

59639-138

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460



OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

JAN 26 2012

Daniel P. Fay  
Valent U.S.A.  
1600 Riviera Avenue, Suite 200  
Walnut Creek, CA 94596

Dear Mr. Fay:

Subject: **SECTION 3 AND SUPPLEMENTAL LABEL AMENDMENTS FOR:**  
Adding new use of Etoxazole on: field corn, pop corn and corn grown for seed  
Zeal WP Miticide  
EPA Reg. No. 59639-138  
Your submission dated: September 10, 2010

The subject amendments submitted in connection with the Federal Insecticide, Fungicide and Rodenticide Act are amended as acceptable.

A stamped copy of the labeling is enclosed for your records. Please submit one final printed copy of the labeling before releasing the product for shipment. If you have any questions, please contact Autumn Metzger at (703) 305-5314 or metzger.autumn@epa.gov.

Regards,

John Hebert (PM 07)  
Insecticide-Rodenticide Branch  
Registration Division (7505P)

# Supplemental Label



## **ZEAL<sup>®</sup> WP MITICIDE**

EPA Reg. No. 59639-138

**FOR USE ON FIELD CORN, POPCORN AND  
CORN (GROWN FOR SEED PRODUCTION)**

**This supplemental label expires on January 31, 2015 and  
must not be used or distributed after this date.**

[Bracketed Information is Optional Text]

### **DIRECTIONS FOR USE**

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

**THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION. READ THE LABEL AFFIXED TO THE CONTAINER FOR ZEAL WP MITICIDE BEFORE APPLYING. USE OF ZEAL WP MITICIDE ACCORDING TO THIS LABELING IS SUBJECT TO THE USE PRECAUTIONS AND LIMITATIONS IMPOSED BY THE LABEL AFFIXED TO THE CONTAINER FOR ZEAL WP MITICIDE.**

<b>ACCEPTED</b>
<b>JAN 26 2012</b>
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide Registered under EPA Reg. No. <i>59639-138</i>

**FIELD CORN, POPCORN,  
CORN (Grown For Seed Production)**

CROP	PESTS	PRODUCT RATE OZ/ACRE	SPECIAL INSTRUCTIONS
Field Corn Popcorn Corn (grown for seed production)	Banks Grass Mite <sup>1</sup> Carmine Spider Mite Pacific Spider Mite Strawberry Spider Mite Two-spotted Spider Mite	1.0 to 3.0 (0.045 to 0.135 lb ai/A)	<p>Apply with [air or] ground equipment in adequate water for uniform coverage ([a minimum of 3 gals/A by air or] a minimum of 10 gals/A [by ground]). Coverage is essential for good control. Use of higher water volume will assure better coverage. Applications of <i>Zeal</i> WP Miticide are recommended before tasseling stage to allow good coverage and provide better control.</p> <p>For field corn utilized for seed production apply <i>Zeal</i> WP Miticide before or at tasseling growth stage. If a second application is needed wait for 14 days to retreat with <i>Zeal</i> WP Miticide.</p> <p>Best results are achieved when mite populations are below threshold or beginning to build up on the plants. <i>Zeal</i> WP Miticide is predominately an ovicide/larvicide and should be used early in the life cycle of mites. Always follow the recommended threshold for your area.</p> <p>Do not use rates below 1.0 oz/A (0.045 lb ai/A) as this may result in poor control and contribute to the development of resistance to etoxazole among mite populations.</p> <p><b>Restrictions</b></p> <ul style="list-style-type: none"> <li>• Do not apply within twenty-one (21) days of harvest.</li> <li>• Do not make more than two (2) <i>Zeal</i> WP Miticide application per season.</li> <li>• Do not apply treatments less than 14 days apart.</li> <li>• Do not apply more than 6.0 oz (0.270 lb ai) of <i>Zeal</i> WP Miticide per acre per season.</li> </ul>

Applications targeting exclusively Banks grass mites may require higher rates particularly if populations have exceeded the established threshold in the fields to be treated with *Zeal* WP Miticide. Also, under extreme drought conditions and higher populations Banks grass mites might require more than one application of a miticide.

**MANAGING RESISTANCE:** Repeated use of the same class of miticides or miticides with similar modes of action can lead to the buildup of resistant mite strains. Use *Zeal* WP Miticide in alternation with other miticides that have different modes of action and/or with other chemical classes of miticides. Follow local, state and federal Integrated Pest Management (IPM) and Resistance Management (RM) recommendations. Read and follow all product labels before applying any miticide.

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**PLEASE CONTACT VALENT U.S.A. CORPORATION AT 800-6-VALENT  
(800-682-5368) TO DETERMINE IF THIS USE IS REGISTERED IN YOUR  
STATE.**

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Manufactured for:  
**Valent U.S.A. Corporation**  
P. O. Box 8025  
Walnut Creek, CA 94596-8025  
[www.valent.com](http://www.valent.com)

Made in U. S. A.

059639-00138.20120117.ZealWP.com



**ACCEPTED**  
**JAN 26 2012**  
 Under the Federal Insecticide,  
 Fungicide, and Rodenticide Act,  
 as amended, for the pesticide  
 Registered under  
 EPA Reg. No. *59639-138*

**GROUP 10B INSECTICIDE**

[Bracketed Information is Optional Text]

# ZEAL<sup>®</sup> WP Miticide

Active Ingredient	By Wt.
*Etoxazole.....	72%
Other Ingredients .....	28%
Total.....	100%

\*2-(2,6-difluorophenyl)-4-[4-(1,1-dimethylethyl)-2-ethoxyphenyl]-4,5-dihydrooxazole

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

**SEE NEXT PAGE FOR ADDITIONAL PRECAUTIONARY STATEMENTS**

EPA Reg. No. 59639-138  
EPA Est. No.

