



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

OFFICE OF  
CHEMICAL SAFETY  
AND POLLUTION PREVENTION

February 07, 2012

Ms. Marie Maks  
Nichino America, Inc.  
4550 New Linden Hill Road, Suite 501  
Wilmington, DE 19808

Subject: Application for Pesticide Amendment (R 350)  
Akari® 5SC Miticide / Insecticide  
EPA Reg. No. 71711-4  
Your Submission Dated February 01, 2010  
Decision No: 428796

Dear Ms. Maks:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. Two (2) copies of the finished labeling must be submitted prior to releasing the product for shipment. A stamped copy of the label is enclosed for your records.

If you have any questions contact Driss Benmhend at 703-308-9525 or by e-mail at: Benmhend.driss@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Suarez", is written over a horizontal line.

Mark Suarez  
Product Manager 13, Insecticide Branch  
Registration Division (7504P)

Enclosure: Label stamped "Accepted"



GROUP 21A INSECTICIDE

**Akari® 5SC Miticide / Insecticide**

FOR USE ON GREENHOUSE AND NURSERY ORNAMENTALS, GREENHOUSE CUCUMBERS,  
GREENHOUSE TOMATOES, NONBEARING FRUIT TREES AND VINES, CHRISTMAS TREES, AND  
INTERIOR ORNAMENTAL PLANTINGS AND PLANTSCAPES

**Active Ingredient:**

*Tert*-butyl(E)- $\alpha$ -(1,3-dimethyl-5-phenoxy-pyrazol-4-ylmethyleneaminoxy)-p-toluate.....5.0%

**Other Ingredients:**.....95.0%

**Total**.....100.0%

(Contains 0.42 lb. active ingredient per U.S. gallon)

EPA Reg. No. 71711-4

EPA Est. No.

**KEEP OUT OF REACH OF CHILDREN**  
**WARNING - AVISO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
(If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID	
<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. 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 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.</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 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>
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 contact 1-800-348-5832 for emergency medical treatment information. In case of fire or spills, information may be obtained by calling 1-800-424-9300.	
<b>NOTE TO PHYSICIAN:</b> There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.	

Net Contents:

**NICHINO AMERICA, INC.**  
4550 New Linden Hill Rd., Suite 501  
Wilmington, DE 19808  
888-740-7700

ACCEPTED

FEB 07 2012

Under the Federal Insecticide, Fungicide,  
and Rodenticide Act, as amended, for the  
pesticide registered under:

EPA. Reg. No: 71711-4



**PRECAUTIONARY STATEMENTS**  
**Hazards to Humans and Domestic Animals**  
**WARNING - AVISO**

Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear (goggles or face shield). Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Harmful if inhaled. Avoid breathing spray mist. Remove contaminated clothing and wash clothing before reuse.

**Personal Protective Equipment**

Applicators and other handlers must wear:

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

**User Safety Recommendations**

Do not eat, drink, smoke, or chew gum or tobacco while handling this product and until hands and face are thoroughly washed with soap and water. Do not use the toilet before thoroughly washing hands. If this product penetrated through your clothing or personal protective equipment, stop handling this product immediately, remove the clothing and equipment, wash your body thoroughly, and put on clean clothing and equipment before resuming the handling activity. After handling this product, remove personal protective equipment immediately. Wash the outside of gloves before taking them off. Shower or wash thoroughly and change into clean clothing as soon as possible. Discard clothing and personal protective equipment that cannot be reused, including clothing and other absorbent materials that have been drenched or thoroughly contaminated with this product's concentrate. Otherwise, wash clothing and personal protective equipment (including both the inside and outside of gloves) before each day of reuse according to manufacturer's directions or, if no such directions, in detergent and hot water. Keep and wash them separately from other laundry.

**ENVIRONMENTAL HAZARDS**

This pesticide is very highly toxic to fish and aquatic invertebrates. Do not apply directly to water. Do not contaminate water when disposing of equipment washwater or rinsate.

**PHYSICAL OR CHEMICAL HAZARDS**

Do not use or store near heat or open flame.

**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 agency in your state 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 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. 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:

- Coveralls
- Protective eyewear
- Waterproof gloves
- Shoes plus socks

**NONAGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, or greenhouses. For other uses, including interiorscapes and other nonagricultural uses, do not enter treated areas without protective clothing until sprays have dried.

