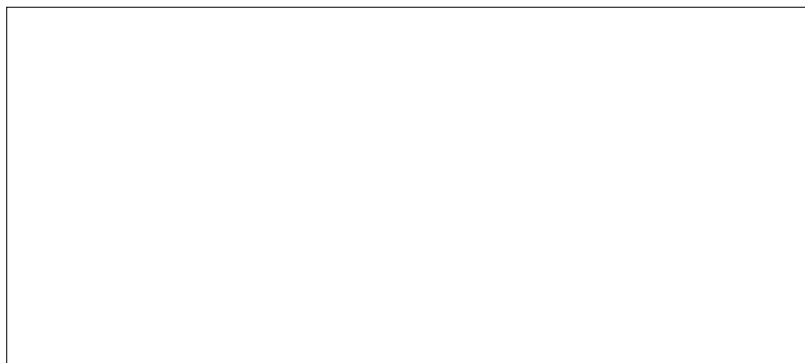




DuPont™ Arilon® insecticide available from:



ALWAYS REFER TO THE PRODUCT LABEL BEFORE USE.

This reference guide is based on US and Australian data and is not intended as a substitute for the product label for the products referenced herein. Product labels for the above products contain proper precautions, directions for use and product warranty and liability limitations that must be read before using the product. Applicators must be in possession of the product label(s) at the time of application. Always read and follow all label directions and precautions for use when using any pesticide.

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The miracles of science®

DuPont™ Arilon®

INSECTICIDE

Innovative technology with outstanding performance



RE
THINK
PEST
CONTROL



The miracles of science®

Upgrade Your Results: Indoors and Out

DuPont™ Arilon® insecticide is the progressive way to control a diverse range of insect pests in both interior and exterior application situations. Studies show that Arilon® provides excellent control of ants, cockroaches and houseflies on a variety of interior and exterior surfaces, including concrete. The robust, high performance formulation also has a favourable toxicological profile with none of the irritancy that can be experienced with pyrethroid products. With a versatile label, Arilon® can be applied with confidence and comfort in and around household and commercial / industrial locations with fewer limitations.

Arilon® is the latest non-repellent chemistry, with a mode of action like no other. The non-repellent action allows the insects to pick up the insecticide unknowingly - DuPont™ Arilon® actually controls insect populations rather than repelling them or excluding them from an area. Unlike pyrethroids which can have a fast knockdown effect, Arilon® takes several hours to activate. Once picked up by the insect, the active ingredient is converted to its MetaActive™ form by enzymes inside the insect. The delay in activation is actually beneficial, as the insect has the chance to transfer Arilon® to other insects before dying, thus providing more comprehensive population control.

Arilon® offers strong residual performance: Tests have proven that Arilon® remains effective in exterior, partly sheltered conditions for up to 3 months and for up to 6 months in indoor conditions, providing an ideal partner for quarterly services. The formulation was developed for ease of use and with the express purpose of giving pest management professionals a powerful product that they can use in a variety of situations.

DuPont™ Arilon® Insecticide Profile

- Studies demonstrate excellent performance against a wide variety of ants, cockroaches and houseflies
- Proven efficacy on a wide range of residential and commercial surfaces
- Proven non-repellent residual insect control in exterior environments for up to three months, and in interior situations for up to six months
- Active ingredient converts to its MetaActive™ form using insect enzymes for targeted insect control
- Developed and approved for both interior and exterior applications
- Available in convenient packs with non-spill measuring device.



Versatility and Flexibility in Application

DuPont™ Arilon® gives you all the performance benefits you expect in one, easy-to-use formulation. Whether insect pest invasions require interior or exterior treatments, residential or commercial usage, or even crack and crevice applications in food-handling establishments, Arilon® offers non-repellent insect pest control across all these use patterns - and more.

For Control of Multiple Pests

Arilon® effectively controls not just one or two species of insects, but a diverse range of pest species. Laboratory and field testing have shown that Arilon® provides excellent control of ants (including Argentine ant, Black House ant, Big Headed ant and Pharaoh ant), cockroaches and houseflies. With Arilon®, you can use one product to control all these insect pests rather than having to treat for different pests with different products - saving time, effort and cost.

Excellent Control on a Wide Variety of Surfaces

The active ingredient in Arilon® has been proven effective, both short term and long term, on many common structural surfaces that require pest control, including stainless steel, ceramic tile, painted surfaces, vinyl siding, weathered wood, concrete and brick. In addition, Arilon® continues to provide effective residual control in exterior, weathered situations for weeks and months after the initial treatment.