**NET WEIGHT 12 OUNCES**  
(Contains 4/3 oz WSP packets)

<b>FIRST AID</b>	
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>HOT LINE NUMBER</b>	
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact <b>800-892-0099</b> for emergency medical treatment information.</p>	

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS & DOMESTIC ANIMALS**  
**CAUTION**

Causes moderate eye irritation. Avoid contact with eyes, skin and clothing. Avoid breathing dust.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):** Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

**Applicators and other handlers must wear:** long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride and shoes plus socks.

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

**USER SAFETY RECOMMENDATIONS**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS:**

This pesticide is toxic to freshwater and marine/estuarine aquatic invertebrates, including oysters and shrimp. 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 apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

**DIRECTIONS FOR USE**

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

**READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.**

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 agency responsible for pesticide regulation.

### **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 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.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: long sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material and shoes plus socks.



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**DISCLAIMER, RISKS OF USING THIS PRODUCT,  
LIMITED WARRANTY  
AND LIMITATION OF LIABILITY**

**IMPORTANT: Read the entire Label including this Disclaimer, Risks of Using this Product, Limited Warranty, and Limitation of Liability before using this product. If the terms are not acceptable THEN DO NOT USE THE PRODUCT; rather, return the unopened product within 15 days of purchase for a refund of the purchase price.**

**RISKS OF USING THIS PRODUCT**

The Buyer and User (referred to collectively herein as "Buyer") of this product should be aware that there are inherent unintended risks associated with the use of this product, which are impossible to eliminate. These risks include, but are not limited to, injury to plants and crops to which this product is applied, lack of control of the target pests or weeds, resistance of the target pest or weeds to this product, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance, resistance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, disease, moisture conditions, irrigation practices, condition of the crop at the time of application, presence of other materials either applied in the tank mix with this product or prior to application of this product, cultural practices or the manner of use or application, (or a combination of such factors) all of which are factors beyond the control of Valent. The Buyer should be aware that these inherent unintended risks may reduce the harvested yield of the crop in all or a portion of the treated acreage, or otherwise affect the crop such that additional care, treatment and expense are required to take the crop to harvest. If the Buyer chooses not to accept these risks, THEN THIS PRODUCT SHOULD NOT BE APPLIED. By applying this product Buyer acknowledges and accepts these inherent unintended risks AND TO THE FULLEST EXTENT ALLOWED BY LAW, AGREES THAT ALL SUCH RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER.

Valent shall not be responsible for losses or damages (including, but not limited to, loss of yield, increased expenses of farming the crop or such incidental, consequential or special damages that may be claimed) resulting from use of this product in any manner not set forth on the label. Buyer assumes all risks associated with the use of this product in any manner or under conditions not specifically directed or approved on the label.

**LIMITED WARRANTY**

Valent warrants only that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label **and subject to the Risks of Using This Product as described above. To the extent consistent with applicable law AND AS SET FORTH ABOVE, VALENT MAKES NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED.** No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

**LIMITATION OF LIABILITY**

**To the fullest extent allowed by law, Valent or Seller is not liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. The limitation includes, but is not limited to, loss of yield on all or any portion of the treated acreage, increased care, treatment or other expenses required to take the crop to harvest, increased finance charges or altered finance ratings, emotional or mental distress and/or exemplary damages. TO THE FULLEST EXTENT ALLOWED BY LAW, THE EXCLUSIVE REMEDY OF THE BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT OR, AT THE ELECTION OF VALENT OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

**PROMPT NOTICE OF CLAIM**

Valent must be provided with prompt notice of any claim so that an immediate inspection of the affected property or plants can be made. To the extent applicable law allows such requirement, notice of a claim shall be given promptly to Valent, whether the claim is based on contract, negligence, strict liability, or other tort or otherwise be barred from any remedy.

**NO AMENDMENTS**

Valent and Seller offer this product, and Buyer accepts it, subject to the foregoing Disclaimer, Risks of Using This Product, Limited Warranty and Limitation of Liability, which may not be modified by any oral or written agreement.

**TANK MIXES**

**NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor, to the extent allowed by applicable law. Read and follow the entire label of each product to be used in the tank mix with this product.**

**CHEMIGATION**

**RESTRICTION:** Do not apply this product through any type of irrigation or chemigation system.

**RESISTANCE MANAGEMENT RECOMMENDATIONS**

*Zeal*<sup>®</sup> WP Miticide is a Group 10B insecticide. Mite biotypes with acquired resistance to Group 10B may eventually dominate the mite population if Group 10B insecticides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by *Zeal* WP Miticide or other Group 10B insecticides.

To delay insecticide resistance consider:

- Avoiding the consecutive use of *Zeal* WP Miticide or other Group 10B insecticides that have a similar target site of action, on the same mite species.
- Using tank mixtures or premixes with insecticides from different target site of action Group as long as the involved products are all registered for the same use and have different sites of action.
- Basing insecticide use on a comprehensive Integrated Pest Management (IPM) program.
- Monitoring treated mite populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors and/or manufacturer for insecticide resistance management and/or IPM recommendations for specific site and resistant pest problems.

