

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

JUL 22 2004

Ms. Audrey Sehn Project Manager Arvesta Corporation 100 First Street, Suite 1700 San Francisco, CA 94105

Subject:

Conditional Registration of Additional Uses on Pome Fruits, Citrus Fruits,

Almonds, Pistachios, Strawberries and Field Grown Ornamentals

Kanemite 15 SC Miticide EPA Reg. No. 66330-38

Supporting Pesticide Petitions 3F6595 and 2F6440

Your Applications of March 27, 2002 and March 31, 2003 and Revised Label

Received With Your E-Mail of July 7, 2004

Dear Ms. Sehn:

The labeling amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, As Amended (FIFRA), is acceptable as a conditional registration under FIFRA Section 3 (c)(7)(B) provided that you:

- 1. Submit two copies of your final printed label incorporating the following correction before you release the product for shipment:
- Clarify the use on nursery crops and nursery plants so that it is clear that they are ornamental and not food producing nursery crops and plants by revising the use to read as follows: "ornamental nursery crops" and "ornamental nursery plants".
- 2. Provide an analytical reference standard for acequinocyl-OH to the EPA National Pesticide Standards Repository.

- 3. Submit the data listed below conducted in accordance with the specified OPPTS or OPP Guideline Number (given in parenthesis), in conformance with the Good Laboratory Practice rule (40 CFR Part 160) and in the format specified in PR Notice 86-5 no later than the time frames specified below. The OPPTS harmonized test guidelines along with the corresponding OPP numbers are available on the Agency's website at http://www.epa.gov/cgibin/epaprintonly.cgi.
- a. Within 1 year of the date of this letter, confirmatory residue analytical enforcement methods and specificity testing of these methods for plants and livestock (860.1340).
- b. Within 1 year from the date of this letter, avian acute dietary study in bobwhite quail (71-2).
- c. Within 1 year from the date of this letter, avian acute oral study in mallard duck (71-1a).
- d. Within 2 years from the date of this letter, a new livestock storage stability study depicting the stability of acequincyl and acequinocyl OH residues in milk and tissue samples frozen for up to 250 days (860.1380).
 - e. Within 2 years from the date of this letter, chronic mysid toxicity test ($\S72-4b$).
- f. Within 3 years from the date of this letter, confined rotational crop study (860.1850).
- 4. Within three years from the date of this conditional registration letter, provide information on the proximity of Federally listed aquatic invertebrates to the proposed use sites. This requirement may be satisfied in one of three ways:
- a) having membership in the FIFRA Endangered Species Task Force (Pesticide Registration [PR] Notice 2000-2);
 - b) citing FIFRA Endangered Species Task Force data; or
- c) independently producing these data, provided the information is of sufficient quality to meet FIFRA requirements. The information will be used by the OPP Endangered Species Protection Program to develop recommendations to avoid adverse effects to listed species.
- 5. Submit the data requested in the November 6, 2003 Notice of Registration for the product within the time frames specified in the Notice.

Included among these requested data were the Independent Laboratory Validations (ILVs) for the analytical methods utilized in the various environmental fate studies submitted in support of the subject product registration. These data, which were submitted in response to the

deficiencies identified in the Agency's review of these environmental fate studies have been received and are under evaluation by the Agency. You were previously provided with a copy of the Agency's review which described the deficiencies and the additional information needed to upgrade the studies.

Additional environmental fate data may be needed pending completion of our evaluation of these data.

The confirmatory inert ingredient information requested in condition 2b of the Notice of Registration dated November 6, 2003 has been received and found to be acceptable and the additional information submitted to upgrade the dermal sensitization study requested in condition 2a of the Notice is currently under evaluation.

6. Submit production information (pounds or gallons produced) for this product for the fiscal year in which the subject new use label amendment is conditionally registered, in accordance with FIFRA Section 29. The fiscal year begins October 1 and ends September 30. The production information will be submitted to the Agency no later than November 15, following the end of the preceding year.

This information should be submitted to the attention of the Registration Support Branch, Section 29 Report at the address cited below.

Document Processing Desk
Office of Pesticide Programs (7504C)
U. S. Environmental Protection Agency
Aerial Rios Building
1200 Pennsylvania Avenue, N. W.
Washington, DC 20460-0001

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions.

