




Pest Management & Public Health

Solutions Guide



What you do is about much more than managing pests. It's about helping create healthier spaces for your customers where they live, work and play. That's why Bayer invests in the latest innovations, technical expertise and business-building tools for pest management professionals. So, together, we can help people lead better lives. It's science, solutions and support at your fingertips. It's science for a better life.

For more information, visit environmentalscience.bayer.us.

 *Science for a **better life***



in the US, **wasps** kill more people than snakes, spiders & scorpions combined

without pest control, food production would drop by as much as one third



beetles taste like apples, wasps like pine nuts and **worms** like fried bacon



Mosquito-borne diseases kill about one million people worldwide

there are **200 million** insects  for each human on the planet



insects **eat** 1/3



of the earth's food crop each year

Control more so you can treat less. Trust our general insect control products to effectively treat ants, spiders and other pests. You can count on Bayer for the most innovative solutions and support in the marketplace to meet a broad range of pest management needs.

At night, the carbon dioxide we exhale often tempts bed bugs out of their hiding spots



fleas carrying diseases have killed more people than all the wars ever fought



mosquitoes prefer children to adults and blondes to brunettes

fleas & ticks transmit **15** major diseases

fleas can leap **800x** farther than their body length


Only full-grown male crickets can chirp



there are more insects in one square mile of rural land than there are human beings on the entire earth

There are more than **900,000** known species of insects in the world



Ticks can grow from the size of a grain of rice  to the size of a marble 

Wasps feeding on fermenting juice have been known to get "drunk" and pass out 







There are some **160,000** species of moths in the world 

the male **bit**
black widow spider 
does not **Ø**

general insect control



general insect control

Product:	Primary Differentiator:	Key Features & Benefits:
 Barricor^{SP}	Ideal for frequent outdoor maintenance applications on complex surfaces	<ul style="list-style-type: none"> // Solid particle formulation performs on complex surfaces like mulch, gravel and concrete, allowing the active ingredient to remain more bioavailable to pests // Offers efficacy at low dose rates // Affordable innovation – one bottle services approximately 128 homes at a similar cost per home to economy pyrethroid formulations // No signal word and no PPE* <p><small>*Always comply with state and company policy regarding PPE.</small></p>
 DeltaDust[®]	The only 100% waterproof dust	<ul style="list-style-type: none"> // Approved for use in commercial food-handling establishments // Labeled for cockroach infestation in sanitary sewers // Kills crawling insects for up to 8 months when left undisturbed // For use indoors and outdoors. // Odorless
 DeltA Gard[®]	Fast knockdown, superior efficacy	<ul style="list-style-type: none"> // Kills mosquitoes quickly – in as few as 10-15 minutes // No knockdown recovery // Effective against pyrethroid-resistant mosquitoes // Designated EPA reduced risk for wide area mosquito control // Utilizes proprietary FFAST[®] Technology for more even distribution of active ingredient
 DeltaGard^G	Low-dose granules	<ul style="list-style-type: none"> // Easy-to-apply granules with flexible-use directions // Designed to control perimeter pests // Broad-spectrum, residual control // Water-dispersible carrier – ideal when rain or irrigation is expected // Ultra-low dosage requirements



even with eight eyes, most spiders are nearsighted



Labeled Use: Commercial Residential		Key Pests Controlled:	Active Ingredient:	Formulation Type:	Available Packaging:
●	●	Ants, boxelder bugs, cockroaches, crickets, silverfish, spiders <i>(See product label for a full list of pests.)</i>	Deltamethrin	Solid Particle (SP) liquid concentrate	32-oz. tip-and-pour bottle
●	●	Ants, bedbugs, carpet beetles, cockroaches, crickets, fleas, fruit flies, phorid flies, scorpions, silverfish, spiders, ticks, wasps <i>(See product label for a full list of pests.)</i>	Deltamethrin	Dust	24 x 1-lb. bottles 4 x 5-lb. bottles
●	●	Insecticide-resistant mosquito species, flies <i>(See product label for a full list of pests.)</i>	Deltamethrin	Oil-in-water emulsion	6 x 16-oz. bottles
●	●	Ants, centipedes, cockroaches, crickets, fire ants, spiders, ticks <i>(See product label for a full list of pests.)</i>	Deltamethrin	Water dispersible granule	20-lb. bag

an ant can survive underwater for up to two days



general insect control

Product:	Primary Differentiator:	Key Features & Benefits:
 Suspend[®] POLYZONE[™]	Proprietary polymer formulation locks AI in place	<ul style="list-style-type: none"> // Stays effective where it's sprayed for up to 90 days, even in tough conditions // Proven reduction in callback frequency // Extended residual under commercial conditions (also labeled for food handling) // Features a proprietary polymer layer that protects the active ingredient from weather, irrigation and mechanical abrasion
 Suspend[®] SC	Advanced-generation pyrethroid	<ul style="list-style-type: none"> // Broad-spectrum control of more than 50 nuisance pests // Flexible label allows application in food service areas // Effective knockdown with a long residual // No odor, no visible residue // Works on porous surfaces // Labeled for food accounts
 Tempo[®] SC ULTRA	Quick broad-spectrum control	<ul style="list-style-type: none"> // Controls more than 100 nuisance pests // Quick knockdown, long residual // Reduced active ingredient and low use rate // Low toxicity // 900-ml. bottle is perfect for perimeters
 Tempo[®] ULTRA WP	Quick broad-spectrum control	<ul style="list-style-type: none"> // Controls more than 100 nuisance pests // Quick knockdown, long residual // Reduced active ingredient and low use rate // Labeled for food handling locations
 Temprid[®] FX	Exceptional strength and flexibility for long-lasting control of hard-to-kill pests	<ul style="list-style-type: none"> // Powerful, broad-spectrum insecticide that controls over 50 pests // Can be applied indoors and outdoors, including foliar applications on non-blooming plants // Effective against key public health pests (including mosquitoes, ticks, etc.) that may transmit various diseases // Enhanced label directions for providing excellent control of scorpions
 Temprid[®] READY TO SPRAY	Bag-on-valve technology allows for applications at any angle	<ul style="list-style-type: none"> // The superior performance of Temprid[®] with Bayer Ready-To-Spray technology // Controls hard-to-kill pests such as bed bugs, spiders and fleas // Kills bed bugs resistant to pyrethroid insecticides // Provides residual effectiveness against bed bugs that lasts up to 6 months



Check it out! Bayer Pest Portal App

Get key insights, research, solutions and preventative tips you need to combat troublesome pests and deliver results to your customers.

