposed to the products used on your pet and in your home. Re-treatment of your home in about 2 weeks should knock out the final generation of pupal fleas that have matured and emerged.

## Why is it recommended to wait 2 weeks before re-treating my home?

Even though it can be frustrating to see fleas, re-treating your home immediately will not solve the problem faster. The best strategy is to wait the full 2 weeks before re-treating. While your first treatment will kill existing eggs, larvae and adult fleas, new adult fleas already forming within protective cocoons will be seen after treatment.

It usually takes about one to two weeks for pupal fleas to mature and emerge from cocoons. When you retreat in two weeks time, you'll be able to quickly kill the remaining population and bring your infestation under complete control.



## **Frequently Asked Questions About Flea and Tick Prevention**

## How do I keep the fleas from coming back and infesting my pet and home?

While you can't prevent fleas in the environment from jumping on your pet, you can prevent them from infesting your home and your pet's favourite areas. There are a variety of Zodiac<sup>®</sup> on-animal products with an Insect Growth Regulator to prevent flea eggs from developing. Fleas lay their eggs on the pet, so on-animal egg control prevents infestation right at the source. Our premise control products will prevent pre-adult fleas from developing for 7 months. This will help prevent pre-adult fleas that may already be in the environment from maturing and jumping back on your pet.

#### What if my pet brings fleas in from outside?

It's easy for pets to pick up occasional fleas during outings. The adults can be killed with insecticide products, but on-going flea egg control helps keep your pet's home environment flea-free. Zodiac® on-animal products, containing Precor®, an Insect Growth Regulator, will kill flea eggs laid on the pet. Our premise control products will prevent flea eggs and larvae from developing for 7 months. Occasional fleas seen on the pet should only be a temporary nuisance when Precor®, an Insect Growth Regulator is used on your pets and in your home.

## Do I need to treat my whole house, even where my pet is not allowed?

It's a good idea to treat all the carpeting and upholstery in your home, at least one time, as a precaution. Flea eggs, the size of sand grains, are very rarely seen but easily spread by your pet. A female flea may lay as many as 40-50 eggs on your pet, per day. Your pet can deposit a multitude of flea eggs, just by being in any area of your home for a brief moment. In addition, the larvae that hatch out can migrate for several feet into areas your pet may never have actually been.

## What are the most important places in the home to treat?

Carpet, upholstered furniture, pet bedding, and favorite pet resting areas should be targeted. Flea eggs are laid on pets and will drop off wherever the pets go. Mostly, we don't see the flea eggs, or the pre-adults that later develop deep within the carpeting or in the crevices of the furniture. The larvae that hatch from the eggs will migrate further and seek out dark, hidden places. That's why it's important to treat areas like underneath furniture and in closets, even if your pet has not been in the exact spot. Zodiac<sup>®</sup> premise control products are designed to penetrate to the base of carpeting and into crevices when applied to these areas.

#### **Tick Prevention**

## What are the best products to use to kill ticks on my dog?

All Zodiac<sup>®</sup> products labeled to kill ticks will be effective but some formulations work faster or last longer than others. It can take as long as one to two days for a tick to die, once exposed to the ingredients. The quickest way to kill ticks is to expose them directly to a wet product like a shampoo or spray. While collars or topicals may kill ticks a bit more slowly, they provide the longest term protection.

## How long will it take before my pet and home are free of ticks?

Once ticks infest a home, it can take several weeks before dramatic results are seen. Even if you're consistently using a tick control product on your pet, you may see ticks from time to time. It's very easy for pets to pick up ticks from infested areas indoors, as well as outdoor environments that we cannot control. You can help prevent an infestation of the home by using tick control on your pet throughout the entire season. If your home does become infested, we recommend weekly treatments until the infestation is brought under control.

