

432-1515

06/28/2011

1/6



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Biopesticides and Pollution Prevention Division (7511P)
1200 Pennsylvania Avenue NW
Washington, DC 20460

NOTICE OF PESTICIDE REGISTRATION

Registration
 Reregistration
(under FIFRA, as amended)

EPA Reg. Number:
432-1515

Date of Issuance:
June 28, 2011

Term of Issuance:
Unconditional

Name of Pesticide Product:
BES0531

Name and Address of Registrant (include ZIP Code):

**Bayer Environmental Science
2 T.W. Alexander Dr.
Raleigh, NC 27709**

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his or her motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This registration does not eliminate the need for continual reassessment of the pesticide. If EPA determines at any time, that additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under section 3(c)(2)(B) of FIFRA.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) and is subject to the following terms:

1. Submit and/or cite all data required for registration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Submit acceptable data packages by November 1, 2012 for the following guideline Studies: OCSP 830.6320 (Corrosion Characteristics) and OCSP 830.6317 (Storage Stability).
3. Revise the EPA Registration Number to read, "EPA Reg. No. 432-1515."
4. Submit two (2) copies of the revised final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for further description of a final printed label.

A stamped copy of the label is enclosed for your records.

Signature of Approving Official:

W. Michael McDavit, Associate Director
Biopesticides and Pollution Prevention Division (7511P)

Date:

JUN 28 2011

EPA Form 8570-6

CONCURRENCES

SYMBOL	▶ 7511P						
SURNAME	▶ <i>Sorrell</i>						
DATE	▶ 6/28/11						

EPA Form 1320-1A (1/90)

OFFICIAL FILE COPY

BES0531

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-RLRL

EPA Est. No.

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

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.

NET CONTENTS:

NOT FOR SALE AFTER:

ACCEPTED

JUN 28 2011

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.

432-1515

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

BES0531 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 be 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 flood water, 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 3 rd and early 4 th 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:

BES0531 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 BES0531.

BES0531 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 BES0531 per acre.

Aerosol droplet size of a BES0531 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 BES0531 droplet sizing.

Small, illegible text at the bottom left of the page, possibly a footer or contact information.

An optimum swath of up to 300 feet is created when BES0531 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 BES0531 is applied undiluted.

Application Rate		Flow Rate (Fluid Ounce/Minute) at a Vehicle Speed of:	
Pints/Acre	Flow 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:

BES0531 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 BES0531 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 based acreage calculations on a 50 foot swath. Examples are given in the following table when BES0531 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.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

PRODUCED FOR



Bayer Environmental Science

A Division of Bayer CropScience, LP
PO Box 12014 2 T.W. Alexander Drive
Research Triangle Park, NC 27709

BES0531 (PENDING) 11/22/10, Resubmitted 06/24/11

Label Claims:

- Biolarvicide
- Biological larvicide
- Biological mosquito control
- A microbial insecticide effective against mosquitoes in a variety of habitats
- Does not persist in soil, water or the environment like many chemical larvicides
- A naturally occurring larvicide, safe for use in sensitive environments
- No toxic effects on beneficial insects such as lady bird beetles, honeybees, mayflies, dragonflies, damselflies, stoneflies, or caddisflies
- Easy to use
- A unique formulation, specifically designed for application by ultra low volume (ULV) equipment
- A unique formulation, specifically designed for labor saving application by ultra low volume (ULV) equipment
- Use in standing water where mosquitoes may breed
- Use in containerized water where mosquitoes breed
- Effective year-round when mosquito larvae are present
- Control mosquitoes
- Controls mosquito larvae in standing water
- Quickly controls mosquito larvae
- Kills mosquito larvae rapidly, often within hours after application at field use rates
- Controls mosquito larvae within 24 hours
- When ingested by mosquito larvae, (product name) prevents the development of adults
- When ingested by mosquito larvae, (product name) prevents emergence of breeding, biting adults
- Kills mosquito larvae upon ingestion of Bt toxins
- Kills mosquito larvae upon ingestion by destroying the cellular lining of the insect digestive tract
- Kills mosquitoes (mosquito larvae) before they hatch, including those that may (can) transmit (carry) West Nile virus, Dengue fever (Dengue hemorrhagic fever), encephalitis or equine encephalitis
- Kills developing mosquitoes (mosquito larvae) before they become breeding, biting adults, including those which may (can) transmit (carry) West Nile virus, Dengue fever (Dengue hemorrhagic fever), encephalitis or equine encephalitis
- Kills mosquitoes (mosquito larvae) before they hatch, including those that may (can) transmit heartworm disease to dogs and cats