**GENERAL INFORMATION**

**Akari® 5SC** is a contact miticide/insecticide used for the control of spider mites and other mite pests in nursery and ornamental crops. This product should be used in a program with other products to provide season long protection. Miticides must be rotated with alternate products for resistance management. Do not use products with the same mode of action (METI-2 inhibitor/IRAC Group 21A) in consecutive applications. Apply as a spray as set forth in the APPLICATION DIRECTIONS section of this label, using sufficient water volume to obtain thorough coverage of plants. Under severe mite conditions, use the maximum rates and the shorter spray interval as specified on the label. Dense foliage or excessive growth will often prevent adequate coverage; adjust spray volumes accordingly.

**Akari 5SC Miticide/Insecticide** is a 5% Suspension Concentrate containing 0.42 lb. of fenpyroximate per gallon which, when mixed with water according to the DIRECTIONS FOR USE, will control mites on ornamentals.

**Akari 5SC Miticide/Insecticide** works primarily through contact action, **so good spray coverage is necessary**. Mix with sufficient water and apply as a foliar spray to obtain uniform coverage. Treat plants when pests are immature or at a susceptible stage and populations are building, before crop damage occurs.

**Akari 5SC Miticide/Insecticide** stops mite feeding immediately after application. **Akari 5SC Miticide/Insecticide** provides this stop-feeding action together with a cessation of egg laying, and mites die in 4 to 7 days.

When **Akari 5SC Miticide/Insecticide** is used to control mites, suppression of mealybugs on the treated crop may be achieved. This product must be used in a program with other products to provide protection against mealybugs.

**COMPATIBILITY OF SPRAY MIXTURES**

**Akari 5SC Miticide/Insecticide** is believed to be compatible with most commonly used fungicides, insecticides, micronutrients, growth regulators, and spray adjuvants. Consult specific product labels for



additional information. It is always a good idea to conduct a tankmix compatibility test when you plan to mix **Akari 5SC Miticide/Insecticide** with other products.

To determine the physical compatibility of **Akari 5SC Miticide/Insecticide** with other products, use a jar test. Using a jar, add the proportionate amounts of the products to approximately one quart of water with agitation. Add dry formulations first, then flowables, then emulsifiable concentrates last. After thorough mixing, allow this mixture to stand for 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank. It is suggested that combinations be used on a small number of plants before treating large areas to check for cultivar sensitivity.

### MIXING DIRECTIONS

#### Shake well before using

Please read COMPATIBILITY OF SPRAY MIXTURES section prior to any tank mixing with **Akari 5SC Miticide/Insecticide**. Begin with clean equipment. Prepare only the amount of spray solution needed to treat the target area. Add sufficient clean water to the spray tank for one-half of the mix load. Where possible, start agitation and properly suspend the necessary amount of **Akari 5SC Miticide/Insecticide** in the tank. Agitate to ensure thorough mixing while adding the remaining required water volume and other products. **Akari 5SC Miticide/Insecticide** should be properly suspended and diluted prior to the addition of any adjuvant or before spraying. Consult the adjuvant label or manufacturer for crop tolerance and safety information when using **Akari 5SC Miticide/Insecticide**. Maintain agitation during mixing and application. If agitation is stopped for any reason, the spray solution must be thoroughly remixed prior to further use.

### GENERAL USE RESTRICTIONS

- In Florida, do not use on bearing or nonbearing commercial fruit trees and vines.
- Do not apply this product through any type of irrigation system.
- Do not apply this product as a smoke or aerosol.
- Do not apply this product to plants used for food or animal feed.
- Do not apply to fruit trees and vines that will bear harvestable fruit within 12 months.
- Do not enter the entire enclosed area (treated area) without protective equipment for 12 hours unless one of the following items is completed:
  1. Ten air exchanges.
  2. Two hours of system ventilation.
  3. Four hours of ventilation using vents, windows, or other passive ventilation.
  4. Eleven hours with no ventilation followed by 1 hour of mechanical ventilation.
  5. Eleven hours with no ventilation followed by 2 hours of passive ventilation.
  6. All required PPE is worn.

### APPLICATION DIRECTIONS

**Akari 5SC Miticide/Insecticide** is recommended for use on greenhouse cucumbers and tomatoes and all ornamental crops including flowering and foliage crops, nursery crops, nonbearing fruit trees and vines, and Christmas trees. These include those crops grown in greenhouses, shade and lathe houses, outdoor nurseries and fields, and in interiorscapes. The use directions of this product are based on the results of product testing programs on a wide variety of ornamental plants. However, it is impossible to test this product on all species and cultivars. The phytotoxicity of **Akari 5SC Miticide/Insecticide** has been assessed on a wide variety of common ornamental plants with no phytotoxicity. However, not all plant species and their varieties and cultivars have been tested with possible tankmix combinations, sequential pesticide treatments, and adjuvants and surfactants. Local conditions also can influence crop tolerance and may not match those under which testing has been conducted. Therefore, before using **Akari 5SC Miticide/Insecticide**, test the product on a sample of the crop to be treated to ensure that a phytotoxic response will not occur as a result of applications. Applications should be made immediately



after the spray solution is prepared. Thorough spray coverage is essential for mite control.