The Pest Portal App helps you:

- // Find products
- // Calculate use rates
- // Locate Bayer Area Sales Managers and Distributors
- // Browse product resources
- // See current promotions
- // View SDS and label information
- // See weather information based on your location

Labeled Use: Commercial Residential		Key Pests Controlled:	Active Ingredient:	Formulation Type:	Available Packaging:
●	●	Ants, brown marmorated stink bugs, carpenter ants, cockroaches, crickets, mosquitoes, moths, multicolored Asian lady beetles, scorpions, spiders, ticks, wasps, yellow jackets (See product label for a full list of pests.)	Deltamethrin	Suspension concentrate	16 x 1-pt. bottles 4 x 1-gal. bottles 30-gal. drum
●	●	Ants, cockroaches, fleas, mosquitoes, scorpions, spiders, ticks, wasps, yellow jackets (See product label for a full list of pests.)	Deltamethrin	Suspension concentrate	16 x 1-pt. bottles 4 x 1-gal. bottles
●	●	Ants, chinch bugs, cutworms, emerald ash borers, leaf-feeding beetles, spiders, ticks (See product label for a full list of pests.)	β-cyfluthrin	Suspension concentrate	2 (4 x 1-gal. bottles) 8 x 900-ml. bottles
●	●	Ants, chinch bugs, emerald ash borers, fungus gnats, grasshoppers, spiders, ticks (See product label for a full list of pests.)	β-cyfluthrin	Wettable powder	6 x 420-gm. bottles 4 (8 x 50-gm. packets)
	●	<i>Indoor:</i> Ants, bed bugs, boxelder bugs, carpet beetles, centipedes, clothes moths, cockroaches, crickets, firebrats, flies, millipedes, pillbugs, silverfish, sow bugs, spiders <i>Outdoor:</i> Ants, boxelder bugs, carpenter ants, centipedes, cockroaches, crickets, earwigs, fire ants, fleas, flies, gnats, ground beetles, hornets, mosquitoes, moths, multicolored Asian lady beetles, scorpions, spiders, ticks, yellow jackets <i>Wood-infesting:</i> Beetles, carpenter ants, carpenter bees, drywood termites (See product label for a full list of pests.)	Imidacloprid, β-cyfluthrin	Suspension concentrate	8 x 900-ml. bottles 6 x 400-ml. bottles 6 x 240-ml. bottles 100 x 8-ml. bottles
	●	<i>Indoor:</i> Ants*, bed bugs, cockroaches, crickets, spiders <i>Outdoor:</i> Ants*, brown marmorated stink bugs, cockroaches, crickets, earwigs, hornets, kudzu bugs, scorpions, spiders, ticks, yellow jackets (See product label for a full list of pests.) *Excluding fire ants	Imidacloprid, β-cyfluthrin	Ready-to-use	15-oz. can

stinging insects



Tempo
ULTRA WP



Active Ingredient: β -cyfluthrin
Formulation: Wettable powder
Use: Commercial, residential

Quick, broad-spectrum control.

Tempo Ultra WP delivers consistent results with fast knockdown and long residual.

- // Broad-spectrum control of more than 100 nuisance pests
- // Quick knockdown
- // Long residual
- // Reduced active ingredient and low use rate
- // Labeled for emerald ash borer

Pests controlled

Wasps, yellow jackets, hornets
(See product label for a more complete list of pests.)

Product sizes: 6 x 420-gm. bottles |
4 x (8 x 50-gm. packets)



bald-faced hornets are aggressive and will attack anyone or anything that invades their space

bed bugs

Tempri[®] is the confident, proven way to control bed bugs and so much more. It delivers immediate results in an all-in-one solution. Its dual mode of action kills bed bugs resistant to pyrethroid insecticides, bed bug eggs and other hard-to-kill pests. Once you see the Tempri[®] Difference, you'll never go back to old pest control products.



Tempri[®]
FX



Active Ingredient: Imidacloprid, β -cyfluthrin
Formulation: Suspension concentrate
Use: Residential

Kill hard-to-kill pests in more places.

Tempri FX combines the powerful, co-milled, dual-active formula you trust for long-lasting control of hard-to-kill pests with a flexible label that delivers even more value. This strength and flexibility gives you the added confidence to take on the toughest jobs, including notoriously hard-to-kill pests, like bed bugs, scorpions and spiders.

- // Powerful, broad-spectrum insecticide that controls over 50 pests
- // Can be applied indoors and outdoors, including foliar applications on non-blooming plants
- // Effective against key public health pests, including mosquitoes, ticks, etc.
- // Enhanced label directions for providing excellent control of scorpions

Pests controlled

Indoor pests: Ants, bed bugs, boxelder bugs, carpet beetles, centipedes, clothes moths, cockroaches, crickets, firebrats, flies, millipedes, pillbugs, silverfish, sow bugs, spiders

Outdoor: Ants, boxelder bugs, carpenter ants, centipedes, cockroaches, crickets, earwigs, fire ants, fleas, flies, gnats, ground beetles, hornets, mosquitoes, moths, multicolored Asian lady beetles, scorpions, spiders, ticks, yellow jackets

Wood-infesting pests: Beetles, carpenter ants, carpenter bees, drywood termites
(See product label for a full list of pests.)

Product sizes: 8 x 900-ml. bottles | 6 x 400-ml. bottles |
6 x 240-ml. bottles

Also available in a convenient, 8-ml, monodose bottle – exact dose for mixing with one gallon of water.



Tempri[®]
READY TO SPRAY



Active Ingredient: Imidacloprid, β -cyfluthrin
Formulation: Ready-to-use
Use: Residential

Attack pests from all angles. Even upside down.

Tempri Ready-To-Spray uses the proven performance of Tempri SC with bag-on-valve technology to deliver immediate results in an all-in-one solution.

- // Controls hard-to-kill pests such as bed bugs, spiders and fleas
- // Kills bed bugs resistant to pyrethroid insecticides
- // Provides residual effectiveness against bed bugs that lasts up to 6 months
- // Kills bed bug eggs

Pests controlled

Indoor pests: Ants*, bed bugs, boxelder bugs, carpet beetles, centipedes, clothes moths, cockroaches, crickets, firebrats, flies, millipedes, pillbugs, silverfish, sow bugs, spiders

Outdoor/perimeter pests: Ants*, boxelder bugs, carpenter ants, centipedes, cockroaches, crickets, earwigs, fire ants, fleas, flies, gnats, ground beetles, hornets, mosquitoes, moths, multicolored Asian lady beetles, scorpions, spiders, ticks, yellow jackets

Wood-infesting pests: Beetles, carpenter ants, carpenter bees
(See product label for a full list of pests.)
*Excluding fire ants

Product size: 15.7-oz. can



bed bugs have been shown to be able to travel over 100 feet in a night but tend to live within 8 feet of where people sleep



you're more likely to be a target for mosquitoes if you eat bananas

mosquitoes

For over 50 years, Bayer has been working with mosquito control professionals worldwide to fight against mosquitoes that may carry diseases. To help you provide protection for your customers, Bayer offers Suspend® PolyZone® to effectively control mosquitoes around residential and commercial properties.



