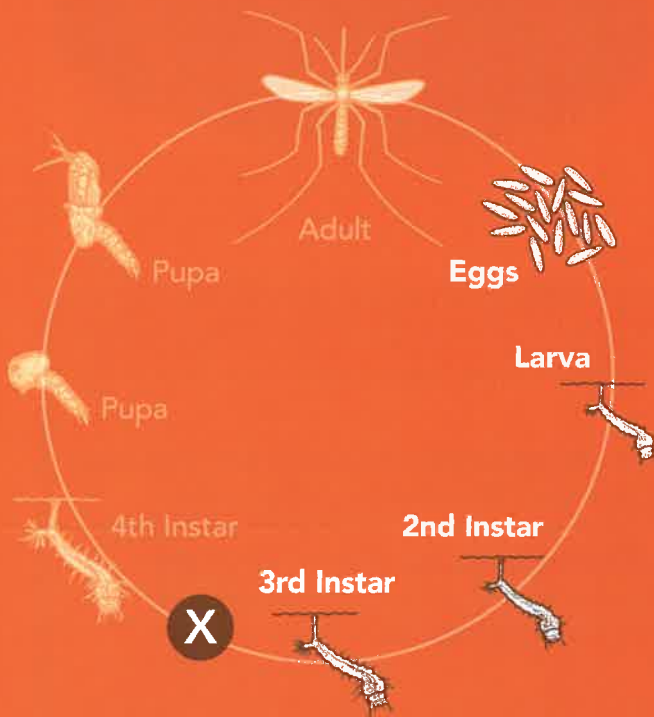


# FOURSTAR® LARVICIDE

FourStar® larvicide is a unique microbial that ends mosquito larval development using naturally occurring bacteria, *Bacillus sphaericus* (Bsph) and *Bacillus thuringiensis israelensis* (Bti). These active ingredients are inherent to soil and contain protein crystals that, when ingested, rupture the gut wall of the larvae causing larval death.



Mosquitoes lay their eggs in standing water, like ponds, ditches and catch basins. FourStar® microbial larvicides can be applied in these areas.

Growing mosquitoes remain in water until they are adults. FourStar® microbial larvicides are effective in the first three instars.

**X** FourStar® microbial larvicides stop mosquito development prior to the pupal stage.



## DESIGNED TO LAST

To enhance performance, FourStar® microbial larvicides contain a dual action release technology. This innovative technology regulates the release of active ingredients to the water surface as well as throughout the water column to ensure a long residual and maximum coverage.

### FourStar® products feature:

- Positive environmental profile
- The first microbial (*Bsph/Bti*) to offer extended residual
- Optimized delivery of the active ingredient to target



## FOURSTAR® FORMULATIONS

FOURSTAR® FORMULATION	RESIDUALS	USES
45 DAY BRIQUETS	Up to 45 days	Use in standing water without the fear of harming aquatic life in areas frequented by humans, livestock and wildlife, storm drains, catch basins, underground drainage systems, storm water retention areas, ponds, and other potential mosquito breeding areas
90 DAY BRIQUETS	Up to 90 days	
180 DAY BRIQUETS	Up to 180 days	
MULTI-BROOD GRANULES (MBG)	Up to 30 days	Floodwater, standing water, roadside ditches, irrigation ditches, pastures, salt marshes, catch basins, storm drains and areas in contact with humans, wildlife and aquatic life
CONTROLLED RELEASE GRANULES (CRG)	Up to 60 days	Pre-flooding application, standing water, roadside ditches, irrigation ditches, pastures, salt marshes, catch basins and storm drains
BTI CONTROLLED RELEASE GRANULE	Up to 40 days	Coastal areas, intermittent floodwater habitat, saltwater areas, sites with canopy vegetation and wet/dry accounts

## FOURSTAR® FORMULATIONS

### FOURSTAR® BRIQUETS

Choose from three briquet sizes and two different formulations with control durations of 45, 90 and 180 days with the *Bsph/Bti* formulation and 45 and 150 days with the *Bti*-only formulation. Briquets can be applied to standing water without fear of harming aquatic life as well as in areas frequented by humans, livestock and wildlife. They may also be applied to potential mosquito breeding areas prior to flooding. Wetting and drying will not reduce their effectiveness.



#### FourStar® *Bsph/Bti* Combination Briquets 45 Day, 90 Day, and 180 Day Features:

- Proven microbial active ingredients
- 6% *Bsph* and 1% *Bti*
- Long-term residual control
- Sustained release technology



#### FourStar® *Bti*-Only Briquets 45 Day and 150 Day Features:

- Long-term residual control with *Bti*
- Sustained release technology
- 7% *Bti*
- Ideal option for rotation plans

#### Application Rate:

To control mosquito larvae, place one briquet in sites to cover up to 100 ft<sup>2</sup> of surface area. When mosquito populations are high, water is heavily polluted, and/or algae are abundant, double the application rate to two briquets per 100 ft<sup>2</sup>.