Apply **Akari 5SC Miticide/Insecticide** using a properly calibrated sprayer in a minimum of 100 gallons of water per acre to ensure uniform, adequate coverage. Be sure to apply in sufficient water to obtain thorough coverage of all plant parts.

- Apply with high or low volume spray equipment to greenhouse cucumbers and tomatoes.
- Apply with high volume, low volume, or ultra low volume (thermal and non-thermal foggers, misters, etc.) spray equipment to ornamental trees, vines, shrubs, foliage, and flowering plants,

Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator's manual, spray nozzle catalogs and/or your crop advisor for more information. Except for use on greenhouse cucumbers and tomatoes, a wetting agent or other spray adjuvant, approved for use on the crop, may be added to spray solutions according to the manufacturer's use instructions to achieve optimum mite control.

For best results, apply when pest populations are beginning to build, before reaching economic thresholds. Consult your local agricultural advisor, state cooperative extension service, or regional Nichino America representative for further information.

TABLE 1 Recommended Application Rates for Akari 5SC Miticide/Insecticide on Cucumbers Grown in Greenhouses				
Crop	Pests	Rate per Acre	Spray Volume	Directions for Use
Greenhouse Cucumbers	Spider mites	2.0 pints	100 gallons	<p>USE RESTRICTIONS</p> <ul style="list-style-type: none"> <li>• Do not use Akari 5SC Miticide/Insecticide in successive miticide applications per resistance management statements on label.</li> <li>• Do not apply more than 2 pints (0.1 lb ai/A) per acre per growing season.</li> <li>• Do not make more than 1 application per growing season.</li> <li>• Do not apply within 7 days of harvest.</li> <li>• Do not apply through any type of irrigation system.</li> <li>• Do not apply in Ultra Low Volume Equipment.</li> </ul> <p>APPLICATION RECOMMENDATIONS</p> <ul style="list-style-type: none"> <li>• Apply with low or high volume ground equipment only. Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator's manual, spray nozzle catalogs and/or your crop advisor for more information.</li> </ul>
	Whitefly (suppression)			
				USE RESTRICTIONS



<b>Greenhouse Tomatoes</b>	Mites (see <b>Target Species</b> )  Potato Psyllid  Whitefly	2.0 pints	100 gallons	<ul style="list-style-type: none"> <li>• Do not apply more than 4.0 pints per acre per growing season.</li> <li>• Do not make more than 2 applications per growing season.</li> <li>• Do not apply within 1 day of harvest.</li> <li>• Do not apply through any type of irrigation system.</li> <li>• Do not apply in Ultra Low Volume Equipment.</li> </ul> <p><b>APPLICATION RECOMMENDATIONS</b></p> <ul style="list-style-type: none"> <li>• Apply with low or high volume ground equipment only. Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator's manual, spray nozzle catalogs and/or your crop advisor for more information.</li> </ul>
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<b>TABLE 2</b> <b>Recommended Application Rates for Akari 5SC Miticide/Insecticide on Ornamental Trees, Vines, Shrubs, Foliage, and Flowering Plants</b>		
<b>Pest</b>	<b>Application Rate Fl. Oz./100 Gallons</b>	<b>Directions for Use</b>
Spider mites	16.0 to 24.0 fl oz	<p><b>USE RESTRICTIONS</b></p> <ul style="list-style-type: none"> <li>• Do not apply more than 10 gallons of spray per 1,000 sq. ft. per application.</li> <li>• Make sequential application of a miticide, with a different mode of action, up to 21 days after initial <b>Akari 5SC Miticide/Insecticide</b> application.</li> <li>• Do not apply more than 48 fl. oz. per crop cycle or per growing season, whichever is longer.</li> </ul> <p><b>APPLICATION RECOMMENDATIONS</b></p> <ul style="list-style-type: none"> <li>• Use the lower rate for low to moderate mite populations.</li> <li>• Use in sufficient volume to obtain uniform plant coverage. 100 gallons of spray will typically cover 20,000 sq. ft. of greenhouse.</li> </ul>
Tarsonemid mites - Broad mite <i>(Polyphagotarsonemus latus)</i> - Cyclamen mite <i>(Phytonemus pallidus)</i>	24.0 fl oz	
Eriophyid mites (rust, gall, and bud mites) including but not limited to: - Hemlock rust mite <i>(Nalepella tsugifoliae)</i> - Hackberry rust mite	24.0 fl oz	
Mealybugs, including but not limited to: - Citrus mealybug <i>(Planococcus citri)</i> - Long-tailed mealybug <i>(Pseudococcus longispinus)</i>	24.0 fl oz	<p><b>USE RESTRICTIONS</b></p> <ul style="list-style-type: none"> <li>• Do not apply more than 10 gallons of spray per 1,000 sq. ft. per application.</li> </ul> <p><b>APPLICATION RECOMMENDATIONS</b></p> <ul style="list-style-type: none"> <li>• For <b>suppression</b> of certain mealybug pests,</li> </ul>