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

Sincerely.

Marilyn A. Mautz

Biologist

Insecticide-Rodenticide Branch Registration Division (7504C)

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By wt.

KANEMITE™ 15 SC

MITICIDE

FOR USE ON COMMERCIAL GREENHOUSE, SHADEHOUSE, ORNAMENTAL, FLORAL, FOLIAGE AND NURSERY CROPS; ALSO FOR USE ON POME FRUITS, CITRUS, ALMONDS, PISTACHIOS AND **STRAWBERRIES**

INGREDIENTS

Active Ingredient

Inert Ingredients	,	84.2%
Total		100.0%
* 3-dodecyl-1, 4-dihydro-1, 4-did	oxo-2-naphthyl-acetate.	
Contains 1.25 lb ai/gal.		ACCEPTED with COMMENTS in EPA Letter Dated;
KEEP OUT OF RE	EACH OF CHILDREN	JUL 22 2004
CA	UTION	Finder the Federal tenenticide. Functicide, and Rodenticide dot as amended, for the posticide registered under LPA Roy. No. 66330-38
See back panel for addition	nal precautionary statement	ts.
Produced for: ARVESTA CORPORATION 100 First Street, Suite 1700 San Francisco, CA 94105	EPA Registration No. EPA Est. No	
NET WEIGHT PO	UNDS (KILOGRAMS)	

FIRST AID		
If inhaled	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. 	
If on skin or clothing	 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. 	
If in eyes	 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. 	
If swallowed	 Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. 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. 	

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE: CALL 1-800-228-5635 Ext. 174

FOR 24-HOUR CHEMICAL EMERGENCY (Spill, Leak, Fire or Accident)
ASSISTANCE:
CALL CHEMTREC 1-800-424-9300

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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Harmful if absorbed through skin.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Socks
- Shoes
- Chemical Resistant Gloves made of waterproof material

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist 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.

ENVIRONMENTAL HAZARDS:

This product is toxic to aquatic invertebrates such as Eastern oysters and mysid 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. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

Surface Water Statement

This product may contaminate water through drift of spray in wind. This product has a potential for runoff for several days after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications

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when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

DIRECTIONS FOR USE:

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

Carefully read and understand the Directions for Use and restrictions before applying this product.

Do not apply this product in any 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 instructions on this label about personal protective equipment (PPE), notification to workers 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 entry into treated areas during restricted entry interval (REI) of 12 hours.

PPE required for early entry into 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, socks, shoes, chemical resistant gloves made of waterproof material.

GENERAL INFORMATION: KANEMITE 15 SC is a miticide for the control of Two-spotted spider mite (*Tetranychus urticae*) and Spruce spider mite (*Oligonychus ununquis*) on ornamentals and nursery plants. This product also controls Two-spotted spider mite (*Tetranychus urticae*) and European red mite (*Panonychus ulmi*) on almonds, pistachios and pome fruit. Citrus red mite (*Panonychus citric*) and Texas citrus mite (*Eutetranychus banski*) on citrus and Two-spotted spider mite (*Tetranychus urticae*) and Strawberry spider mite (*Tetranychus turkestani*) on strawberries. When applied to the foliage as directed, KANEMITE 15 SC provides quick knockdown and long residual control. Due to its unique mode of action, KANEMITE 15 SC does not show cross-

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resistance to existing miticides and is very effective against various species of resistant and susceptible mites. KANEMITE 15 SC is relatively harmless to most predacious mites and beneficial insects, making it compatible with IPM and resistance management programs.

NOTICE TO USER: Plant tolerance to this product has been found to be acceptable in research trials for the general plant species listed on the label. However, due to the large number of species and their associated varieties or cultivars of ornamental and nursery plants, and due to variable growing conditions, it is impossible to test every plant variety or cultivar for tolerance to this product. Neither the Manufacturer nor the Seller has determined whether or not this product can be safely used on all ornamental or nursery plants. The user should determine if this product can be used safely prior to commercial use. In a smaller test area, test the recommended rates on plants for phytotoxicity prior to general use.

