

73049-474

6/15/2011

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

EPA Reg. Number:
73049-474

Date of Issuance:
JUN 15 2011

Term of Issuance: Unconditional

NOTICE OF PESTICIDE:

Registration Re-registration
(under FIFRA, as amended)

Name of Pesticide Product:
VBC-40009

Name and Address of Registrant (include ZIP Code):

Valent BioSciences Corporation
870 Technology Way, Suite 100
Libertyville, IL 60048

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/reregistered 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 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 the 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.

The product is registered in accordance with FIFRA section 3(c)(7) and is subject to the following terms and conditions:

1. Submit and/or cite all data required for registration of your product under FIFRA section 3(c)(7) and section 4 when the Agency requires all registrants of similar products to submit such data.
2. Submit acceptable data packages within 1 year of the date of registration for the following Guideline Studies: OPPTS 830.6320 (Corrosion Characteristics) and OPPTS 830.6317 (Storage Stability).
3. Make the following label change before you release the product for shipment: Revise the EPA Registration Number to read, "EPA Reg. No. 73049-474."
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 a further description of the final printed label.

If these conditions are not complied with, the registration will be cancelled in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of this condition. A stamped copy of the label is enclosed for your record.

Signature of Approving Official:

Date:

JUN 15 2011

W. Michael McDavit, Associate Director
Biopesticides and Pollution Prevention Division

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VBC-40009 (S-Abscisic acid, S-ABA)
Seed Treatment - Use Label

**VBC-40009
Plant Growth Regulator
SUSPENSION CONCENTRATE**

FOR USE AS A SEED TREATMENT

Active Ingredient	
S-Abscisic Acid	25.0% w/v
Other Ingredients.....	75.0% w/v
Total.....	100.0% w/v

Contains a total of 25 g of S-Abscisic Acid (S-ABA) in 100 ml of product. Application of VBC-40009 (S-ABA) to seeds shifts the seedling emergence timeframe. Application of appropriate rates of VBC-40009 also imparts an increased resistance of the emerged seedling to environmental stress (such as chilling stress).

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also call toll-free 1-800-892-0099 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-847-968-4700.	

EPA Registration No. 73049-
EPA Establishment No. 33762-IA-001

Valent BioSciences Corporation
870 Technology Way
Libertyville, IL 60048
1-847-968-4700

Net Contents: 33.8 fl. oz. (1000 ml)

ACCEPTED

JUN 15 2011

Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended, for
the pesticide registered under
EPA Reg. No. 73049-474

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. 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.

Do not use treated seed for animal or human consumption. Do not allow treated seed to contaminate grain or other seed intended for animal or human consumption.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Shoes plus socks.
- Protective eyewear.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash-water or rinsate.

To prevent potential consumption by animals, cover or collect treated seeds spilled during loading.

ACCEPTED

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 in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

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Treated seed must not be used for or mixed with food or animal feed, or processed for oil. Seed commercially treated with a pesticide must be labeled as follows: "Treated Seed. Do not use for food, feed or oil."

The seed treater must add an EPA approved dye with the pesticide during the seed treatment process, unless dye is already on the seed [40 CFR 153.155(b)(1)].

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

GENERAL DIRECTIONS

Use only for treating seed. Use only as directed. Read the label thoroughly and make sure it is understood before making applications. VBC-40009 shifts seedling emergence and helps protect the emerged seedlings from temporary environmental stress.

Application instructions:

- VBC-40009 contains the active ingredient S-Absciscic Acid, commonly known as S-ABA. S-ABA is a potent naturally occurring Plant Growth Regulator found in plants.
- *Undesired effects can result from any deviations from the label directions for applying VBC-40009.*
- VBC-40009 should be thoroughly mixed by shaking or agitation before use.
- Apply VBC-40009 to seeds using commercial seed treatment equipment at a seed treatment facility.

COMPATIBILITY WITH OTHER AGRICULTURAL PRODUCTS

Compatibility and performance data for VBC-40009 with other agricultural products is not available. Although VBC-40009 is generally compatible with many other seed treatment formulations, if VBC-40009 is to be mixed with other seed treatment products, first test on a small scale. Use caution in mixing with other products as incompatibility might occur. Incompatibility is indicated by an inhomogeneous seed treatment mixture an uneven seed coating or poor adherence of the seed coating to the seed.

APPLICATIONS, RATES, AND TIMINGS EMERGENCE AND FLOWERING DELAY FOR HYBRID SEED PRODUCTION

CROP	OBJECTIVE / BENEFIT	APPLICATION INSTRUCTIONS
Seeds for production of hybrid seeds of corn, sorghum, pearl millet, rice and sunflower	Delaying seedling emergence and flowering of inbred lines used in production of hybrid seed crops	Apply diluted VBC-40009 directly to seeds for delayed emergence and synchronization of flowering of inbred lines used in production of hybrid crops. Make one application using seed treatment equipment which will give uniform coverage to all seeds. To ensure uniform coverage VBC-40009 must be mixed into an application volume appropriate for the crop treated (see tables below).