Specifically Designed Formulation

The 20 WG (water-dispersible granule) formulation of Arilon® was designed specifically for the pest management industry and offers several benefits to pest control professionals. Arilon® is a dry concentrate that is diluted with water and then sprayed. This low-odour, non-clogging, non-staining formulation is convenient to store, carry, prepare, use and clean up after. It has a strong affinity to attach itself to insects for excellent performance, yet leaves minimal visible residue on treated surfaces. While Arilon® offers excellent residual control over extended periods of time, the formulation does not bind to concrete or wood surfaces, making it available to be picked up by crawling insects.



Pest Species	Surface	DAT	Mortality
Argentine ant	Stainless Steel	1	100%
German cockroach	Vinyl	1	100%
American cockroach	Vinyl	1	100%
Black House ant	Unglazed Tile	1	100%
Coastal Brown ant	Unglazed Tile	1	100%
Housefly	Unglazed Tile	1	100%
Pharaoh ant	Wood	1	100%
Smokybrown cockroach	Concrete	2	100%
Oriental cockroach	Concrete	2	100%

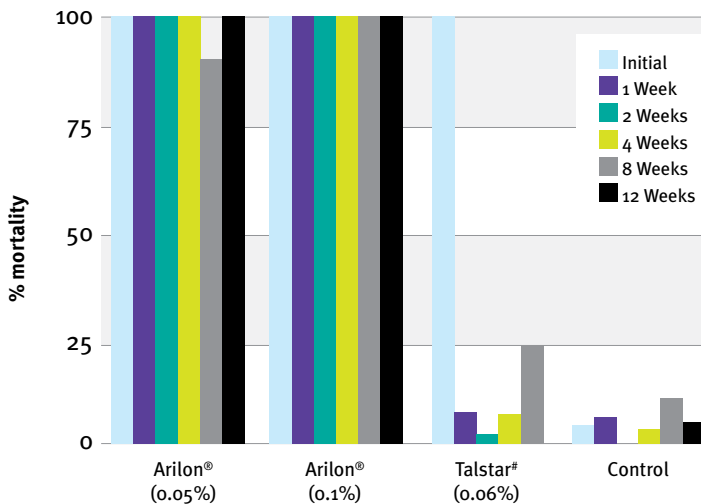
Multi - Pest summary

Multiple States and Countries 2008 - 2009

Results: The surfaces in this chart are arranged in order from the least to most porous of structural surfaces. Irrespective of the surface tested or the insect evaluated, DuPont™ Arilon® provides 100% control for many ants, cockroaches and houseflies in fewer than 2 days.

Sources: BioResearch; Purdue University; Stine-Haskell Research; Universiti Sains Malaysia; and University of Technology Sydney.

3 month indoor data on concrete
German cockroaches

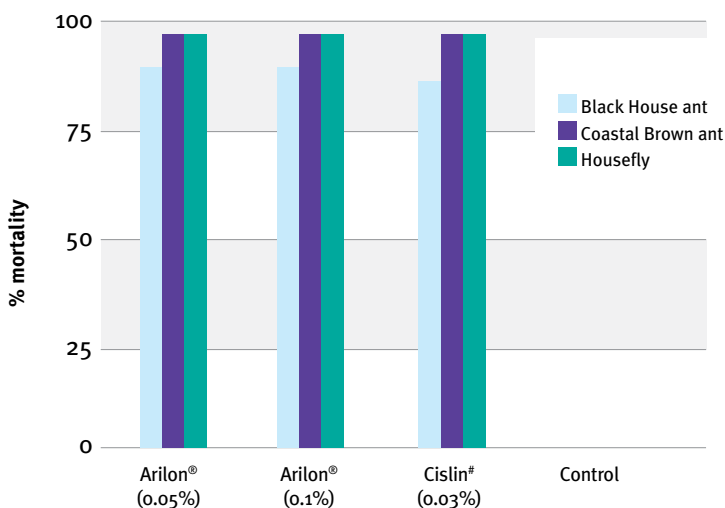


Multi - Pest residual surface trial:

Results: Arilon® is designed to control a diverse spectrum of ants, cockroaches and houseflies on a wide range of porous and non - porous surfaces. Even on tough surfaces such as concrete, which tend to degrade pyrethroids quickly, Arilon® continues to perform. Arilon® provided nearly 100% over a 3 month period on German cockroaches on a concrete surface aged under indoor conditions, whereas the performance of a Bifenthrin product (Talstar 7.9 Flowable, US product) dropped off quickly after only 1 week.