For further information or to report suspected resistance, you may contact Valent U.S.A. Corporation at the following toll-free number: 800-682-5368.

### WATER SOLUBLE PACKAGING INFORMATION

#### MIXING INSTRUCTIONS

This bag contains water soluble packets of *Zea/ WP* Miticide. Do not handle the packets with wet gloves or allow the packets to become wet prior to mixing. If all packets are not used, close and reseal outer container to protect remaining packet(s). Do not add any liquid fertilizers, micronutrients or adjuvants to the spray solution until after the water soluble packets and their contents have completely dissolved. Water soluble packet(s) should completely dissolve in approximately five minutes. Dissolution rate may be slowed by cold water, lack of agitation, or water containing high concentrations of boron or sulfur. High concentration of boron or sulfur may result in spray screen or nozzle clogging due to the incomplete dissolution of the water soluble packet material.

1. Fill clean spray tank 1/2 to 2/3 of desired level with clean water.
2. While agitating, add the correct number of *Zea/ WP* Miticide water soluble packets and make sure that they have dissolved completely before proceeding. Agitation should create a rippling or rolling action on the water surface.
3. Fill spray tank to desired level with water. Continue agitation until all spray solution has been applied.
4. Mix only the amount of spray solution that can be applied the day of mixing. Apply *Zea/ WP* Miticide within 6 hours of mixing.
5. Refer to the chart below to determine the number of *Zea/ WP* Miticide water soluble packets required to treat a given number of acres at a specific rate.

Number of <i>Zea/ WP</i> Miticide Water Soluble Packets Required to Treat Specified Number of Acres		
Rate (oz/A)	Number of Acres to be Treated	Number of 3 oz Packets Required
0.66	45	10
1.0	30	10
2.0	15	10
3.0	10	10
4.0	7.5	10

<b>CANEBERRY (Subgroup 13-07 A)</b>			
<b>CROP</b>	<b>PESTS</b>	<b>PRODUCT RATE OZ/ACRE</b>	<b>SPECIAL INSTRUCTIONS</b>
Blackberry Loganberry Raspberry, Black Raspberry, Red Raspberry, Wild Cultivars, ..varieties and/or hybrids of these	Two-spotted Spider Mite	2.0 to 3.0 (0.09 to 0.135 lb ai/A)	<p>Apply by ground as a full coverage spray in a minimum of 50 gals/A of water. Applications of <i>Zeal</i> WP Miticide must be done using enough carrier (water) to ensure thorough coverage of the crop's vegetative and reproductive parts, which mites are using for dispersal, feeding and reproduction. Use higher water volumes on older trees and varieties that have more compact and dense foliage. Higher volumes of water coupled with well calibrated equipment will help to provide better coverage.</p> <p>Best results are achieved when mite populations are low. <i>Zeal</i> WP Miticide is predominately an ovicide/larvicide. Apply <i>Zeal</i> WP Miticide at or prior to threshold for your area but not greater than the maximum rate listed.</p> <p>Do not use below use rate 2.0 oz/A (0.09 lb ai/A) as this may result in poor control and contribute to the development of resistance to etoxazole among mite populations.</p>
<p><b>Restrictions</b></p> <ul style="list-style-type: none"> <li>• Preharvest interval (PHI) is 0 day.</li> <li>• Do not make more than one (1) <i>Zeal</i> WP Miticide application per season.</li> <li>• Do not apply more than 3.0 oz (0.135 lb ai) of <i>Zeal</i> WP Miticide per acre per season</li> <li>• Do not use with an adjuvant or surfactant.</li> </ul>			

**MANAGING RESISTANCE:** Repeated use of the same class of miticides or miticides with similar modes of action can lead to the buildup of resistant mite strains. Use *Zeal* WP Miticide in alternation with miticides having different modes of action and/or that belong to different chemical classes. Follow local, state, and federal Integrated Pest Management (IPM) and Resistance Management (RM) recommendations. Read and follow all product labels before applying any miticide.

**FIELD CORN, POPCORN,  
CORN (Grown For Seed Production)**

<b>CROP</b>	<b>PESTS</b>	<b>PRODUCT RATE OZ/ACRE</b>	<b>SPECIAL INSTRUCTIONS</b>
Field Corn Popcorn Corn (grown for seed production)	Banks Grass Mite <sup>1</sup> Carmine Spider Mite Pacific Spider Mite Strawberry Spider Mite Two-spotted Spider Mite	1.0 to 3.0 (0.045 to 0.135 lb ai/A)	<p>Apply with [air or] ground equipment in adequate water for uniform coverage ([a minimum of 3 gals/A by air or] a minimum of 10 gals/A [by ground]). Coverage is essential for good control. Use of higher water volume will assure better coverage. Applications of Zeal WP Miticide are recommended before tasseling stage to allow good coverage and provide better control.</p> <p>For field corn utilized for seed production apply Zeal WP Miticide before or at tasseling growth stage. If a second application is needed wait for 14 days to retreat with Zeal WP Miticide.</p> <p>Best results are achieved when mite populations are below threshold or beginning to build up on the plants. Zeal WP Miticide is predominately an ovicide/larvicide and should be used early in the life cycle of mites. Always follow the recommended threshold for your area.</p> <p>Do not use rates below 1.0 oz/A (0.045 lb ai/A) as this may result in poor control and contribute to the development of resistance to etoxazole among mite populations.</p>
<p><b>Restrictions</b></p> <ul style="list-style-type: none"> <li>• Do not apply within twenty-one (21) days of harvest.</li> <li>• Do not make more than two (2) Zeal WP Miticide application per season.</li> <li>• Do not apply treatments less than 14 days apart.</li> <li>• Do not apply more than 6.0 oz (0.270 lb ai) of Zeal WP Miticide per acre per season.</li> </ul>			