		use in sufficient volume to obtain uniform plant coverage. 100 gallons of spray will typically cover 20,000 sq. ft. of greenhouse.
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**Akari 5SC Miticide/Insecticide** is recommended for use on all ornamental plantings including those listed in Table 3.

**TABLE 3**  
**List of Plant Species Tested for Tolerance to Akari 5SC Miticide/Insecticide<sup>1</sup>**

Common Name	Scientific Name
African violet	<i>Saintpaulia ionantha</i>
Azalea	<i>Rhododendron</i> spp.
Chrysanthemum	<i>Chrysanthemum morifolium</i>
Citrus, nonbearing	<i>Citrus</i> spp.
Coleus	<i>Coleus X hybridus</i>
Cotoneaster	<i>Cotoneaster</i> spp.
Dieffenbachia	<i>Dieffenbachia</i> spp.
English ivy	<i>Hedera helix</i>
Fern	<i>Davallia</i> spp.
Ficus	<i>Ficus</i> spp.
Geranium	<i>Geranium</i> spp.
Gerbera	<i>Gerbera</i> spp.
Grape, nonbearing	<i>Vitis</i> spp.
Hackberry	<i>Celtis occidentalis</i>
Hemlock	<i>Tsuga</i> spp.
Holly (e.g. blue, Burford, Japanese)	<i>Ilex</i> spp.
Hypoestes	<i>Hypoestes</i> spp.
Juniper (e.g. creeping, Parsons, upright)	<i>Juniperus</i> spp.
Marigold	<i>Tagetes erecta</i>
New Guinea impatiens	<i>Impatiens linearifolia</i>
Pittosporum	<i>Pittosporum</i> spp.
Poinsettia	<i>Euphorbia pulcherrima</i>
Pyracantha (firethorn, red firethorn)	<i>Pyracantha angustifolia</i> , <i>P. coccinea</i>
Rose, cut and miniature	<i>Rosa</i> spp.
Schefflera	<i>Schefflera</i> spp.
Sweetpotato vine, ornamental	<i>Ipomoea batatas</i>
Zinnia	<i>Zinnia elegans</i>

<sup>1</sup> Local conditions can influence crop tolerance and may not match those under which these species were tested. Before using **Akari 5SC Miticide/Insecticide**, test the product on a small sample of the crop to be treated.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool, dry place.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:**

**(Nonrefillable container equal to or less than 5 gallons)**

Nonrefillable container. DO NOT reuse or refill this container. Triple rinse (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  $\frac{1}{4}$  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, or, if allowed by state or local authorities, by burning. If burned, stay out of smoke.

**(Nonrefillable container greater than 5 gallons)**

Nonrefillable container. DO NOT reuse or refill this container. Triple rinse (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. 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, or, if allowed by state or local authorities, by burning. If burned, stay out of smoke.

**IMPORTANT: READ BEFORE USE  
WARRANTY STATEMENT**

By using this product, user or buyer accepts the following conditions, warranty, disclaimer of warranties and limitations of liability.

**CONDITIONS:** The directions for use of this product are believed to be accurate and must be followed carefully. However, because of extreme weather and soil conditions, use methods and other factors beyond the control of Nichino America, Inc. (NAI), it is impossible for NAI to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks are assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, WHICH EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of NAI is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, NAI disclaims any liability whatsoever for incidental or consequential damages, including, but not limited to, liability arising out of breach of contract, express or implied warranty (including warranties of merchantability and fitness for a particular purpose), tort, negligence, strict liability or otherwise.

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