Active Ingredient: Deltamethrin
Formulation: Suspension concentrate
Use: Outdoor residential and commercial applications



Unstoppable staying power against the unexpected.

It stays effective where it's sprayed, even in tough conditions, from one visit to the next.

- // Proprietary polymer formulation locks the AI in place and protects it from the elements
- // Proven reduction in callback frequency, which can lead to customer satisfaction and retention
- // Extended residual under commercial conditions (also labeled for food handling)

Pests controlled

Ants, bed bugs, boxelder bugs, brown marmorated stink bugs, carpenter ants, carpet beetles, centipedes, clothes moths, cockroaches, crickets, earwigs, firebrats, fleas, flies, fruit flies, gnats, hornets, millipedes, mosquitoes, moths, multi-colored Asian lady beetles, pillbugs, scorpions, silverfish, spiders, ticks, wasps, yellow jackets
(See product label for a full list of pests.)

Product sizes: 16 x 1-pt. bottles | 4 x 1-gal. bottles | 30-gallon drum

maintenance



Active Ingredient: Deltamethrin
Formulation: Solid Particle (SP) liquid concentrate
Use: Outdoor residential, commercial

A better choice for frequent maintenance services.

Barricor uses a solid particle (SP) formulation technology that provides outstanding performance on complex surfaces and allows the active ingredient to remain more bioavailable to pests.

- // Offers efficacy at low dose rates
- // Affordable innovation – one bottle services approximately 128 homes at a similar cost per home compared to economy pyrethroid formulations
- // No signal word and no PPE*

*Always comply with state and company policy regarding PPE

Pests

Indoor pests: Ants*, carpenter ants, cockroaches, house flies and spiders
Outdoor pests: American cockroaches, ants**, carpenter ants, fire ants, harvester ants, house flies and Turkestan cockroaches
(See product label for a full list of pests.) *Excluding pharaoh, fire & harvester ants; **Excluding pharaoh ants

Product size: 32-oz. tip-and-pour bottle

Cockroaches are believed to have originated more than **280 million years ago**

cockroaches can live **without food for one month**, but will only survive **one week without water**

American roaches have been reported to spread at least

33 kinds of bacteria

6 kinds of parasitic worms

and at least **7** other kinds of human pathogens



The American cockroach is the **largest** of the house-infesting cockroaches

a cockroach can hold its breath for **40 minutes**



roaches pick up germs on the spines of their legs & bodies as they crawl through decaying matter or sewage and then carry these into food and onto surfaces

Win the war against roaches with Maxforce®

the **#1** choice of professionals.

We have the only roach control system you need, with effective products for clean out, rotation and maintenance. It's integrated pest

management at its best, delivering high performance with low impact.

roaches are known to carry E coli, salmonella, dysentary, typhoid, cholera, leprosy and tuberculosis

SPEED LIMIT

3



cockroaches do not like to travel alone

roaches have an attraction to **beer**



Cockroaches can run up to three miles in an hour



cockroaches can cause
allergic reactions
& trigger asthma attacks



sun	mon	tue	wed	thur	fri	sat
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a roach can live up to a week without its head

ROACH

*roach
control*



roach control

Product:	Primary Differentiator:	Key Features & Benefits:
 Maxforce[®] FC MAGNUM	Fast and effective cockroach bait in gel form	<ul style="list-style-type: none"> // Fast knockdown of cockroaches – see results the same day // ContactX™ kill technology – cockroaches only need to touch the bait to die // Better tertiary kill with the Domino Effect®
 Maxforce[®] FC SELECT	Kills both normal and bait-averse strains of roaches nationwide	<ul style="list-style-type: none"> // Maintain cockroach-free conditions by baiting in harborages where roach activity may be introduced // Labeled for indoor and outdoor use, including commercial kitchens // Works even where sanitation is poor and other food is available
 Maxforce[®] IMPACT[®]	Advanced formulation combats aversion without compromising flexibility	<ul style="list-style-type: none"> // Designed for modern-day bait rotation strategies to combat aversion and prevent resistance // Contains more complex carbohydrates; not reliant on simple sugars that select for aversion // Active ingredient with alternate mode of action // BlueBead technology with proprietary feeding stimulant assures excellent bait acceptance
 Maxforce[®] FC	Dual action formula kills two ways, by ingestion or contact, killing the roaches you see and those you don't	<ul style="list-style-type: none"> // Long-lasting control // Easy-to-use and apply // Ideal for use in kitchens* // Effectively kills without a trace – no fumes or odor // See visible results overnight <p>* Not to be used on surfaces where food is handled or prepared.</p>
 Maxforce[®] FC ROACH KILLER BAIT STATION	Low-impact roach control for up to 1 year	<ul style="list-style-type: none"> // Starts killing roaches in hours by contact or ingestion // Child-resistant design // No fumes, no mess
 Suspend[®] SC	Advanced-generation pyrethroid	<ul style="list-style-type: none"> // Broad-spectrum control of more than 50 nuisance pests // Flexible label allows application in food service areas // Fast knockdown with a long residual // No odor, no visible residue

a cockroach can live up to one week without its head



Labeled Use: Commercial Residential		Key Pests Controlled:	Active Ingredient:	Formulation Type:	Available Packaging:
●	●	American cockroaches, German cockroaches, adult pantry pest beetles (See product label for a full list of pests.)	Fipronil	Bait gel	12 x 33-gm. reservoirs
●	●	German cockroaches, American cockroaches, oriental cockroaches, brown cockroaches, smoky brown cockroaches (See product label for a full list of pests.)	Fipronil	Bait gel	5 (4 x 30-gm. reservoirs)
●	●	German cockroaches, American cockroaches, oriental cockroaches, brown cockroaches, smoky brown cockroaches (See product label for a full list of pests.)	Clothianidin	Bait gel	5 (4 x 30-gm. reservoirs)
●	●	Cockroaches (See product label for a full list of pests.)	Fipronil	Bait gel	5 (4 x 30-gm. reservoirs) 8 (3 x 60-gm. reservoirs)
●	●	Small cockroaches, such as German and brown-banded roaches (See product label for a full list of pests.)	Fipronil	Bait station	4 x 72 stations
●	●	Ants, bed bugs, cockroaches, fleas, mosquitoes, scorpions, spiders, ticks, wasps, yellow jackets (See product label for a full list of pests.)	Deltamethrin	Suspension concentrate	16 x 1-pt. bottles 4 x 1-gal. bottles

the only roach control system you need

The Maxforce® Roach Control System brings together the clean out power of Magnum, the rotational benefits and EPA reduced-risk designation of Impact® and the sustained control of Select. Together, they give you a real rotation solution you won't find anywhere else. And using the system is as easy as 1-2-3.