<sup>1</sup> Applications targeting exclusively Banks grass mites may require higher rates particularly if populations have exceeded the established threshold in the fields to be treated with Zeal WP Miticide. Also, under extreme drought conditions and higher populations Banks grass mites might require more than one application of a miticide.

**MANAGING RESISTANCE:** Repeated use of the same class of miticides or miticides with similar modes of action can lead to the buildup of resistant mite strains. Use Zeal WP Miticide in alternation with other miticides that have different modes of action and/or with other chemical classes of miticides. Follow local, state and federal Integrated Pest Management (IPM) and Resistance Management (RM) recommendations. Read and follow all product labels before applying any miticide.

COTTON			
CROP	PESTS	PRODUCT RATE OZ/ACRE	SPECIAL INSTRUCTIONS
Cotton	Carmine Spider Mite Pacific Spider Mite Two-spotted Spider Mite	0.66 to 1.0 (0.03 to 0.045 lb ai/A)	<p>Apply with air or ground equipment in adequate water for uniform coverage (3 to 10 gals/A by air or 10 to 50 gals/A by ground). Coverage is essential for good control. Use of higher water volume will assure better coverage.</p> <p>Best results are achieved when mite populations are low. <i>Zea/ WP Miticide</i> is predominately an ovicide/larvicide and should be used early in the life cycle of mites. Apply <i>Zea/ WP Miticide</i> at or prior to threshold for your area but not greater than the maximum rate listed.</p> <p>Do not use below use rate 0.66 oz/A (0.03 lb ai/A) as this may result in poor control and contribute to the development of resistance to etoxazole among mite populations.</p>
<p><b>Restrictions</b></p> <ul style="list-style-type: none"> <li>• Preharvest interval (PHI) is 28 days.</li> <li>• Do not make more than one (1) <i>Zea/ WP Miticide</i> application per season.</li> <li>• Do not apply more than 1.0 oz (0.045 lb ai) of <i>Zea/ WP Miticide</i> per acre per season.</li> </ul>			

**MANAGING RESISTANCE:** Repeated use of the same class of miticides or miticides with similar modes of action can lead to the buildup of resistant mite strains. Use *Zea/ WP Miticide* in alternation with miticides having different modes of action and/or that belong to different chemical classes. Follow local, state and federal Integrated Pest Management (IPM) and Resistance Management (RM) recommendations. Read and follow all product labels before applying any miticide.

CUCURBIT VEGETABLES (Crop Group 9)			
CROP	PESTS	PRODUCT RATE OZ/ACRE	SPECIAL INSTRUCTIONS
Acorn Squash Balsam Apple Balsam Pear Bittermelon Butternut Squash Calabaza Squash Cantaloupe Chayote (fruit) Chinese Cucumber Chinese Okra Chinese Waxgourd (Chinese Preserving Melon) Citron Melon Cucumber Cucuzza Gherkin Gourd, Edible Hechima Hubbard Squash Hyotan <i>Momordica</i> spp. Muskmelon Pumpkin Spaghetti Squash Summer Squash Watermelon Winter Squash	Two-spotted Spider Mite Carmine Spider Mite Pacific Spider Mite Strawberry Spider Mite	2.0 to 3.0 (0.09 to 0.135 lb ai/A)	Apply with [air or] ground equipment in adequate water for uniform coverage ([a minimum of 3 gals/A by air or] a minimum of 10 gals/A [by ground]). Coverage is essential for good control. Use of higher water volume will assure better coverage.  Applications of <i>Zea/ WP</i> Miticide must be made using enough carrier (water) to ensure thorough coverage of the crop's vegetative and reproductive parts, which mites use for dispersal, feeding and reproduction. Use higher water volumes on more mature plants and varieties that have more compact and dense foliage. Higher volumes of water coupled with well calibrated equipment will help to provide better coverage.  Best results are achieved when mite populations are low. <i>Zea/ WP</i> Miticide is predominately an ovicide/larvicide. Apply <i>Zea/ WP</i> Miticide at or prior to threshold for your area but not greater than the maximum rate listed.  Do not use below use rate 2.0 oz/A (0.09 lb ai/A) as this may result in poor control and contribute to the development of resistance to etoxazole among mite populations.
			<p><b>Restrictions</b></p> <ul style="list-style-type: none"> <li>• Preharvest interval (PHI) is 7 days.</li> <li>• Do not make more than one (1) <i>Zea/ WP</i> Miticide application per season.</li> <li>• Do not apply more than 3.0 oz (0.135 lb ai) of <i>Zea/ WP</i> Miticide per acre per season.</li> <li>• Do not use with an adjuvant or surfactant.</li> </ul>

**MANAGING RESISTANCE:** Repeated use of the same class of miticides or miticides with similar modes of action can lead to the buildup of resistant mite strains. Use *Zea/ WP* Miticide in alternation with miticides having different modes of action and/or that belong to different chemical classes. Follow local, state and federal Integrated Pest Management (IPM) and Resistance Management (RM) recommendations. Read and follow all product labels before applying any miticide.