RESISTANCE MANAGEMENT: Due to its new and unique mode of action, KANEMITE 15 SC does not show cross-resistance, however, in order to reduce selection pressure, which can lead to the development of resistance, the following strategies are recommended. Since KANEMITE 15 SC is relatively harmless to predator mite and beneficial insects, it can be compatible with IPM and resistance management programs.

- 1. Incorporate IPM techniques into your insect/mite control program.
- 2. Ensure thorough spray coverage of all foliage.
- 3. Always apply KANEMITE 15 SC at the recommended rates and according to label recommendations as soon as threshold infestations are observed.
- 4. Do not use KANEMITE 15 SC in successive applications. Rotation with other miticides having different modes of action is recommended.

PLANT TOLERANCE: Neither the manufacturer nor the seller has determined whether or not KANEMITE 15 SC can be used safely on all varieties and cultivars. KANEMITE 15 SC has been tested on a variety of plants with no phytotoxicity observed at label rates. Since all plant species and their varieties and cultivars have not been tested for tolerance, it is recommended that a small number of plants be sprayed to make certain that no phytotoxicity occurs, prior to any large scale application to plants. The end user assumes all risks arising from application of KANEMITE 15 SC in a manner inconsistent with its labeling.

COMPATIBILITY OF MIXTURES: KANEMITE 15 SC can be combined with most commonly used pesticides with the exception of strongly alkaline material, which can reduce the activity of this product. **DO NOT** combine KANEMITE 15 SC with Phosethyl (Fosetyl). To obtain broad-spectrum insect control, KANEMITE 15 SC can be tank-mixed with most other miticide/insecticide products. However, all plant species and their varieties and cultivars have not been tested with possible tank mix combinations, sequential pesticide treatments

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and adjuvants and surfactants. The user should conduct a spray mix compatibility and phytotoxicity trial under local conditions to ensure compatibility prior to any large-scale use.

PREPARATION OF SPRAY SOLUTION: Begin with clean equipment. Add sufficient clean water to the spray tank for one-half of the mix load. Start tank agitation. Add and properly suspend the necessary amount of product before adding any other products. Agitate to ensure thorough mixing while adding the remaining required water. A high quality wetting agent or other spray adjuvant, approved for use on your crop, may be added to spray solutions according to the manufacturer's use instructions. KANEMITE 15 SC should be properly suspended and diluted prior to the addition of any adjuvant. Consult the adjuvant label or manufacturer for crop tolerance and safety information when used with this product. Maintain agitation during mixing and application. DO NOT allow the spray mixture to stand without agitation. If agitation is stopped for any reason, the spray solution must be thoroughly re-mixed prior to any further use. Apply with properly calibrated spray equipment.

APPLICATION: KANEMITE 15 SC should be applied when threshold populations are observed. Do not wait until large mite populations have been established.

Apply KANEMITE 15 SC in sufficient water to ensure uniform and thorough coverage of foliage. Thorough coverage is required for optimum control. To achieve adequate coverage, use proper spray pressures, nozzles, nozzle spacing, and water volume per acre.

When used as directed, KANEMITE 15 SC is effective for the control of a variety of mite species, but is not effective against rust mites. KANEMITE 15 SC shows efficacy on all mite life stages of susceptible mites. Using KANEMITE 15 SC in successive miticide applications is not recommended. Use KANEMITE 15 SC as part of a sound resistance management program that includes rotation with other miticide treatments having different modes of action.

GENERAL RESTRICTION AND LIMITATIONS: Do not apply this product through any type of irrigation system. Do not use KANEMITE 15 SC in successive miticide applications. Use KANEMITE 15 SC in rotation with other treatments having different modes of action. Not for use in or around residential areas. Do not apply by air. Do not apply within 75 feet of aquatic areas.

GREENHOUSE AND SHADEHOUSE ORNAMENTALS AND NURSERY PLANTS: For control of Two-spotted spider mite (*Tetranychus urticae*) and Spruce spider mite (*Oligonychus ununquis*) mix 6.4–12.8 fluid ounces of KANEMITE 15 SC in 100 gallons of water (0.06-0.125 lb ai/100 gal of water) and apply as a full coverage spray to the foliage to drip except for roses and impatiens where the maximum application rate is 6.4 fluid ounces in 100 gallons

of water (0.06 lbs ai/100 gal of water) (Table 1. and 2.). Actual spray volume will vary depending on the size of plants being sprayed. Application should be made as soon as mite population reach economic infestation levels.