#### Where does my pet usually pick up ticks?

Ticks can be found in a variety of places, but they are most prevalent in thickly vegetated areas outdoors. Many of the places we take our pets for recreation, like parks, wooded areas, and even our own back yards can be hotbeds for infestation. Some ticks thrive in dark, moist areas, underneath objects and plants, so they are often hidden from view. They are often found on vertical surfaces, like the sides of fences, trees or tall grass. Ticks can then easily attach themselves to a pet or person who is passing by.

## What can I do to reduce the chances of my pet picking up ticks?

Products that repel ticks, like Zodiac® PowerSpot® topical for Dogs or Zodiac® Flea Spray for Dogs & Cats are extremely helpful in reducing the number of ticks your pet may pick up. Avoiding woody or grassy tick habitats will reduce your pet's chances of encountering ticks. Checking your pet regularly for ticks will give you the best chance of finding and removing them before they can cause a problem.



## **Frequently Asked Questions About Flea and Tick Prevention**

#### Safety

## Are any Zodiac° on-animal products recommended for use on any pets other than dogs and cats?

Zodiac<sup>®</sup> products are labeled for use on dogs and/or cats only. We would not recommend use on any other type of pet. When a flea and tick product is labeled for a specific type of pet, this means that the appropriate testing has been done to support safe and effective use on that particular animal. If you don't see your type of pet on the label, we would recommend that you consult with your veterinarian for treatment advice.

## Is it okay for children to play with pets who have been treated with Zodiac° products?

Once a product has dried, it's okay for children and adults to have close contact with their pets again. Our products are formulated knowing that children will play, pet and even sleep with animals. When used according to label directions, the amount of active ingredient on the pet is a tiny flea or tick sized dose. Children can also play with pets wearing collars, since they release a very small amount of active ingredient at a slow rate.

## Can children and pets play on the floor after home treatment?

Once dry, it's okay for children and pets to play on carpeting, upholstered furniture and other treated areas in the home. Zodiac<sup>®</sup> premise products are designed with the understanding that children will have close and direct contact with carpet and upholstery, the very areas that need to be treated for flea and tick control.

## How long should I wait before I allow my children and pets back into treated areas in the home?

Some premise product labels give a specific time frame for re-entering the treated area, so the label should always be checked first. If the product label doesn't give a re-entry time, then it's okay for pets and people to return once the treated surfaces have dried. Our premise sprays dry so quickly, there isn't really a specific amount of time that can be predicted in every situation. As a rule of thumb, we recommend waiting at least 20 minutes when using a Zodiac<sup>®</sup> aerosol spray and 1 hour when using a Zodiac<sup>®</sup> pump spray for the home.

## Is it okay for my pet to groom or lick herself after a Zodiac° product is applied?

Normal grooming after application is expected and should not be a problem when a product is used according to label directions. The amount of active ingredient in each dose is just enough to be effective against a flea, tick or other targeted insect. The pet, which is much larger than the targeted pest, should not be affected by this small amount of active ingredient. All of our products have been tested for use on dogs and/or cats, knowing they will groom themselves. Cats that actively groom or engage in close physical contact with recently treated dogs may be at risk of harm.

## Should non-carpeted areas, like wood or tiled floors, be treated with a premise product?

Treating wood floors, tile, linoleum and other smooth floorings/surfaces should not be necessary. Flea eggs and larvae rarely survive out in open, well-trafficked areas. Carpet and upholstery are the ideal environments for fleas in the home. We do recommend that you clean, mop and vacuum all floors, to remove any eggs that might have been deposited by your pets. Special attention should be paid to flooring underneath all furniture and other large objects, baseboards, as well as closets, storage areas, garages, etc. The more hidden, undisturbed areas could harbor fleas and should be thoroughly cleaned to remove any pre-adults that may be developing.



