



FFAST™ Bti

- A microbial insecticide effective against mosquitoes in a variety of habitats
- A naturally occurring larvicide, safe for use in sensitive environments
- A unique formulation, specifically designed for application by ultra low volume (ULV) equipment
- Kills mosquito larvae rapidly, often within hours after application at field use rates
- Controls mosquito larvae within 24 hours
- Kills mosquito larvae before they hatch, including those that can transmit West Nile virus, Dengue fever, encephalitis or equine encephalitis

ACTIVE INGREDIENT:

Bacillus thuringiensis subspecies israelensis
 Strain BMP 144 solids, spores and insecticidal toxins* 10.0%

OTHER INGREDIENTS: 90.0%

TOTAL: 100.0%

* Equivalent to 380 International Toxic Units (ITU) / mg (1.02 Billion ITU / gallon or 253 Million ITU / liter). Potency units should not be used to adjust rates beyond those specified in the Directions for Use Section. **Note:** The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

EPA Reg. No. 432-1515

KEEP OUT OF REACH OF CHILDREN CAUTION

For **MEDICAL** and **TRANSPORTATION** Emergencies **ONLY** Call 24 Hours A Day 1-800-334-7577
 For **PRODUCT USE** Information Call 1-800-331-2867

See inside leaflet for complete First Aid Instructions, Precautionary Statements, Directions for Use and Storage and Disposal Instructions.



Net Contents
2.5 Gallons
 80009259
 80256450A 110801AV2

BACKED
 by **BAYER™**

FIRST AID	
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
<p>Have the product container or label with you when calling a poison control center or doctor or going for treatment. In case of emergency call toll free the Bayer Environmental Science Emergency Response Telephone No. 1-800-334-7577.</p> <p>Note To Physician: No specific antidote is available. Treat the patient symptomatically.</p>	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. As a general precaution when exposed to potentially high concentrations of living microbial products such as this, all mixer/loaders and applicators not in enclosed cabs or aircraft must wear a dust/mist filtering respirator meeting NIOSH Standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization. Wear water-proof gloves.

ENVIRONMENTAL HAZARDS

Do not contaminate water when disposing of equipment washwaters or rinsate. Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.

Do not apply when ground wind speed exceeds 10 mph or favors drift beyond the treatment areas. Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and water related factors determines the potential for spray drift. The applicator and the treatment coordinator are responsible for considering all these factors when making decisions.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply this product through any type of irrigation system.

PRODUCT INFORMATION

FFAST™ Bti is a selective, microbial insecticide effective against mosquitoes in a variety of habitats. This product is specifically designed to optimize applications by ultra-low volume (ULV) or space spray equipment. When appropriate equipment is used, with flow rates and nozzles optimized for these applications, this product can be used to control mosquitoes that are known or suspected of breeding in standing waters within a 300 foot swath width of the application equipment.

Treatment areas include: abandoned swimming pools or spas, bird baths,

buckets, drains, flood water, flower pots, garbage cans, hollow trees, lagoons, lakes, marshes or swamps, old tires, ornamental fountains, plant trays, planters, plastic covers, ponds, pool covers, rain barrels, roof gutters, standing water, statuary, stock tanks, swamps, tree holes, urns, water gardens, wheelbarrows, or any other water holding receptacles or locations where water collects and mosquito breeding is known or suspected.

Mosquito Habitat	Suggested Rate Range
Treat areas with floodwater, roadside ditches, irrigation ditches, standing pond, woodland pools, snow melt pools, and pastures. Urban, suburban, or residential areas where the control of container breeding mosquitoes is desired.	0.25 – 1.0 pints per acre (4 – 16 fluid ounces per acre)
Treat areas with catch basins, storm water retention areas, tidal water, salt marshes and rice fields.	0.5 – 1.0 pints per acre (8 – 16 fluid ounces per acre)
Treat areas with polluted water (such as sewage lagoons, animal waste lagoons), water with moderate organic matter and water with a high concentration of suspended solids. When late 3rd and early 4th instar larvae predominate, when mosquito populations are high, or when algae is abundant.	1.0 – 2.0 pints per acre (16 – 32 fluid ounces per acre)

In addition, standing water containing mosquito larvae, in fields growing crops such as alfalfa, almonds, asparagus, corn, cotton, dates, grapes, peaches or walnuts may be treated at recommended rates.