1 Clean out



Active Ingredient: Fipronil
Formulation: Bait gel
Use: Commercial, residential



Fast and effective cockroach bait in gel form.

Reduce populations fast; satisfy customers now.

- // Fast knockdown of cockroaches – see same day results
- // ContactX™ kill technology – cockroaches only need to touch the bait to die
- // Better tertiary kill with the Domino Effect®

Pests controlled

American cockroaches, German cockroaches, adult pantry pest beetles
(See product label for a full list of pests.)

Product size:

12 x 30-gm. reservoirs



2 Rotation



Active Ingredient: Clothianidin
Formulation: Bait gel
Use: Commercial, residential



Specially designed to combat aversion.

It's formulated for modern-day bait rotation strategies to combat aversion and prevent resistance.

- // Works on all roaches – indoors or outdoors, large or small
- // Contains more complex carbohydrates; not reliant on simple sugars that select for aversion
- // Active ingredient with alternate mode of action
- // BlueBead technology with proprietary feeding stimulant assures excellent bait acceptance
- // EPA reduced-risk designation for cockroach control
- // No signal word or big 8 allergens

Pests controlled

German cockroaches, American cockroaches, oriental cockroaches, brown cockroaches and smoky brown cockroaches
(See product label for a full list of pests.)

Product size:

5 (4 x 30-gm. reservoirs)

cockroaches can spread nearly
33 different kinds of bacteria



3 Maintenance



Active Ingredient: Fipronil
Formulation: Bait gel
Use: Commercial, residential



Maintain cockroach-free conditions.

It allows you to maintain cockroach-free conditions by baiting in harborage sites where roach activity may be introduced.

- // Labeled for both indoor and outdoor use, including commercial kitchens
- // Works even where sanitation is poor and other food is available

Pests controlled

German cockroaches, American cockroaches, oriental cockroaches, brown cockroaches and smoky brown cockroaches
(See product label for a full list of pests.)

Product size:

5 (4 x 30-gm. reservoirs)

diet matters



Don't over estimate bait attraction

Bait cannot be attractive if it's placed outside the sensory range of the targeted roaches.



Correctly place baits

Place baits directly into, or as close as possible to, cockroach harborage sites.



Apply appropriate amounts of bait

Start with label directions and be prepared to return in a week to adjust accordingly.



90-120 days

It's recommended you rotate gels every 90-120 days. This is also the typical German cockroach generational cycle.

There are more than **700 ant species** found in the U.S.

but only about **25 species** commonly infest homes



Maxforce® Ant Solutions take the guesswork out of ant baiting. Our product line-up addresses different ant species, food preferences and seasonality, helping you better protect your customers from these nuisance pests.

when crushed, some species have a rotten coconut-like smell while others smell citrusy or lemon-like



The harvester ant gets its common name from its behavior of collecting seeds



Acrobat ants get their common name from the ability to raise their abdomen over their thorax & head



crazy ants get their common name from the workers' habit of running in an erratic, jerky manner when searching for food



If a 175 pound person were as strong as an ant he could lift almost 9,000 pounds



Ants will eat practically any kind of food, but most are attracted to sweets

Fire ants like to build mounds along sidewalks or close to trees





ants have been
living on the earth
for more than **100**
million
years

It has been estimated
that the total number
of individual ants
alive in the world at
any one time is between

1-10
quadrillion



**one fire ant can
sting multiple times**
which makes this pest
particularly dangerous
to small children and pets





Ants can lift up to **50 times**
their own body weight



*ant
control*



ant control

Product:	Primary Differentiator:	Key Features & Benefits:
 Maxforce[®] COMPLETE	<p>High performance, low impact ant control</p>	<ul style="list-style-type: none"> // The Simply Irresistible™ food ingredients, combined with the delayed-action kill of the AI, eliminates ant colonies through the Maxforce Domino Effect® // Broad-spectrum control, including ants, crickets & cockroaches* // Can be applied as a crack-and-crevice treatment, mound treatment, around the perimeter of structures or broadcast outdoors <p>* German, American, Oriental and Smokey Brown roaches</p>
 Maxforce[®] FC ANT BAIT STATION	<p>Effective ant control for up to 1 year</p>	<ul style="list-style-type: none"> // Non-repellent formula does not cause secondary colony formation // No insecticide odor // Child-resistant design // Perfect for homes, schools and other sensitive environments
 Maxforce[®] FC FIRE ANT BAIT	<p>Low-dose granules for long-lasting control</p>	<ul style="list-style-type: none"> // Provides effective control of fire ants with a Simply Irresistible™ formula and the Maxforce Domino Effect® // Economical and easy-to-apply // Cost-effective, easy-to-use granules
 Maxforce[®] FLEET™	<p>Contains fipronil, the #1 active ingredient for fast, effective ant control, indoors and out</p>	<ul style="list-style-type: none"> // Long-lasting, fast-acting // Moist, carbohydrate-rich gel // New, thicker consistency enables it to stay where it's applied – even on vertical applications // Formulated to take advantage of ant trophallaxis, in which worker ants eat the bait and return to feed it to the rest of the colony
 Maxforce[®] QUANTUM	<p>Stays attractive to ants for up to 3 months</p>	<ul style="list-style-type: none"> // Can be diluted to effectively control mega-colony ants // Hydroscopic formula retains and absorbs moisture to keep it attractive to ants // Delayed-action kill eliminates the entire colony // Clear, odorless formula