## **Glossary of Terms**

Imidacloprid:	An insecticide that was made to mimic nicotine. Nicotine is naturally found in many plants, including tobacco, and is toxic to insects. Imidacloprid is used to control sucking insects, termites, some soil insects, and fleas on pets. A few minutes after application, the insect is paralyzed and cannot move.
Methoprene: (Precor°)	Low in odour concentrate indicated for preventing flea eggs and larvae development. It is an insect growth regulator, thus effectively breaks the flea's life cycle. By exposing the young stages of fleas to this material they are not able to mature properly and cannot reproduce.
Permethrin: (see Pyrethrins)	Referred to as a "synthetic pyrethroid insecticide" because it is man-made, (synthetic) but resembles naturally occurring chemicals found in plants (pyrethrins). This insecticide kills adult fleas and ticks (adulticide). Permethrin acts as a stomach poison when it is ingested by fleas, or as a poison through direct contact. The primary target is adult fleas.
Pyrethrins:	Natural insecticide extracted from certain species of the chrysanthemum plant. The natural pyrethrins is a contact poison which quickly penetrates the nervous system of the insect. A few minutes after application, the insect is paralyzed and cannot move.
Piperonyl Butoxide:	Acts as a synergist. It restricts the fleas' enzymes from fighting off the pyrethrins.
Tetrachlorvinphos:	Tetrachlorvinphos (TCVP) is an organophosphate pesticide used to kill fleas and ticks. TCVP is an acetylcholinesterase (cholinesterase inhibitor) inhibitor, as such, inhibits the acetylcholinesterase enzyme from breaking down acetylcholine.





## **GET CERTIFIED**

#### HOW TO GET CERTIFIED

- 1. Read the Zodiac<sup>®</sup> Training Manual and Brochure.
- 2. Take the quiz.
- 3. Mail to Wellmark International.
- Upon successful completion of the questionnaire, (75% pass mark) we will send you a Zodiac<sup>®</sup> Flea & Tick Certificate and thank you gift (touchscreen Stylus Pen).

## 1. Adult fleas make up approximately what % of most flea populations?

- a. 5–10%
- b. 35-60%
- c. 1—5%
- d. 90–100%

## 2. Fleas can cause health problems such as:

- a. Spread of tapeworm
- b. Severe intense itching and hair loss
- c. Skin abrasions with secondary infections
- d. Allergic skin reactions
- e. All of the above
- 3. Each female flea lays an average of how many eggs per day?
  - a. 1 egg
  - b. 20-50 eggs
  - c. 5-10 eggs
  - d. 400-500 eggs
- 4. Zodiac<sup>®</sup> products with Precor<sup>®</sup> (IGR) is unique because:
  - a. Low toxicity and not hazardous to people or the environment
  - b. Prevents pre-adult fleas from reproducing
  - c. On animal effective for up to 2 months
  - d. In home 7 months pre-adult residual
  - e. All of the above
- 5. Precor<sup>®</sup> IGR kills what before they can grow into another infestation?
  - a. Adult fleas & flea eggs
  - b. Flea eggs & flea larvae (pre-adult flea)
  - c. Flea pupae & flea eggs
  - d. All of the above

## 6. Flea eggs make up approximately what % of a typical infestation?

- a. 90–100%
- b. 30–50%
- c. 5–10%
- d. 1–5%
- 7. When applying Zodiac<sup>®</sup> Flea & Tick Pet Spray:
  - a. Precor<sup>®</sup> (IGR) will be unaffected by regular bathing or swimming
  - b. It will prevent flea eggs from hatching for up to 2 months
  - c. It can be applied weekly for severe flea problems
  - d. All of the above
- The following statements concerning Zodiac<sup>®</sup> Flea & Tick Pet Sprays are either true or false:
  - T F For severe flea infestations, treatments can be performed daily
  - T F These products will not kill flea eggs
  - T F One treatment will control adult flea and ticks
- 9. Flea pupae account for what % of a typical infestation?
  - a. 5–10%
  - b. 35-60%
  - c. 1-5%
  - d. 90-100%
- 10. What Zodiac<sup>®</sup> <u>Topical</u> Spot-On<sup>®</sup> product is available to kill adult fleas on cats?
  - a. Zodiac<sup>®</sup> PowerSpot<sup>®</sup> II Topical
  - b. Infestop<sup>™</sup> Topical is the only Zodiac<sup>®</sup> "Spot-on<sup>®</sup>" adult flea control/kill available for Cats
  - c. Zodiac<sup>®</sup> Power Band Plus Breakaway<sup>®</sup> Collar
  - d. Zodiac<sup>®</sup> Smart Shield<sup>®</sup> Topical