HOPS			
CROP	PEST	PRODUCT RATE OZ/ACRE	SPECIAL INSTRUCTIONS
Hops	Two-spotted Spider Mite	3.0 to 4.0 (0.135 to 0.18 lb ai/A)	<p>Apply with ground equipment in a minimum of 50 gals/A of water. Coverage is essential for good control. Use of higher water volume will assure better coverage.</p> <p>Best results are achieved when mite populations are low. <i>Zea/ WP Miticide</i> is predominately an ovicide/larvicide. Apply <i>Zea/ WP Miticide</i> at or prior to threshold for your area but not greater than the maximum rate listed.</p> <p>Do not use below use rate 3.0 oz/A (0.135 lb ai/A) as this may result in poor control and contribute to the development of resistance to etoxazole among mite populations.</p>
<p><b>Restrictions</b></p> <ul style="list-style-type: none"> <li>• Preharvest interval (PHI) is 7 days.</li> <li>• Do not make more than one (1) <i>Zea/ WP Miticide</i> application per season.</li> <li>• Do not apply more than 4.0 oz (0.18 lb ai) of <i>Zea/ WP Miticide</i> per acre per season.</li> </ul>			

**MANAGING RESISTANCE:** Repeated use of the same class of miticides or miticides with similar modes of action can lead to the buildup of resistant mite strains. Use *Zea/ WP Miticide* in alternation with miticides having different modes of action and/or that belong to different chemical classes. Follow local, state and federal Integrated Pest Management (IPM) and Resistance Management (RM) recommendations. Read and follow all product labels before applying any miticide.



LOW GROWING BERRY (Subgroup 13-07G)			
CROP	PEST	PRODUCT RATE OZ/ACRE	SPECIAL INSTRUCTIONS
Bearberry Bilberry Blueberry, Lowbush Cloudberry Cranberry Lingonberry Muntries Partridgeberry Strawberry Cultivars, varieties, and/or hybrids of these	European Red Mite Pacific Spider Mite Two-spotted Spider Mite	2.0 to 3.0 (0.09 to 0.135 lb ai/A)	<p>Apply with ground equipment in a minimum of 100 gals/A of water. Coverage is essential for good control. Use of higher water volume will assure better coverage.</p> <p>Best results are achieved when mite populations are low. <i>Zeal</i> WP Miticide is predominately an ovicide/larvicide and should be used early in the life cycle of mites. Apply <i>Zeal</i> WP Miticide at or prior to threshold for your area but not greater than the maximum rate listed.</p> <p><i>Zeal</i> WP Miticide will not control Cyclamine Mite. Another miticide registered for this pest should be used if these mites are a problem.</p> <p>Do not use below use rate 2.0 oz/A (0.09 lb ai/A) as this may result in poor control and contribute to the development of resistance to etoxazole among mite populations.</p>
	Two-spotted Spider Mite	2.0 to 3.0 (0.09 to 0.135 lb ai/A) + 10 2/3 fl oz <i>Danitol</i> ® 2.4 EC Insecticide (0.2 lb ai/A)	<p>Apply with ground equipment in adequate water for uniform coverage (using a minimum of 100 gals/A).</p> <p>Alternate with other non-pyrethroid insecticides if retreatment is needed in less than 30 days to comply with local IPM programs.</p> <p>Comply with all applicable directions, restrictions and precautions on the registered label for <i>Danitol</i> 2.4 EC Insecticide.</p>
<p><b>Restrictions</b></p> <ul style="list-style-type: none"> <li>• Preharvest interval (PHI) is 1 day.</li> <li>• Do not make more than one (1) <i>Zeal</i> WP Miticide application per season.</li> <li>• Do not apply more than 3.0 oz (0.135 lb ai) of <i>Zeal</i> WP Miticide per acre per season.</li> <li>• Do not use with an adjuvant or surfactant.</li> </ul>			

**MANAGING RESISTANCE:** Repeated use of the same class of miticides or miticides with similar modes of action can lead to the buildup of resistant mite strains. Use *Zeal* WP Miticide in alternation with miticides having different modes of action and/or that belong to different chemical classes. Follow local, state, and federal Integrated Pest Management (IPM) and Resistance Management (RM) recommendations. Read and follow all product labels before applying any miticide.

MINT			
CROP	PESTS	PRODUCT RATE OZ/ACRE	SPECIAL INSTRUCTIONS
Mint (Peppermint and Spearmint)	Pacific Spider Mite Strawberry Spider Mite Two-spotted Spider Mite	2.0 to 4.0 (0.09 to 0.18 lb ai/A)	<p>Apply with [air or] ground equipment in adequate water for uniform coverage (minimum of [10 gals/A by air or] 50 gals/A [by ground]). Coverage is essential for good control. Use of higher water volume will assure better coverage.</p> <p>Best results are achieved when mite populations are low. <i>Zeal</i> WP Miticide is predominately an ovicide/larvicide. Apply <i>Zeal</i> WP Miticide at or prior to threshold for your area but not greater than the maximum rate listed.</p> <p>Do not use below use rate 2.0 oz/A (0.09 lb ai/A) as this may result in poor control and contribute to the development of resistance to etoxazole among mite populations.</p>
	<p><b>Restrictions</b></p> <ul style="list-style-type: none"> <li>• Preharvest interval (PHI) is 7 days.</li> <li>• Do not make more than one (1) <i>Zeal</i> WP Miticide application per season.</li> <li>• Do not apply more than 4.0 oz (0.18 lb ai) of <i>Zeal</i> WP Miticide per acre per season.</li> <li>• Do not use with an adjuvant or surfactant.</li> </ul>		