ants are the longest living of all insects, living up to 30 years



Labeled Use: Commercial Residential	Key Pests Controlled:	Active Ingredient:	Formulation Type:	Available Packaging:
● ●	Acrobat ants, Argentine ants, big-headed ants, carpenter ants, cornfield ants, crazy ants, field ants, ghost ants, harvester ants, odorous house ants, pavement ants - plus cockroaches, crickets, silverfish, firebrats, earwigs (See product label for a full list of pests.)	Hydramethylnon	Granular bait	6 x 8-oz. plastic applicator containers 6 x 4-lb. plastic jugs
● ●	Argentine ants, carpenter ants, crazy ants, pavement ants, cornfield ants, odorous house ants, acrobat ants, thief ants (See product label for a full list of pests.)	Fipronil	Bait station	4 x 24 stations
● ●	Fire ants (See product label for a full list of pests.)	Fipronil	Granular bait	1 x 10-lb. bag
● ●	Argentine ants, carpenter ants, odorous house ants (See product label for a full list of pests.)	Fipronil	Bait gel	5 (4 x 27-gm. reservoirs)
● ●	Acrobat ants, Argentine ants, big-headed ants, black garden ants, crazy ants, ghost ants, little black ants, odorous house ants, pavement ants, pharaoh ants, rover ants, thief ants, white-footed ants (See product label for a full list of pests.)	Imidacloprid	Liquid gel	6 x 120-gm. squeeze tubes



ant control

Product:	Primary Differentiator:	Key Features & Benefits:
 Premise²	Liquid formulation of the original non-repellent termiticide	<ul style="list-style-type: none"> // Small bottle size for handheld sprayers // Easy-to-use and mix // Broad label flexibility saves time and labor
 Premise[®] FOAM	The original non-repellent termiticide available in portable instant foam	<ul style="list-style-type: none"> // Ready-to-use can means no bulky equipment needed // No measuring, mixing or waiting around required // Long-lasting residue delivers long-term termite control // Undetectable by termites // Fast and easy-to-use – ideal for targeted applications // Expands at a 30:1 ratio to thoroughly cover hard-to-reach areas such as inside termite galleries, wall voids, floor joists and more
 Temprid[®] FX	Exceptional strength and flexibility for long-lasting control of hard-to-kill pests	<ul style="list-style-type: none"> // Powerful, broad-spectrum insecticide that controls over 50 pests // Can be applied indoors and outdoors, including foliar applications on non-blooming plants // Effective against key public health pests (including mosquitoes, ticks, etc.) that may transmit various diseases // Enhanced label directions for providing excellent control of scorpions



ants don't sleep

ants leave trails and communicate with each other using pheromones as chemical signals



Labeled Use: Commercial Residential	Key Pests Controlled:	Active Ingredient:	Formulation Type:	Available Packaging:
● ●	Subterranean termites, drywood termites, ants (See product label for a full list of pests.)	Imidacloprid	Liquid	2 (6 x 240-ml. bottles)
● ●	Ants, carpenter bees, wood-infesting beetles/borers, drywood termites and subterranean termites (See product label for a full list of pests.)	Imidacloprid	Foam	12 x 18-oz. cans
●	<p><i>Indoor:</i> Ants, bed bugs, boxelder bugs, carpet beetles, centipedes, clothes moths, cockroaches, crickets, firebrats, flies, millipedes, pillbugs, silverfish, sow bugs, spiders</p> <p><i>Outdoor:</i> Ants, boxelder bugs, carpenter ants, centipedes, cockroaches, crickets, earwigs, fire ants, fleas, flies, gnats, ground beetles, hornets, mosquitoes, moths, multicolored Asian lady beetles, scorpions, spiders, ticks, yellow jackets</p> <p><i>Wood-infesting:</i> Beetles, carpenter ants, carpenter bees, drywood termites (See product label for a full list of pests.)</p>	Imidacloprid, β-cyfluthrin	Suspension concentrate	8 x 900-ml. bottles 6 x 400-ml. bottles 6 x 240-ml. bottles



House flies taste with their feet, which are

10 million times
more sensitive to sugar than the human tongue

adult house flies are no bigger than 1/4" long
& usually live between
15 & 25 days

Female horse fly bites, especially in large specimens, can be quite painful because their mouthparts are used for **tearing and lapping**

Indoors, flies will congregate on **windows** stimulated by the light shining through them



house flies tend to stay within
1-2 miles
of where they were born



However, they have been known to migrate up to 20 miles to find food

From a resting position, the fly performs a wild leap and stumbles through the air using its legs

Only on the second phase will they gain control and start flapping their wings

Too fast for the swat – airborne flies harness their aerodynamic force within a wingbeat or two to almost instantaneously change their course

Adult horse flies are fast, strong fliers and capable of flying for more than **30 miles**



Female horse flies are so persistent that they will continue biting a host until they either succeed in procuring their blood meal or are **killed**

The house fly "hums" in the key of **F**



New products come and go, but Bayer Maxforce® continues to immediately and effectively alleviate your customers' fly problems. From spot bait to granular solutions, Maxforce has a treatment option designed for every situation.

There are more than 120,000 species of flies worldwide



The house fly is known to carry over

100 different kinds

of disease causing germs, such as typhoid fever, dysentery, tuberculosis & bubonic plague






A female house fly can lay up to **600 eggs** in her lifetime

House flies defecate every **4-5 minutes**

fly
control



fly control

Product:	Primary Differentiator:	Key Features & Benefits:
 DeltA Gard	Fast knockdown, superior efficacy	<ul style="list-style-type: none"> // No knockdown recovery // Utilizes proprietary FFAST[®] Technology for more even distribution of active ingredient // May be sprayed when livestock are present // No VOCs // Low odor
 Maxforce[®] GRANULAR FLY BAIT	Kills flies for up to 30 days for consistent fly control between applications	<ul style="list-style-type: none"> // Long-lasting fly control // Kills flies in 60 seconds or less // Contains four powerful attractants that lure flies to their death // Labeled for use around the outside of structures and partially enclosed or protected areas, including commercial and agricultural production facilities // Contains Bitrex[®] bittering agent // Use around dumpsters, garbage compactors, outdoor dining areas and loading docks // Contains Z-9 Tricosene (pheromone)
 Maxforce[®] FLY SPOT BAIT	Unobtrusive control, indoors and outdoors. Immediate results – kills in 60 seconds or less.	<ul style="list-style-type: none"> // Controls house flies both indoors and outdoors, including non-food areas of commercial food handling establishments and animal facilities // Long residual <ul style="list-style-type: none"> - Up to 6 weeks indoors - Up to 30 days outdoors // Treat less surface area compared to contact killing sprays // Low odor // Contains Z-9 Tricosene (pheromone)

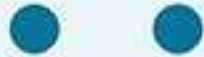
house flies are capable of contaminating food & transferring more than 100 pathogens, including typhoid, salmonella & tuberculosis



flies have 4,000 lenses in each eye



Labeled Use:
Commercial | Residential



Key Pests Controlled:

Insecticide-resistant mosquito species, flies
(See product label for a full list of pests.)