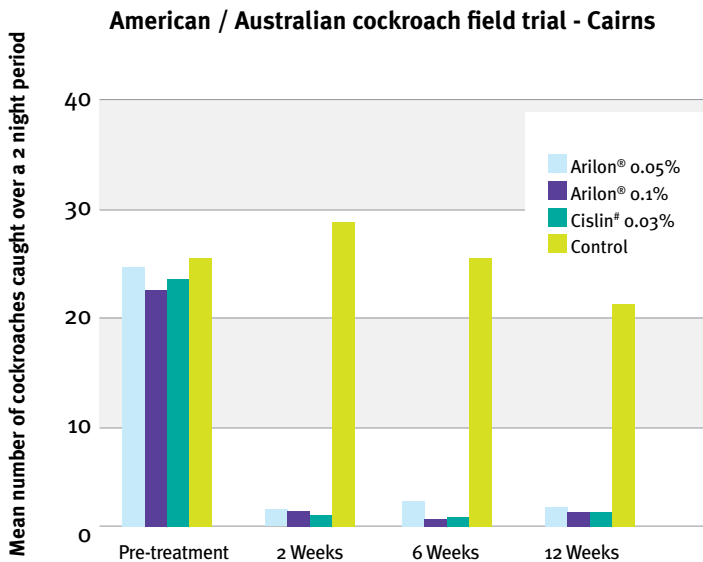
Source: Stine-Haskell Research

6 month indoor data on unglazed tiles
Ants and Houseflies



On an alternative porous surface (unglazed tile), Arilon® demonstrated nearly 100% control of houseflies and ants over a 6 month period under indoor conditions - performance in line with Cislin (Deltamethrin).

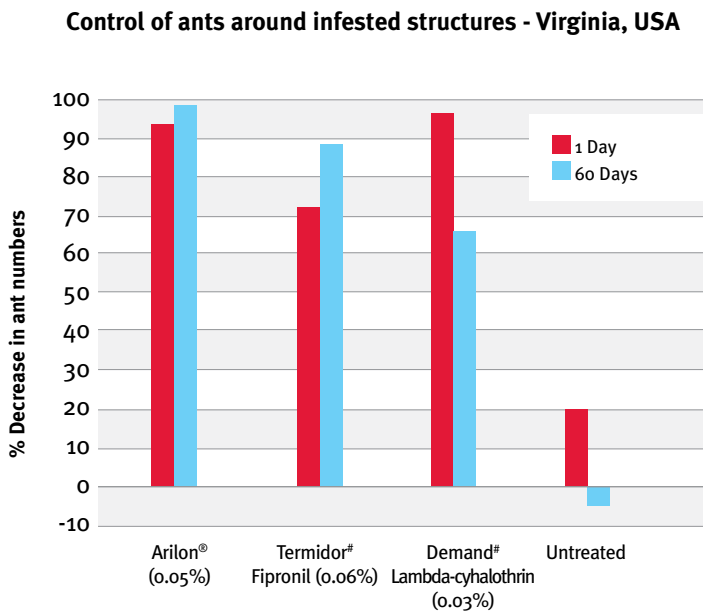
Source: University of Technology Sydney.



Control of large cockroaches in infested houses:

Results: Applications to houses as an indoor crack and crevice treatment and outdoor spot treatment against large cockroach species (American and Australian cockroaches) in Cairns, Australia and has shown the excellent performance of Arilon®, delivering at least 3 months control under field conditions.

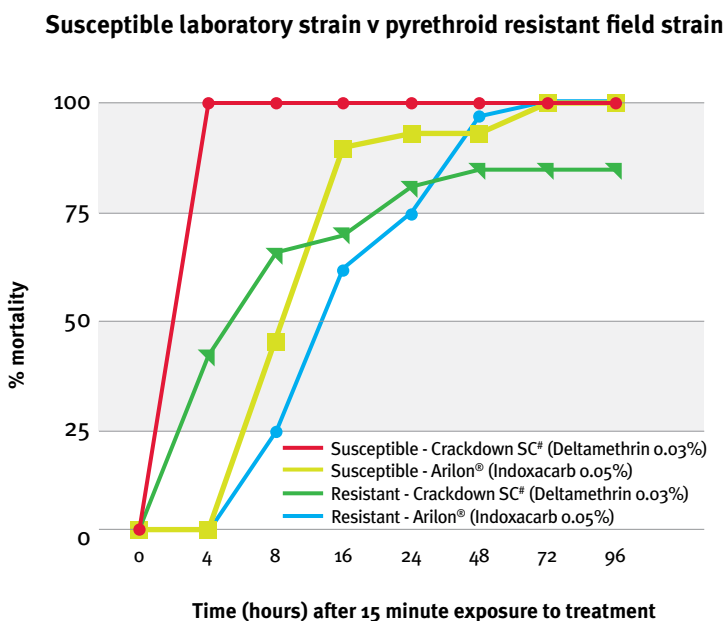
Source: University of Technology Sydney.