## GET CERTIFIED and receive a gift for your dedication to becoming a flea & tick control expert.

#### 11. Zodiac $^{\circ}$ Infestop $_{^{\mathrm{TM}}}$ Topical is available:

- a. Only at pet specialty stores across Canada
- b. Without a visit to the vet and only from  ${\rm Zodiac}^{\rm \$}$
- c. To the mass markets (Walmart, Dollar stores etc)
- d. a and b
- 12. True or False: Zodiac<sup>®</sup> Infestop<sub>™</sub> Topical provides flea infestation protection for up to 4 weeks for cats and at least 4 weeks for dogs.

#### **13. Zodiac® Infestop**<sup>™</sup> **Topical**:

- a. Control fleas within 1 day of treatment
- b. Kills fleas rapidly
- c. Only kills adult fleas on dogs
- d. May reduce flea allergy dermatitis
- e.a,bandd
- 14. Flea larvae represent about what % of most infestations?
  - a. 1–5%
  - b. 5–10%
  - c. 35-60%
  - d. 90–100%
- 15. What are the benefits of using Infestop Topicals for dogs and cats?
  - a. Same active ingredient for both dog and cat
  - b. Unique applicator to minimize exposure (internal pin release)
  - c. May reduce flea allergy dermatitis (FAD)
  - d. All of the above

#### 16. Zodiac<sup>®</sup> Spot On<sup>®</sup> II Topical with Smart Shield<sup>®</sup> Flea Control for Cats/Kitten:

- a. Helps keep liquid off hands
- b. Contains Precor<sup>®</sup> (IGR) to kill flea eggs before they hatch
- c. Remains effective for up to 4 weeks
- d. All of the above
- Zodiac<sup>®</sup> PowerSpot<sup>®</sup> Topical with Smart Shield<sup>®</sup> Flea, Tick and Mosquito Control for Dogs:
  - a. Kills flea, ticks and mosquitoes on contact
  - b. Kills flea eggs for 4 weeks
  - c. Tip parts hair for direct application to pets skin
  - d. Kills blacklegged ticks (deer ticks) which may carry Lyme disease
  - e. All of the above

#### 18. Flea eggs can develop into the larval stage within how many days under optimal conditions?

- a. 2—5
- b. 10-12
- c. 27-30
- d. 14–16
- Zodiac<sup>®</sup> PowerBand<sup>®</sup> Plus Collars with Precor<sup>®</sup> (IGR) for Dogs/Puppies and Cats/Kittens:
  - a. Effectively kills adult fleas and ticks and kills flea eggs for 7 months
  - b. Safety release collar design for cats
  - c. Stretch collar to activate
  - d. Has a slow-release generator
  - e. All of the above
- 20. Zodiac<sup>®</sup> Flea & Tick Collar for Dogs and Cats:
  - a. Kills ticks for 4 months
  - b. Kills fleas for 5 months
  - c. Safety release collar design for cats
  - d. Stretch the collar to activate
  - e. Has a slow release generator
  - f. All of the above



## **GET CERTIFIED**

#### 21. Zodiac<sup>®</sup> Flea Egg Collar with Precor<sup>®</sup> (IGR) for dogs and cats:

- a. Effectively breaks the flea life cycle
- b. Kills fleas eggs for 8 months on dogs and up to 12 months on cats
- c. Safety release collar design for cats
- d. Designed to prevent flea population build up in your home
- e. All of the above