Active Ingredient:

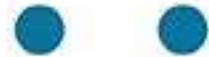
Deltamethrin

Formulation Type:

Oil-in-water emulsion

Available Packaging:

6 x 16-oz. bottles

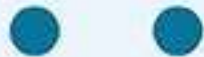


House flies

Imidacloprid

Granular

4 x 5-lb. pails



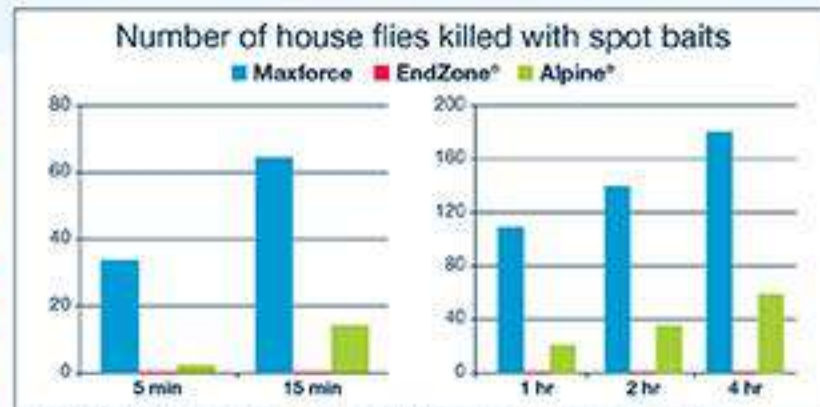
House flies

Imidacloprid

Water soluble powder

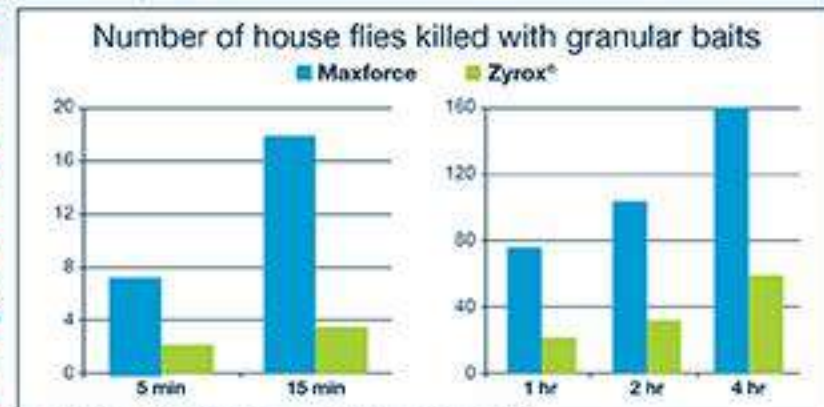
50 x 2-oz. pouches
6 x 1-lb. bottles

Maxforce Fly Spot Bait costs up to **75% less** per fl. oz. than other competitive spray baits.



OE14USABYN-EKD1, OE14USABTD-EKD2 | Bayer Environmental Science, Clayton, NC
EndZone did not knockdown or kill any houseflies within 4 hours. Alpine Pressurized Fly Bait is a true aerosol (petroleum propellants) containing 0.5% d-methofenothrin. It does not contain Z-9 Tricosene (pheromone) nor the food attractants that make Maxforce special.

Maxforce Granular Fly Bait costs up to **50% less** than the leading competitor.



OE14USABTE-EKD2 | Bayer Environmental Science, Clayton, NC
Syngenta's Zyrox Fly Bait is a granular formulation containing 0.5% cyantraniliprole. Its bait matrix does not contain Z-9 Tricosene (pheromone) nor the food attractants that make Maxforce special.

super economical

control your spending

The average size Formosan termite colony can consume 1' of a 2X4 in 25 days

Termites use their scissor-like jaws to eat wood



**24 hours a day,
7 days a week**

Termites date back more than
120 million years
to the time of the dinosaurs

A mature Formosan termite colony
can cause severe structural damage
to a home in as little as **six months**

X	X	X	X
X	X		

In addition to structures,
Formosan termites
also infest trees, shrubs,
utility poles, timber,
railroad trusses
& even **boats**



High performance and excellent value just
got better. Premise® provides highly
effective termite control with a seven-year
guarantee from initial treatment*. Help your
customers protect their biggest investment
with the most effective long-term termite
protection available.

*See Premise Guarantee terms and conditions.

Termites are known
as "silent destroyers"
because of their ability
to chew through wood,
flooring and even
wallpaper undetected

**Drywood
termites
can be found
in attics**

but can chew through
**support beams,
floors and walls**

**Drywood termites usually
swarm on sunny, warm days
after a sudden rise in temperature**

Subterranean termites
build distinctive tunnels, "**mud tubes**,"
to reach food sources and protect themselves from open air





termite colonies can range
from a few thousand individuals
to several million

it would take one termite
3,144 years
to eat the wood in a
1,000-square-foot home



termites cause **\$5 billion**
of damage yearly throughout the U.S.

an average size
termite colony
may consume

12.9 lb.
of food per year







TERMITE

*termite
control*



termite control

Product:	Primary Differentiator:	Key Features & Benefits:
 Premise[®] 2	Liquid formulation of the original non-repellent termiticide	<ul style="list-style-type: none"> // Small bottle size for handheld sprayers // Easy-to-use and mix // Broad label flexibility saves time and labor // Termites cannot detect the presence of this product, so a perfect application is less critical
 Premise[®] 75 WP	High-performance, non-repellent termiticide	<ul style="list-style-type: none"> // Non-repellent termiticide with high performance, affordability and excellent value // Water-soluble packets provide easy mixing // Broad label flexibility saves time and labor // Termites cannot detect the presence of this product, making treatments more effective // Can be applied at the lowest rate currently available on the market today // Labeled for Premise Perimeter Application – less drilling, less labor
 Premise[®] PRE-CONSTRUCTION	The original non-repellent termiticide	<ul style="list-style-type: none"> // Easy-to-use // Broad label flexibility saves time and labor // Termites cannot detect the presence of this product, so more will be exposed to the treatment // Not harmful to plumbing and other construction components
 Premise[®] PRO	Superior protection for pre-construction treatment against subterranean termite species	<ul style="list-style-type: none"> // Superior formulation, proven performance // Easy-to-measure // Suspension formula requires minimal agitation // Non-repellent chemistry means termites cannot detect in soil // Structural protection doesn't depend on a perfect barrier as with pyrethroids // Not harmful to plumbing and other construction components