**MANAGING RESISTANCE:** Repeated use of the same class of miticides or miticides with similar modes of action can lead to the buildup of resistant mite strains. Use *Zeal* WP Miticide in alternation with miticides having different modes of action and/or that belong to different chemical classes. Follow local, state and federal Integrated Pest Management (IPM) and Resistance Management (RM) recommendations. Read and follow all product labels before applying any miticide.

PEPPER AND EGGPLANT (Subgroup 8-10B)			
CROP	PESTS	PRODUCT RATE OZ/ACRE	SPECIAL INSTRUCTIONS
African Eggplant Bell Pepper Eggplant Martynia Non-Bell Pepper Okra Pea Eggplant Pepino Roselle Scarlet Eggplant Cultivars, varieties and/or hybrids of these	Two-spotted Spider Mite	2.0 to 3.0 (0.09 to 0.135 lb ai/A)	<p>Apply with ground equipment in a minimum of 20 gals/A of water. Applications of <i>Zeal</i> WP Miticide must be made using enough carrier (water) to ensure thorough coverage of the crop's vegetative and reproductive parts, which mites use for dispersal, feeding and reproduction. Use higher water volumes on more mature plants and varieties that have more compact and dense foliage. Higher volumes of water coupled with well calibrated equipment will help to provide better coverage.</p> <p>Best results are achieved when mite populations are low. <i>Zeal</i> WP Miticide is predominately an ovicide/larvicide. Apply <i>Zeal</i> WP Miticide at or prior to threshold for your area but not greater than the maximum rate listed.</p> <p>Do not use below use rate 2.0 oz/A (0.09 lb ai/A) as this may result in poor control and contribute to the development of resistance to etoxazole among mite populations.</p>
			<p><b>Restrictions</b></p> <ul style="list-style-type: none"> <li>• Preharvest interval (PHI) is 7 days.</li> <li>• Do not make more than one (1) <i>Zeal</i> WP Miticide application per season.</li> <li>• Do not apply more than 3.0 oz (0.135 lb ai) of <i>Zeal</i> WP Miticide per acre per season</li> <li>• Do not use with an adjuvant or surfactant.</li> </ul>

**MANAGING RESISTANCE:** Repeated use of the same class of miticides or miticides with similar modes of action can lead to the buildup of resistant mite strains. Use *Zeal* WP Miticide in alternation with miticides having different modes of action and/or that belong to different chemical classes. Follow local, state, and federal Integrated Pest Management (IPM) and Resistance Management (RM) recommendations. Read and follow all product labels before applying any miticide.

POME FRUIT (Crop Group 11)			
CROPS	PESTS	PRODUCT RATE OZ/ACRE	SPECIAL INSTRUCTIONS
Apple Crabapple Loquat Mayhaw Pear Pear, Oriental Quince	European Red Mite McDaniel Spider Mite Pacific Spider Mite Two-spotted Spider Mite	2.0 to 3.0 (0.09 to 0.135 lb ai/A)	<p>Apply by ground with airblast equipment in a minimum of 100 gals/A. Coverage is essential for good control. Use of higher water volume will assure better coverage.</p> <p>Best results are achieved when mite populations are low. <i>Zeal</i> WP Miticide is predominately an ovicide/larvicide and should be used early in the life cycle of mites. Apply <i>Zeal</i> WP Miticide at or prior to threshold for your area but not greater than the maximum rate listed.</p> <p><i>Zeal</i> WP Miticide will not control Rust Mites or Blister Mites. If these pests are a problem, use an alternative miticide registered for that use.</p> <p>Do not use below use rate 2.0 oz/A (0.09 lb ai/A) as this may result in poor control and contribute to the development of resistance to etoxazole among mite populations.</p>
<p><b>Restrictions</b></p> <ul style="list-style-type: none"> <li>• Preharvest interval (PHI) is 14 days.</li> <li>• Do not make more than one (1) <i>Zeal</i> WP Miticide application per season.</li> <li>• Do not apply more than 3.0 oz (0.135 lb ai) of <i>Zeal</i> WP Miticide per acre per season.</li> </ul>			

**MANAGING RESISTANCE:** Repeated use of the same class of miticides or miticides with similar modes of action can lead to the buildup of resistant mite strains. Use *Zeal* WP Miticide in alternation with miticides having different modes of action and/or that belong to different chemical classes. Follow local, state, and federal Integrated Pest Management (IPM) and Resistance Management (RM) recommendations. Read and follow all product labels before applying any miticide.