Control of ants around infested structures:

Results: Field studies conducted on large ant populations around infested structures and composed mostly of Odorous House ants, showed both the speed of control and residual performance. Within one day, Arilon® provided over 90% control and despite the increasing ant pressure as reflected in the untreated area, Arilon® continued to deliver residual control. Even 60 days after the treatment, Arilon® provided 99% control.

Source: Virginia Tech University, Blacksburg, VA

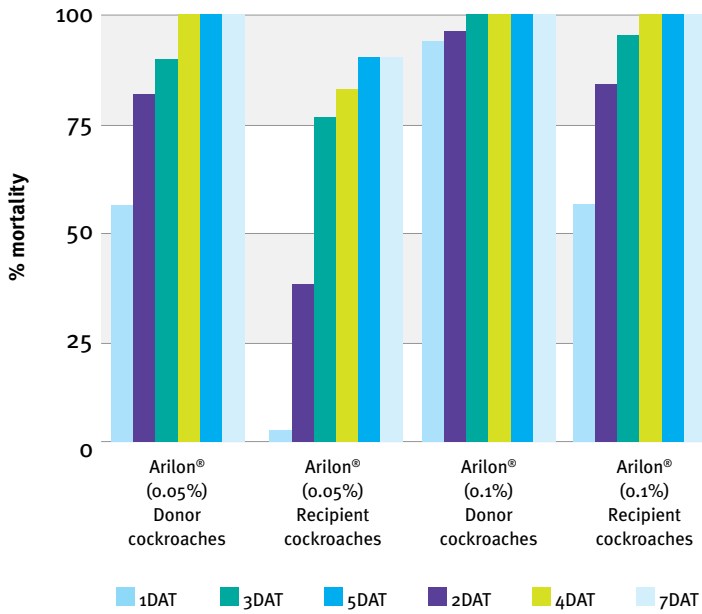


Control of Pyrethroid resistant cockroaches:

Results: Resistance to pyrethroid sprays is well documented. The data in this chart demonstrates that Arilon® delivers 100% control against both susceptible and pyrethroid resistant strains of German cockroaches (collected from the field in Singapore). In comparison, although Deltamethrin gives fast 100% control of susceptible cockroaches, against the pyrethroid resistant strains, the performance of deltamethrin is significantly slower and never actually delivers even 90% control. This demonstrates the benefits of using products with a different mode of action.

Source: Universiti Sains Malaysia.

German cockroach transfer test. Mortality of donor and recipient cockroaches 5:5 Donor:Recipient Ratio

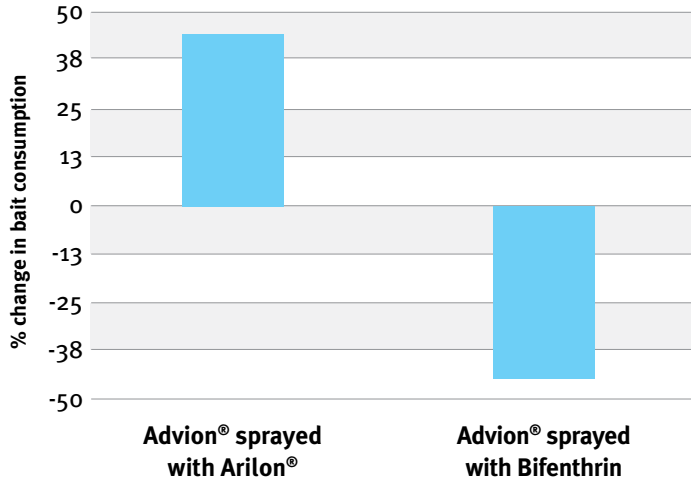


Arilon® is transferred between insects:

Results: This chart demonstrates the transfer of Arilon® from cockroaches that have walked across a treated surface (donor cockroaches) to cockroaches that have not been exposed (recipient cockroaches)..... resulting in the death of both donor and recipient cockroaches. Being a non - repellent insecticide, insects readily walk across Arilon® treated surfaces. This, coupled with the unique Arilon® formulation, allows insects to pick up insecticide particles and transfer the insecticide to other insects through their normal behaviour. With insects that live in close proximity to one other (ants in nests, cockroaches in harbourages), Arilon® can deliver secondary kill, thus enhancing product performance and achieving better population control.