Formosan termite colonies can be up to 300 feet long and there can be tens of thousands of termites in a single colony



the world's termites outweigh the world's humans 10 to 1



Labeled Use: Commercial Residential		Key Pests Controlled:	Active Ingredient:	Formulation Type:	Available Packaging:
●	●	Subterranean termites, drywood termites, ants (See product label for a full list of pests.)	Imidacloprid	Liquid	2 (6 x 240-ml. bottles)
●	●	Carpenter ants, dampwood termites, drywood termites, subterranean termites, other wood-infesting insects (See product label for a full list of pests.)	Imidacloprid	Water-soluble packets	12-envelope case
●	●	Subterranean termites, carpenter ants, other wood-infesting insects (See product label for a full list of pests.)	Imidacloprid	Liquid	2 x 2.15-gal. jugs
●	●	Subterranean termites, carpenter ants, other wood-infesting insects (See product label for a full list of pests.)	Imidacloprid	Liquid	4 x 123-oz. jugs





termite control

Product:



**Premise[®]
FOAM**

Primary Differentiator:

**The original non-repellent
termiticide available
in portable instant foam**

Key Features & Benefits:

- // Ready-to-use can means no bulky equipment needed
- // No measuring, mixing or waiting around required
- // Long-lasting residue delivers long-term termite control
- // Undetectable by termites
- // Fast and easy-to-use – ideal for targeted applications
- // Expands at a 30:1 ratio to thoroughly cover hard-to-reach areas such as inside termite galleries, wall voids, floor joists and more



**Premise[®]
GRANULES**

**Only non-repellent
termiticide in granule
formulation**

- // Quick and easy – starts killing termites instantly
- // Can be used before full structural treatment
- // Apply to:
 - Bare soil, landscaped areas, turf grass and mulch areas
 - Areas surrounding structures that are subject to termite attacks
 - Non-structural wood-to-soil contact situations
 - Bath-trap treatments, around wells and in crawl spaces
 - Near well lines applied in trench – no need to pull out soil and treat on plastic and then replace
- // No mixing or setup time
- // No water needed to apply
- // No bulky, heavy equipment needed

*subterranean termite colonies can
have up to 2 million members!*



the Premise[®] Guarantee

If Premise Insecticide fails to stop termites at any time within seven years of initial treatment, we will gladly reimburse you (Pest Management Professional) for the product and labor costs necessary for a retreatment, provided that all terms and conditions of this offer have been met.

Seven years

the queen of a certain termite species can lay 40,000 eggs per day



Labeled Use:
Commercial | Residential

Key Pests Controlled:

Active Ingredient:

Formulation Type:

Available Packaging:

Ants, carpenter bees, wood-infesting beetles/borers, drywood termites and subterranean termites
(See product label for a full list of pests.)

Imidacloprid

Foam

12 x 18-oz. cans

Subterranean termite species of *Coptotermes*, *Heterotermes*, *Reticulitermes* and *Zootermopsis*
(See product label for a full list of pests.)

Imidacloprid

Granular

8 x 3.6-lb. jugs

create a protection zone

Premise creates a protective Treated Zone between termites and the wood in your home. Unlike some other products that rely on a continuous chemical barrier to keep termites away, Premise has a unique chemistry that binds to the soil and won't wash away. Even at the lowest exposure to Premise, termites instantly stop feeding and damage to structure immediately stops.

1. Premise liquid is applied as a diluted, water-based solution to soil along foundation walls.



3. Premise protects structures with its long-lasting non-repelling Treated Zone.

2. Termites contact Premise as they forage in treated soil and carry it back to their nest mates.

the Premise Domino Effect[®]



Termites can't detect the Premise Treated Zone. Termites are exposed by contact and ingestion of soil.



Once exposed to Premise, termites stop feeding & soon die.



Termites exposed to Premise transfer the product to nest mates through social interaction and cannibalism.



Rodents consume or contaminate about
20% of the world's food supply

a rat will shed over
500,000 body
hairs each year



worldwide, rats and mice are
responsible for spreading
over 35 diseases

Rodents contaminate products,
equipment and food prep surfaces
with their hair, droppings and urine



Bayer has created a business service platform dedicated to leveraging smart devices, IoT and artificial intelligence to provide value-added services and solutions. The goal is to help customers fuel profitable growth, stay ahead of industry regulations, and build business models with long-term sustainability. The first offering from this exciting platform is the Bayer Rodent Monitoring System (RMS) – control that sets you free!

An adult rat



can squeeze
into a hole as
small as a
quarter

Rats can chew through glass, cinder block, wire, aluminum and lead causing structural damage to buildings



Fifty rats
in a food facility
can demolish
23 pounds
of food per week



Mice can
carry as many
as 200 human
pathogens

Mice are good jumpers and can jump 18 inches in the air



Rats contaminate and
destroy enough food
worldwide each year to feed

200
MILLION
PEOPLE

rats can fall from a height of
50 feet without getting hurt



It is estimated there is one rat for
every person living in the U.S.

*rodent
monitoring*

rodent monitoring



There when you can't be

The Bayer Rodent Monitoring System (RMS) is a wireless network of high-tech trap sensors that provides 24/7 monitoring, real-time capture alerts and up-to-the-minute rodent program verification. It helps PMPs provide proactive, effective pest management, while helping food safety and other sensitive businesses protect their facilities and safeguard public health.

Prevent

Manually checking each trap can divert focus from the true purpose of IPM inspections: prevention. Whether you rely on third-party pest management service or manage an in-house program, Bayer RMS can provide the time needed to think outside the trap and be more proactive.

Correct

With 24/7 monitoring, real-time capture alerts, and up-to-the-minute program verification, you have the data to take immediate corrective action, preventing further infestation.

Predict

Bayer gives you the data to analyze patterns, find root causes and predict future rodent problems, helping improve accountability and compliance.



