

# Natular® DT Larvicide

## Frequently Asked Questions

### Q What is the active ingredient in Natular® DT larvicide?

A Spinosad. It is a naturally-derived active ingredient produced during fermentation by the soil organism, *Saccharopolyspora spinosa*. The natural metabolites produced during the fermentation process were termed "spinosyns." Spinosad is the collective term for the two most prominent and most active compounds in the fermentation broth (spinosyn A and spinosyn D). Hence the name "Spinosad." Spinosad has been used since 1999 on more than 250 crops and in consumer and animal health uses in over 85 countries. Its first use in public health began in 2009, when it was introduced as the active ingredient in Clarke's Natular® brand of mosquito larvicides. Spinosad received the USEPA's Presidential Green Chemistry Challenge Award in 1999 as a novel natural insecticide that provided a new mode of action against target pests and provided a good environmental profile compared to traditional synthetic pesticides. More information about this award for Spinosad can be found at <https://www.epa.gov/greenchemistry/document-green-chemistry-challenge-award-recipients-1996-2016>.

### Q How is the active ingredient manufactured?

A Spinosad is produced in a state-of-the-art fermentation facility in the United States, using natural feed-stocks to maintain the fermentation process.

### Q Is Natular DT an EPA Registered product?

A Yes. Natular DT was registered with the EPA in 2008 and is approved for use in 49 states. In fact, Clarke received the USEPA Presidential Green Chemistry Challenge Award in 2010 for the unique formulation and tablet technology of Natular DT. More information about our award for this innovation can be found at <https://www.epa.gov/greenchemistry/presidential-green-chemistry-challenge-2010-designing-greener-chemicals-award>.

### Q How does Natular DT work?

A Natular DT is an easy-to-use, bi-layer tablet containing spinosad that prevents mosquito larvae from becoming biting adults. It has an effervescent layer that releases active ingredient immediately, while the rest of the tablet continues to work for up to 60 days. If dry down occurs inside a container treated with Natular DT, the tablet is reactivated when water is present again.

### Q What types of mosquito larvae can Natular DT control?

A Natular DT can control the larvae of both nuisance and disease vectoring mosquitoes, including those that can carry and transmit diseases, such as West Nile virus, Dengue and Zika. Natular DT is effective on larvae from all four instar stages and has been tested on twenty of the most common vector and nuisance mosquito species.

### Q Where should I use Natular DT?

A Natular DT was formulated specifically to control mosquito larvae in outdoor containerized water sources commonly found around residential and commercial properties. These include sites such as buckets, old tires, empty pots, gutters, natural and man-made depressions (pot holes, tire tracks, swales, ditches, etc.), tree holes and more. Please refer to the product's label for a full list of application sites.

### Q How much Natular DT should be used to treat containerized water?

A One tablet can treat up to 50 gal. or 25 sq. ft. of surface water, up to 6 in. deep, for up to 60 days. Any remaining tablet may be reused after cleaning out a containerized water source. See label for complete instructions.

### Q Can I use water treated with Natular DT for watering plants or a garden, or washing pets?

A Yes. When used according to label instructions, water treated with Natular DT, such as in a rain barrel or a "self-watering" planter, may be used to water residential plants, flowers, or vegetable gardens. It will not damage the plants, and will not harm pets (or people) who consume the plants or bathe in the water."

### Q Can I use Natular DT tablets indoors?

A Per the product label, Natular DT is intended for Outdoor Use only.

### Q Should I use Natular DT in my swimming pool?

A Normal chlorinated swimming pools with a working pump system would not require Natular DT. The pool's pumping system keeps the water moving enough to prevent mosquito breeding. However, unused swimming pools that collect water when it rains, commonly referred to as "green pools," can be mosquito breeding sources, and it would be beneficial to treat that water source with the appropriate number of tablets, based on the pool's size and water volume. Please refer to the label for complete dosing instruction.

### Q Is Natular safe for the environment?

A Spinosad was the first larvicide registered under the EPA's Reduced Risk program due to its reduced risk to human health and non-target organisms when compared to other available alternatives. Spinosad is not toxic to birds, terrestrial wildlife, or fish. While spinosad is toxic to some aquatic invertebrates, following the label use directions will minimize the risk to these organisms.