SMALL FRUIT VINE CLIMBING, EXCEPT FUZZY KIWIFRUIT (Subgroup 13-07 F)			
CROP	PESTS	PRODUCT RATE OZ/ACRE	SPECIAL INSTRUCTIONS
Amur River Grape Gooseberry Grape Kiwifruit, Hardy Maypop Schisandra Berry Cultivars, varieties, and/or hybrids of these	European Red Mite Pacific Spider Mite Two-spotted Spider Mite Willamette Mite	2.0 to 3.0 (0.09 to 0.135 lb ai/A)	<p>Apply by ground as a full coverage spray in a minimum of 25 gals/A of water. Coverage is essential for good control. Use of higher water volume will assure better coverage.</p> <p>Best results are achieved when mite populations are low. <i>Zeal</i> WP Miticide is predominately an ovicide/larvicide and should be used early in the life cycle of mites. Apply <i>Zeal</i> WP Miticide at or prior to threshold for your area but not greater than the maximum rate listed.</p> <p><i>Zeal</i> WP Miticide will not control Rust Mites or Blister Mites. If these pests are a problem, use an alternative miticide registered for that use.</p> <p>Do not use below use rate 2.0 oz/A (0.09 lb ai/A) as this may result in poor control and contribute to the development of resistance to etoxazole among mite populations.</p>
<p><b>Restrictions</b></p> <ul style="list-style-type: none"> <li>• Preharvest interval (PHI) is 14 days</li> <li>• Do not make more than one (1) <i>Zeal</i> WP Miticide application per season.</li> <li>• Do not apply more than 3.0 oz (0.135 lb ai) of <i>Zeal</i> WP Miticide per acre per season.</li> <li>• Do not use with an adjuvant or surfactant.</li> </ul>			

**MANAGING RESISTANCE:** Repeated use of the same class of miticides or miticides with similar modes of action can lead to the buildup of resistant mite strains. Use *Zeal* WP Miticide in alternation with miticides having different modes of action and/or that belong to different chemical classes. Follow local, state and federal Integrated Pest Management (IPM) and Resistance Management (RM) recommendations. Read and follow all product labels before applying any miticide.

STONE FRUIT (Crop Group 12)			
CROP	PEST	PRODUCT RATE OZ/ACRE	SPECIAL INSTRUCTIONS
Apricot Cherry (sweet and tart) Nectarine Peach Plum Plum, Chickasaw Plum, Damson Plum, Japanese Plumcot Prune (fresh)	European Red Mite Pacific Spider Mite Two-spotted Spider Mite	2.0 to 3.0 (0.09 to 0.135 lb ai/A)	Apply with ground equipment in a minimum of 50 gals/A of water. Coverage is essential for good control. Use of higher water volume will assure better coverage.  Best results are achieved when mite populations are low. <i>Zeal</i> WP Miticide is predominately an ovicide/larvicide. Apply <i>Zeal</i> WP Miticide at or prior to threshold for your area but not greater than the maximum rate listed.  Do not use below use rate 2.0 oz/A (0.09 lb ai/A) as this may result in poor control and contribute to the development of resistance to etoxazole among mite populations.
<b>Restrictions</b> <ul style="list-style-type: none"> <li>• Preharvest interval (PHI) is 7 days.</li> <li>• Do not make more than one (1) <i>Zeal</i> WP Miticide applications per season.</li> <li>• Do not apply more than 3.0 oz (0.135 lb ai) of <i>Zeal</i> WP Miticide per acre per season.</li> <li>• Do not use with an adjuvant or surfactant.</li> </ul>			

**MANAGING RESISTANCE:** Repeated use of the same class of miticides or miticides with similar modes of action can lead to the buildup of resistant mite strains. Use *Zeal* WP Miticide in alternation with miticides having different modes of action and/or that belong to different chemical classes. Follow local, state and federal Integrated Pest Management (IPM) and Resistance Management (RM) recommendations. Read and follow all product labels before applying any miticide.

NON-BEARING FRUIT TREES			
CROP	PESTS	PRODUCT RATE OZ/ACRE	SPECIAL INSTRUCTIONS
Non-Bearing Fruit Trees	European Red Mite McDaniel Spider Mite Pacific Spider Mite Two-spotted Spider Mite	2.0 to 3.0 (0.09 to 0.135 lb ai/A)	Apply by ground with airblast equipment as a full coverage spray.  Best results are achieved when mite populations are low. <i>Zeal</i> WP Miticide is predominately an ovicide/larvicide. Apply <i>Zeal</i> WP Miticide at or prior to threshold for your area but not greater than the maximum rate listed.  Do not use below use rate 2.0 oz/A (0.09 lb ai/A) as this may result in poor control and contribute to the development of resistance to etoxazole among mite populations.
	<b>Restrictions</b> <ul style="list-style-type: none"> <li>• Do not harvest fruit or nuts from treated trees within one (1) year of application.</li> <li>• Do not make more than one (1) <i>Zeal</i> WP Miticide application per season.</li> <li>• Do not apply more than 3.0 oz (0.135 lb ai) <i>Zeal</i> WP Miticide per acre per season.</li> </ul>		

**MANAGING RESISTANCE:** Repeated use of the same class of miticides or miticides with similar modes of action can lead to the buildup of resistant mite strains. Use *Zeal* WP Miticide in alternation with other miticides having different modes of action and/or that belong to different chemical classes. Follow local, state and federal Integrated Pest Management (IPM) and Resistance Management (RM) recommendations. Read and follow all product labels before applying any miticide.