24x7 monitoring
Real-time data & alerts



Proactive service
Faster root cause analysis



Improved audit readiness
Real-time program verification

Prevention starts with knowing when and where, in real time

Features

- // 24/7 monitoring
- // Real-time capture alerts
- // Daily system status reports
- // Up-to-the-minute rodent program verification
- // Graphic floor plan
- // Time-stamped data

Helps enable

- // Rapid response
- // Faster root cause analysis
- // Better IPM inspection
- // Infestation prevention
- // Transparency across facilities
- // Improved audit readiness

Available for indoor and outdoor use

- // Water-resistant sensor
- // Ability to count bait station activity as an alternative to immediate alerts
- // Ability to create activity heat maps showing areas of external rodent pressure
- // Small, sleek sensor design fits multiple bait stations
- // Gasket technology protects against water
- // Sensor status LEDs shine through translucent gasket material, allowing easy status visibility even in daylight situations

For more information, visit beyondsmarterbusiness.com.





Heat maps showing areas of rodent pressure are automatically generated by capture data provided from the network of deployed devices.



Graphic floor plan

we have more tools you can use

Take advantage of our expert resources.

We keep you connected with expert information and innovative business tools.

website



PRODUCT GUIDES



PRODUCT VIDEOS



CUSTOMER STORIES

app store



BAYER PEST PORTAL APP

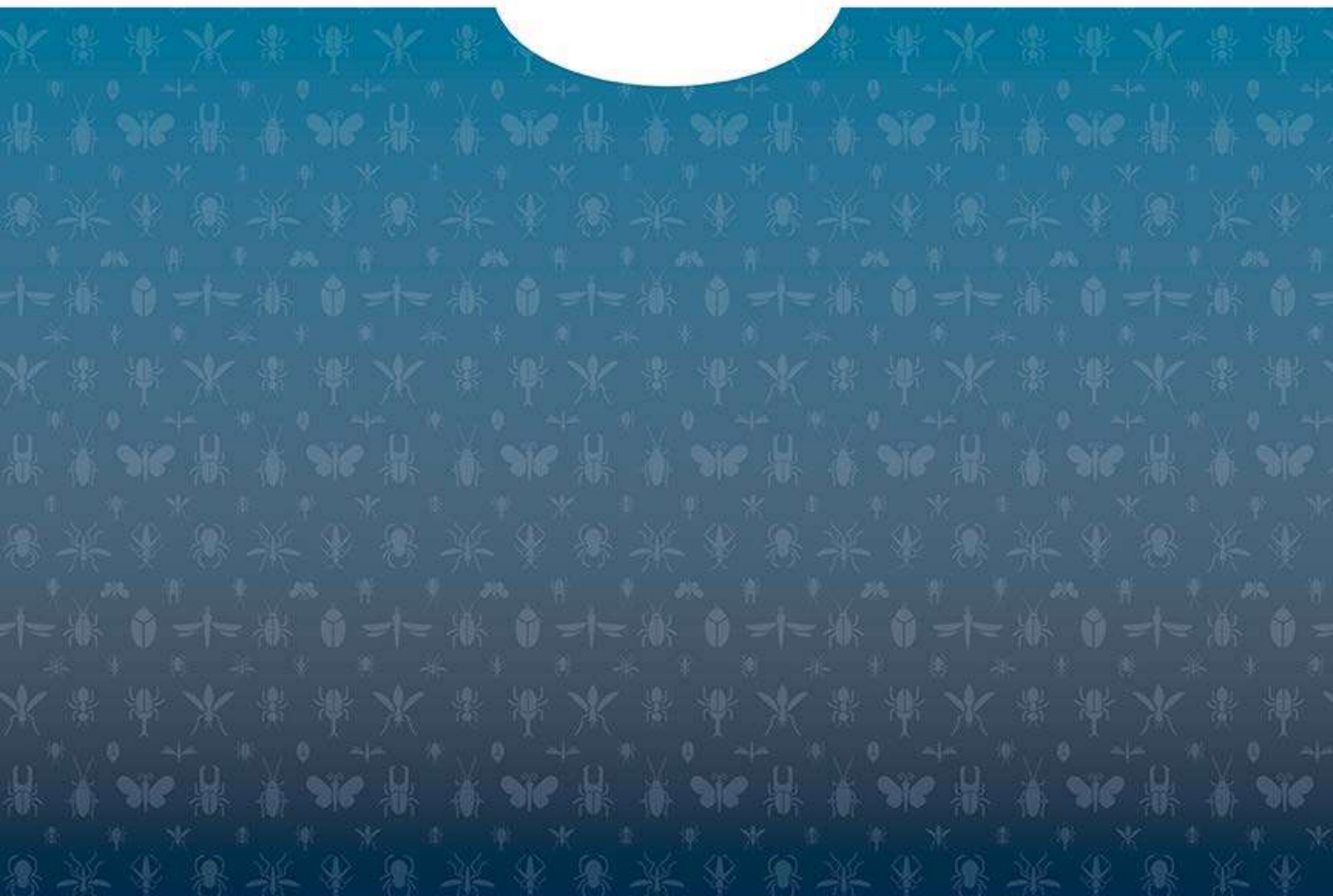
environmentalscience.bayer.us |  @BayerPestPro |  Available on  iTunes and Google play

Insect facts and trivia courtesy of the following resources:

CDC – cdc.gov
Hexapoda Collection – thehexapodacollection.com
Indiana State Department of Health – in.gov/isdh
International Food Safety & Quality Network – ifsqn.com
National Geographic – nationalgeographic.com
PestWorld and PestWorld for Kids – pestworld.org; pestworldforkids.org
Quality Assurance & Food Safety – qualityassurancemag.com
SA Health – sahealth.sa.gov.au
Smithsonian – si.edu
University of Vermont – uvm.edu
U.S. Fish & Wildlife Service – fws.gov
World Health Organization

Additional facts and trivia for entertainment purposes only:

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livescience.com
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realpages.com
rkenvironmental.com
web.ics.purdue.edu
zappest.com



ALWAYS READ AND FOLLOW LABEL INSTRUCTIONS.

Bayer Environmental Science, a Division of Bayer CropScience LP, 5000 CentreGreen Way, Suite 400, Cary, NC 27513. For additional product information, call toll-free 1-800-331-2867. www.environmentalscience.bayer.us. Not all products are registered in all states. Bayer (reg'd), the Bayer Cross (reg'd), Barricor®, ContactX™, DeltaDust®, DeltaGard®, Domino Effect®, FFAST®, Fleet™, Impact®, Maxforce®, PolyZone®, Premise®, Simply Insectible™, Suspend®E, Temp®, and Tempid® are trademarks of Bayer. Alpine and Cy-Kick are registered trademarks of BASF. EndZone is a registered trademark of FMC. Zynox is registered trademarks of Syngenta. Bitrex is a registered trademark of the Johnson Matthey Group of companies. ©2020 Bayer CropScience LP, ES-0820-MULTI-001-A-00