### FOURSTAR® GRANULES:

FourStar® Granules are heavy, high-density and sand-based larvicides designed for mosquito habitats with vegetative canopy. A dual action controlled release technology allows FourStar® Granules to remain effective through wet and dry periods. A variety of formulations can kill mosquito larvae with a range of residual and multiple floodings.

### FourStar® Multi-Brood Granule (MBG): Sand with Staying Power

FourStar® MBG granule is a heavy, high-density and sand-based larvicide with *Bsph* and *Bti* dual active ingredients. It is most effective in semi-permanent or permanent water habitats providing up to 4 weeks of residual. A dual action release technology in FourStar® MBG granule produces results within the first 48 hours of application for a quick and effective kill of mosquito larvae.



#### FourStar® MBG Features:

- High-density, spherical silica sand carrier
- Combination *Bsph* and *Bti* active ingredients
- Dual action flash release technology
- Bulk density at 65 lbs/ft<sup>3</sup>
- Up to 4 weeks residual
- Control of both floodwater species and *Culex* species

#### FourStar® MBG Benefits:

- Covers a wide range of mosquito species
- Heavier granule provides optimal vegetation penetration
- Long residual saves labor
- Dual active ingredients help prevent resistance development
- Granules are easy on equipment
- Expanded aerial application window
- Less target drift
- More coverage per application

#### Application Rate:

FourStar® MBG granule is approved for ground and aerial application at a minimum of 5 to 10 lbs per acre, up to 20 lbs per acre.

### FourStar® Multi-Brood Controlled Release Granule (CRG): When Timing Is Everything

FourStar® CRG granule is the first and only microbial granule to offer pre-flood application. That means it maintains effectiveness through wet and dry periods. A dual action controlled release technology in FourStar® CRG granule can kill larvae for up to 60 days and 4 floodings.



#### FourStar® CRG Features:

- High-density, spherical silica sand carrier
- 9 to 1 (9% *Bsph*/1% *Bti*) combination active ingredients
- Dual action controlled release technology
- Bulk density of 51 lbs/ft<sup>3</sup>
- Up to 60 days control
- Effective in intermittent flood areas

#### FourStar® CRG Benefits:

- Can be applied to pre-flood areas
- Wet/dry effectiveness reduces applications
- Active ingredient ratio prevents resistance
- Weight provides optimal vegetation penetration
- Less target drift
- More coverage per application

#### Application Rate:

FourStar® CRG granule is approved for ground and aerial application at a minimum of 7.5 to 10 lbs per acre, up to 20 lbs per acre.

### FourStar® Multi-Brood Controlled Release Granule (Bti CRG)

FourStar® Bti CRG granule is a heavy, high-density and sand-based larvicide designed for saltwater habitats with vegetative canopy. A dual action controlled release technology allows FourStar® Bti CRG granule to remain effective through wet and dry periods. It can kill larvae for up to 40 days and 4 floodings.



#### FourStar® Bti CRG Features:

- High-density, spherical silica sand carrier
- 10% *Bti* active ingredient
- Dual action controlled release technology
- Up to 40 days residual
- Effective in intermittent flood areas

#### FourStar® Bti CRG Benefits:

- Can be applied to pre-flood areas
- Wet/dry effectiveness reduces applications
- Controls *Aedes taeniorhynchus*
- Weight provides optimal vegetation penetration
- Less target drift
- More coverage per application

#### Application Rate:

FourStar® Bti CRG granule is approved for ground and aerial application at a minimum of 7.5 to 10 lbs per acre, up to 20 lbs per acre.

### FourStar® WSP: Control Condensed to a Water Soluble Pouch

The power of the FourStar® multi-brood granule technology comes in an easy-to-apply water soluble pouch. The FourStar® WSP product is a microbial insecticide effective against mosquito larvae in a variety of aquatic habitats. It can be hand-applied to all mosquito development sites that contain aquatic life, fish and plants as well as areas in contact with humans, animals, horses, livestock, pets, birds or wildlife.



#### FourStar® WSP Features:

- 3% *Bti* and 3% *Bacillus sphaericus* active ingredients
- Up to 8 weeks of residual control
- Multi-brood control

#### FourStar® WSP Benefits:

- Easy application by hand
- Designed to release effective levels of the active ingredients at the surface and throughout the water column
- Effective in a variety of water habitats

#### Application Rate:

Apply on basis of surface area of potential mosquito breeding sites by placing one FourStar® WSP pouch for up to 50 ft<sup>2</sup> of treatment area.