#### 22. The following statements concerning Zodiac<sup>®</sup> Double Action Flea & Tick Shampoo are either true or false:

- TF Is gentle, yet highly effective in killing adult fleas, ticks and flea eggs
- TF Precor<sup>®</sup> (IGR) kills flea eggs from hatching for up to 4 weeks
- T F Enriched to condition and soothe sensitive skin
- T F Can be used only on cats
- T F For severe flea problems, treatments can be performed weekly

#### 23. Zodiac<sup>®</sup> Premise Plus and Zodiac<sup>®</sup> Premise 1000/2000 products kill what in the home?

- a. Adult fleas and ticks
- b. Flea eggs (pre-adult fleas)
- c. Flea larvae (pre-adult flea)
- d. Flea pupae
- e. a, b, and c

#### 24. The following statements concerning Zodiac<sup>®</sup> Premise Plus and/or Premise 1000/2000 are either true or false:

- T F One treatment with these products will control pre-adult fleas for up to 7 months
- T F All of these products kill flea larvae (pre-adult flea)
- T F You should thoroughly vacuum before application
- T F One can of Premise 2000 will treat approximately 20 average size rooms (10 x 10) or 2,000 square feet
- T F To kill new fleas that emerge from a protective cocoon, a second treatment may be necessary in about 2 weeks
- ${\sf T} \; {\sf F} \; {\sf These \ products \ can \ also \ be \ applied \ to \ the \ pet}$

#### 25. The Zodiac<sup>®</sup> 2-Step Approach means:

- a. Applying products twice a day
- b. Treating your home and treating your pet
- c. Using one product twice as much
- 26. Adult fleas can emerge from the pupae in how many days?
  - a. 5—6
  - b. 7 days-1 year
  - c. 3–4
  - d. 1-2

## 27. If you have any questions about Zodiac<sup>®</sup> products you can:

- a. Call the toll free line 1 800 688-7378
- b. Refer to the Zodiac<sup>®</sup> Training Manual and Brochure
- c. Have your customer call the toll free line 1 800 688-7378
- d. All of the above

## In-store Training Manual and Product Reference Guide Questionnaire

#### Become a Certified ZODIAC° Flea & Tick Control expert today!

# WHY?

#### Knowledge is Power...

By studying the ZODIAC Training Manual you'll have the knowledge necessary to assist your customers in making the right buying decision to win their battle against fleas & ticks.

#### Satisfied Customers...

Once this material has been absorbed you'll be able to explain to your customers how and why the ZODIAC product line is the best buy for their money... because it works!

#### Develop Trust and Loyalty...

By demonstrating product knowledge and helping your customers solve their flea & tick problems, you will have developed an excellent rapport that will translate into customer loyalty and repeat business.

PLEASE PRINT VERY CAREFULLY		
NAME		
STORE NAME		
STORE PHONE		
STORE ADDRESS		
CITY		
PROVINCE		
POSTAL CODE		
PRESENTATION DATE		
We want your suggestions! Please let us know if we can improve our products or services.		
Please mail completed questionnaire to:		
Wellmark International 100 Stone Road West, Suite 111 Guelph. Ontario. Canada N1G 5L3		



## Family of Effective Flea, Tick and Mosquito Control



## Trusted to protect your pets for over 30 years

## 100% Satisfaction Guaranteed\*

#### ZODIAC Flea & Tick Hotline: 1-800-688-7378

(8:00 am to 5:00 pm Central Standard Time)

\*Money back guarantee (A receipt/proof of purchase is required for a refund)

Zodiac, PowerSpot, Spot On, Power Band, BreakAway and Precor are registered trademarks of Wellmark International. Smart Shield, Smart Shield with design and Intestop are trademarks of Farnam Companies, Inc. Advantage is a registered trademark of Bayer AG. Twist'n'Use is a trademark of Neopac. Applicator US patent numbers U725.485, D725.486, D702.683 Canadian applicator patent numbers 145860, 153211, 149985, 155009