***Inbred Genetics:** Different inbreds within a given plant species may require a higher or lower rate of VBC-40009 to achieve the desired period of emergence and flowering delay. The extent of delay resulting from VBC-40009 is dependent on inbred genetics, and is not immediately obvious without testing. The genetic background of the seed will affect its sensitivity to this natural growth regulator. Conduct small scale evaluations of each inbred to determine the dose required for the desired period of emergence and flowering delay. Treat a small amount of inbred seed with a range of application rates of VBC-40009 (e.g. for a desired 50 growing degree day delay of corn, test 25, 50, 100, 200 mg a.i. per 1000 kernels), plant the seed under representative field conditions and measure the delay in emergence and flowering with respect to untreated seed planted simultaneously. Treating with too little or too much VBC-40009 will result in a delay that is shorter or longer than desired.

Delay of corn inbred parents

CROP	Delay of anthesis	Active Ingredient (mg) per 1000 kernels	VBC-40009 (grams) per 1000 kernels	Remarks
Apply VBC-40009 in a total application volume of 8 to 35 fluid ounces per hundred pounds of seed according to equipment used and previous experience.				
Field corn	50 GDD	25 - 200 mg active ingredient	0.1 - 0.8 grams VBC-40009	Application rate depends on inbred genetics*
Field corn	100 GDD	100 - 400 mg active ingredient	0.4 - 1.6 grams VBC-40009	Application rate depends on inbred genetics*
Field corn	150 GDD	200 - 600 mg active ingredient	0.8 - 2.4 grams VBC-40009	Application rate depends on inbred genetics* Significant stand loss is possible at these rates.

GDD = Growing Degree Days

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Delay of sorghum inbred parents

CROP	Delay of anthesis	Active Ingredient (grams) per 100 pounds seed	VBC-40009 (grams) per 100 pounds seed	Remarks
Apply VBC-40009 in a total application volume of 10 to 40 fluid ounces per hundred pounds of seed according to equipment used and previous experience.				
Sorghum	1 – 10 days	20 – 200 grams active ingredient	80 – 800 grams VBC-40009	Application rate depends on delay desired and inbred genetics*. Significant stand loss is possible at high rates.

Delay of pearl millet inbred parents

CROP	Delay of anthesis	Active Ingredient (grams) per 100 pounds seed	VBC-40009 (grams) per 100 pounds seed	Remarks
Apply VBC-40009 in a total application volume of 20 to 80 fluid ounces per hundred pounds of seed according to equipment used and previous experience.				
Pearl Millet	1 – 10 days	50 – 400 grams active ingredient	200 – 1600 grams VBC-40009	Application rate depends on delay desired and inbred genetics*. Significant stand loss is possible at high rates.

Delay of rice inbred parents

CROP	Delay of anthesis	Active Ingredient (grams) per 100 pounds seed	VBC-40009 (grams) per 100 pounds seed	Remarks
Apply VBC-40009 in a total application volume of 10 to 40 fluid ounces per hundred pounds of seed according to equipment used and previous experience.				
Rice	1 – 10 days	2 – 20 grams active ingredient	8 – 80 grams VBC-40009	Application rate depends on delay desired and inbred genetics*. Significant stand loss is possible at high rates.

Delay of sunflower inbred parents

CROP	Active Ingredient (mg) per 1000 seeds	VBC-40009 (mg) per 1000 seeds	Remarks
Apply VBC-40009 in a total application volume of 20 to 100 fluid ounces per hundred pounds of seed according to equipment used and previous experience.			
Sunflower	100 – 600 mg active ingredient	400 – 2400 mg VBC-40009	Consult with Valent BioSciences representative for specific information

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APPLICATIONS, RATES, AND TIMINGS
GENERAL INDUCTION OF STRESS TOLERANCE

CROP	OBJECTIVE / BENEFIT	APPLICATION INSTRUCTIONS
Apply VBC-40009 in a total application volume of 8 to 35 fluid ounces per hundred pounds of seed according to equipment used and previous experience.		
Corn	Induction of cold tolerance	<p>Applications: Make one application of 4.8 grams of VBC-40009 per 80,000 kernel bag, (1.2 grams of active ingredient per 80,000 kernel bag).</p> <p>Emergence may be delayed 1 - 2 days</p>

FACTORS AFFECTING RESPONSE TO VBC-40009

S-ABA, the active ingredient in VBC-40009, is a potent naturally occurring Plant Growth Regulator found in plants.

In addition to proper application technique, environmental and cultural factors will affect a seed or seedling's response to treatment with VBC-40009. Do not use this product on old, weak, or damaged seed. Excessive stand loss could result from such use.

Different inbreds or cultivars within a given plant species may require a higher or lower rate of VBC-40009 to achieve the desired effects.

Determining Optimal Rates: Optimal VBC-40009 rates will vary according to the desired emergence and flowering delay. Different inbreds or cultivars of the same species may respond differently to VBC-40009. Therefore, to determine response levels treat or test a small number of seeds before applying VBC-40009 to a large number of seeds.

DO NOT exceed the maximum stated rate.

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STORAGE AND DISPOSAL

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

Pesticide Storage

Keep container tightly closed when not in use. Store product in a cool place. Avoid extended storage conditions at temperatures above 25°C (77°F). Avoid exposure of product to light or sunlight.

Pesticide Disposal

To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

Container Disposal

Nonrefillable container. Do not reuse or refill this container.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after flow begins to drip. Fill 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 puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

Warranty and Disclaimer Statement:

To the fullest extent permitted by law, seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.