Source: Stine-Haskell Research.

Consumption of bait sprayed with insecticide, by German cockroaches



Use in combination with cockroach baits:

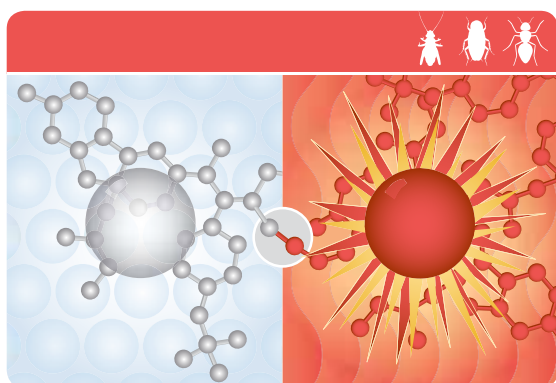
Results: Until now, it has been difficult to use sprays in the same area as bait products, as pyrethroid sprays tend to be repellent. As such using sprays and baits in the same area can be counterproductive. However, since Arilon® is a non - repellent insecticide, it can be used in conjunction with bait products (such as DuPont™ Advion®), to achieve improved control in a more integrated cockroach or ant control program. Although it is not recommended to spray Arilon® directly over bait products, this chart shows that if it happened to occur, it is unlikely to impact bait performance..... unlike a pyrethroid spray.

Source: Stine-Haskell Research.

Winning Chemistry

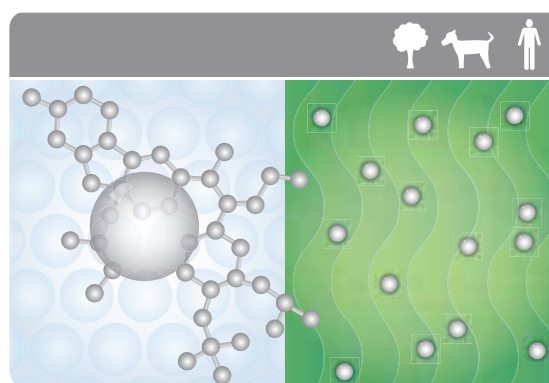
In 1989, E I du Pont de Nemours and Company became one of the first companies to publicly establish global environmental goals. Since then, DuPont globally has broadened its sustainability commitments, with an eye toward developing environmentally improved products for key global markets. DuPont™ Arilon® is another example of our commitment to creating more environmentally sustainable products as outlined below.

Arilon® insecticide contains a proprietary active ingredient that is the only current member of its class of chemistry, the oxadiazines, so it performs like no other insecticide. Based on its favourable environmental and toxicological profile resulting from its selective activation in insects rather than non-target organisms, this active ingredient from DuPont™ Professional Products is in a select group of insecticides to have earned the Award for Team Innovation from the American Chemical Society (ACS).



Target Organisms

Through chemical optimisation methods, DuPont™ scientists engineered the active ingredient in Arilon® to be bioactivated and utilise the insect pests' own enzymes for metabolic conversion to its MetaActive™ form.



Non-Target Organisms

In contrast to the activation in insects, the active is actually broken down in non-target organisms such as mammals, effectively differentiating between target insect pests and non-target species.

*2003 ACS Award for Team Innovation; in recognition of the discovery of indoxacarb.

Smart Performance

The active ingredient in DuPont™ Arilon® insecticide offers a mode of action for residual spray insect control that presents a benefit to pest management professionals - reliance on the target insect pests' metabolic activation process and their natural behaviour to deliver more complete control. Once Arilon is ingested or absorbed by the target pest, the bioactivation process utilises internal insect enzymes to change the active ingredient into its active form we call MetaActive™. The non-repellent nature of Arilon® and its delayed activation, mean that insects walking across treated surfaces do not change their behaviour. As a result, insects have the opportunity to return to their harborage (cockroaches) or nest (ants) before they get effected by the MetaActive™. The insecticide can then be transferred through contact, grooming and other insect behaviours to kill insects that did not have direct contact with the treated surface - a smart way to boost performance.



A test surface sprayed with Arilon® was “tagged” for special photography. Here you can see the result: the light spots on the body of the cockroach show where it unknowingly came into contact with minute particles of Arilon®. Shortly afterward this cockroach experienced paralysis, then death. These particles are easily transferred to other cockroaches, resulting in increased population control.