CHRISTMAS TREES			
CROP	PESTS	PRODUCT RATE OZ/ACRE	SPECIAL INSTRUCTIONS
Christmas Trees	McDaniel Spider Mite Pacific Spider Mite Spruce Spider Mite Two-spotted Spider Mite	2.0 to 3.0 (0.09 to 0.135 lb ai/A)	Apply by ground as full coverage spray or by air in a minimum of 10 gals/A. Coverage is critical for effective control.  Best results are achieved when mite populations are low. <i>Zeal</i> WP Miticide is predominately an ovicide/larvicide. Apply <i>Zeal</i> WP Miticide at or prior to threshold for your area but not greater than the maximum rate listed.  Do not use below use rate 2.0 oz/A (0.09 lb ai/A) as this may result in poor control and contribute to the development of resistance to etoxazole among mite populations.
	<b>Restrictions</b> <ul style="list-style-type: none"> <li>Do not make more than one (1) <i>Zeal</i> WP Miticide application per season.</li> <li>Do not apply more than 3.0 oz (0.135 lb ai) <i>Zeal</i> WP Miticide per acre per season.</li> </ul>		

**MANAGING RESISTANCE:** Repeated use of the same class of miticides or miticides with similar modes of action can lead to the buildup of resistant mite strains. Use *Zeal* WP Miticide in alternation with miticides having different modes of action and/or that belong to different chemical classes. Follow local, state, and federal Integrated Pest Management (IPM) and Resistance Management (RM) recommendations. Read and follow all product labels before applying any miticide.



TREE NUTS			
CROPS	PESTS	PRODUCT RATE OZ/ACRE	SPECIAL INSTRUCTIONS
Almond Beech Nut Brazil Nut Butternut Cashew Chestnut Chinquapin Filbert (Hazelnut) Hickory Nut Macadamia Nut Pecan Pistachio Walnut Black English	European Red Mite Pacific Spider Mite Two-spotted Spider Mite	2.0 to 3.0 (0.09 to 0.135 lb ai/A)	Apply by ground with airblast equipment as a full coverage spray.  Best results are achieved when mite populations are low. <i>Zeal</i> WP Miticide is predominately an ovicide/larvicide. Apply <i>Zeal</i> WP Miticide at or prior to threshold for your area but not greater than the maximum rate listed.  Do not use below use rate 2.0 oz/A (0.09 lb ai/A) as this may result in poor control and contribute to the development of resistance to etoxazole among mite populations.
<p><b>Restrictions</b></p> <ul style="list-style-type: none"> <li>• Preharvest interval (PHI) is 28 days.</li> <li>• Do not make more than one (1) <i>Zeal</i> WP Miticide application per season.</li> <li>• Do not apply more than 3.0 oz (0.135 lb ai) <i>Zeal</i> WP Miticide per acre per season.</li> </ul>			

**MANAGING RESISTANCE:** Repeated use of the same class of miticides or miticides with similar modes of action can lead to the buildup of resistant mite strains. Use *Zeal* WP Miticide in alternation with miticides having different modes of action and/or that belong to different chemical classes. Follow local, state, and federal Integrated Pest Management (IPM) and Resistance Management (RM) recommendations. Read and follow all product labels before applying any miticide.

TROPICAL AND SUB-TROPICAL FRUIT (INEDIBLE PEEL)			
CROP	PESTS	PRODUCT RATE OZ/ACRE	SPECIAL INSTRUCTIONS
Avocado Canistel Mango Papaya Sapodilla Sapote, Black Sapote, Mamey Star Apple	Avocado Brown Mite Persea Mite Two-spotted Spider Mite	2.0 to 3.0 (0.09 to 0.135 lb ai/A)	<p>Apply with [air or] ground equipment in adequate water for uniform coverage ([minimum 20 gals/A by air or] minimum 50 gals/A [by ground]). Applications of <i>Zeal</i> WP Miticide must be made using enough carrier (water) to ensure thorough coverage of the crop's vegetative and reproductive parts, which mites use for dispersal, feeding and reproduction. Use higher water volumes on more mature plants and varieties that have more compact and dense foliage. Higher volumes of water coupled with well calibrated equipment will help to provide better coverage.</p> <p>Best results are achieved when mite populations are low. <i>Zeal</i> WP Miticide is predominately an ovicide/larvicide. Apply <i>Zeal</i> WP Miticide at or prior to threshold for your area but not greater than the maximum rate listed.</p> <p>Do not use below use rate 2.0 oz/A (0.09 lb ai/A) as this may result in poor control and contribute to the development of resistance to etoxazole among mite populations.</p>
<p><b>Restrictions</b></p> <ul style="list-style-type: none"> <li>• Preharvest interval (PHI) is 1 day.</li> <li>• Do not make more than one (1) <i>Zeal</i> WP Miticide application per season.</li> <li>• Do not apply more than 3.0 oz (0.135 lb ai) of <i>Zeal</i> WP Miticide per acre per season</li> </ul>			

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**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE**

Keep pesticide in original container.  
Do not put concentrate or dilute into food or drink containers.  
Store in cool, dry place.  
Do not store diluted spray.  
For help with any spill, leak, fire or exposure involving this material, call day or night  
**(800) 892-0099.**

**PESTICIDE DISPOSAL**

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Open dumping is prohibited.

**CONTAINER HANDLING**

Nonrefillable outer bag. Do not reuse or refill the outer bag. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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Manufactured for:  
**Valent U.S.A. Corporation**  
P.O. Box 8025  
Walnut Creek, CA 94596-8025  
(800)-6-VALENT (682-5368)  
[www.valent.com](http://www.valent.com)

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