Where dense vegetation is present or large area of coverage is required, use higher rates of application and/or a slower speed for best results.

APPLICATION DIRECTIONS

Ground Application:

FFAST Bti is designed to be applied undiluted (i.e., "neat") from vehicle-mounted ULV cold aerosol generator or vehicle-mounted non-thermal aerosol (cold fog) may be modified to allow high flow rates. For undiluted applications, apply 0.25 to 2.0 pints per acre of FFAST Bti.

FFAST Bti may also be diluted with water before application; the amount of water will depend on weather, spray equipment, and mosquito habitat characteristics. If diluted in water before application, maintain rates of application at 0.25 to 2.0 pints of FFAST Bti per acre.

Aerosol droplet size of a FFAST Bti application may be determined using magnesium oxide slides. The optimum droplet size range is from 15 to 45 microns by the volume median diameter (VMD) calculation, where 70% or greater of the spray droplets shall be no more than 30 microns. A spread factor of 0.86 should be used; A.I.M.S. or PC-DC-III are not suitable for FFAST Bti droplet sizing.

An optimum swath of up to 300 feet is created when FFAST Bti is applied from a truck that is being driven perpendicular to the wind direction. Direct the spray head of equipment to ensure even distribution of the spray cloud throughout the area. For best results, apply when meteorological conditions are conducive to keep the spray cloud close to the ground. Do not apply when ground wind speed exceeds 10 mph.

The desired application rate may be obtained under different conditions by altering the flow rates or vehicle speed. Examples are given in the following table based on 300 foot swath width when FFAST Bti is applied undiluted.

Application Rate		Flow Rate (Fluid Ounce/Minute) at a Vehicle Speed of:	
Pints/Acre	Fluid Ounce/Acre	5 mph	10 mph
0.25	4	12	24
0.5	8	24	48
1.0	16	48	96
2.0	32	96	-

Backpack or Handheld Sprayer Application:

FFAST Bti may be applied either undiluted or diluted with water using a non-thermal ULV, backpack or handheld sprayer. The amount of water will depend on weather, spray equipment, and mosquito habitat characteristics. For most ground spraying, apply in 5-100 gallons of water per acre using hand pump, airblast, mist blower, etc., spray equipment.

Examples of dilution rates are given in the following table when FFAST Bti is diluted with water.

Application Rate		Fluid Ounce Needed per Gallon of Spray When Applied at a Rate of:		
Pints/Acre	Fluid Ounce/Acre	10 Gallon/Acre	25 Gallon/Acre	50 Gallon/Acre
0.25	4	0.4	0.16	0.08
0.5	8	0.8	0.32	0.16
1.0	16	1.6	0.64	0.32
2.0	32	3.2	1.28	0.64

Apply through non-thermal ULV application or mist blower equipment and base acreage calculations on a 50 foot swath. Examples are given in the following table when FFAST Bti is applied undiluted.

Application Rate		Flow Rate (Fluid Ounce/Minute) at a Walking Speed of:			
Pints/Acre	Fluid Ounce/Acre	1 mph	2 mph	3 mph	4 mph
0.25	4	0.4	0.8	1.2	1.6
0.5	8	0.8	1.6	2.4	3.2
1.0	16	1.6	3.2	4.8	6.4
2.0	32	3.2	6.4	9.6	12.8

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage: Store in a cool (59 – 86 F°; 15 – 30 C°), dry place.

Pesticide Disposal: Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Then offer for recycling, if available, or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration. If partly filled: Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

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Produced for:

Bayer
Environmental Science

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