Table 1. Application Rate For Floral, Foliage and Nursery Crops (For Roses and Impatiens See Table 2)

PEST	Rate of product per 100 gallons of water
Two-spotted spider mite (Tetranychus urticae)	
Spruce spider mite (Oligonychus ununquis)	6.4 fl. oz. – 12.8 fl. oz.
	(0.06 – 0.125 lbs ai/100 gal)

Do not apply more than 0.6 lb ai/A per crop cycle.

Table 2. Maximum Application Rate for Roses (Except Miniature Roses) and Impatiens

PEST	Rate of product per 100 gallons of water
Two-spotted spider mite (Tetranychus urticae)	6.4 fl. oz.
Spruce spider mite (Oligonychus ununquis)	(0.06 lbs ai/100 gal)

Do not apply more than 0.31 lb ai/A per crop cycle.

ALMONDS AND PISTACHIOS: For control of two-spotted spider mite (*Tetranychus urticae*) and European red mite (*Panonychus ulmi*), apply at a rate of 31 fl oz per acre (0.3 lbs ai/acre) in 100 gallons of water. Do not use less than 100 gallons of water volume per acre. Allow a minimum of 21 days between treatments. Do not apply by air. Do not make more than two applications of KANEMITE per year. Do not apply more than a total of 62 fl oz of KANEMITE 15 SC per acre (0.6 lbs ai/acre) per season. Preharvest interval is 7 days. Note the restricted entry interval (REI) is 12 hours.

CITRUS (ORANGES, GRAPEFRUIT, LEMONS): For control of Citrus red mite (*Panonychus citri*) and Texas citrus mite (*Eutetranychus banksi*), apply at a rate of 31 fl oz per acre (0.3 lbs ai/acre). Do not use less than 100 gallons of water volume per acre. Allow a minimum of 21 days between treatments. Do not apply by air. Do not make more than two applications of KANEMITE per year. Do not apply more than a total of 62 fl oz of KANEMITE 15 SC per acre (0.6 lbs ai/acre) per season. Preharvest interval is 7 days. Note the restricted entry interval (REI) is 12 hours.

POME FRUITS (APPLES AND PEARS): For control of two-spotted spider mite (*Tetranychus urticae*) and European red mite (*Panonychus ulmi*), apply at a rate of 31 fl oz per acre (0.3 lbs ai/acre) in 100 gallons of water. Do not use less than

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100 gallons of water volume per acre. Allow a minimum of 21 days between treatments. Do not apply by air. Do not make more than two applications of KANEMITE per year. Do not apply more than a total of 62 fl oz of KANEMITE per acre (0.6 lb ai/acre) per season. Preharvest interval is 14 days. Note the restricted entry interval (REI) is 12 hours.

STRAWBERRIES: For control of two-spotted spider mite (*Tetranychus urticae*) and Strawberry spider mite (*Tetranychus turkestani*) apply at a rate of 31 fl oz per acre (0.3 lb ai/acre). Do not use less than 100 gallons of water volume per acre. Allow a minimum of 21 days between treatments. Do not apply by air. Do not make more than two applications of KANEMITE 15 SC per year. Do not apply more than a total of 62 fl oz of KANEMITE 15 SC per acre (0.6 lb ai/acre) per season. Preharvest interval is 1 day. Note the restricted entry interval (REI) is 12 hours.

Table	3	Ann	lication	Pates
i abie	Э.	ADD	ncation	Rates

CROP	PEST	Rate of product per Acre
Almonds	Two-spotted spider mite (Tetranychus urticae)	31 fl oz.
	European red mite (Panonychus ulmi)	(0.3 lbs ai/acre)
Citrus	Citrus red mite (Panonychus citri)	
	Texas citrus mite (Eutetranychus banksi)	
Pome Fruit	Two-spotted spider mite (Tetranychus urticae)	
	European red mite (Panonychus ulmi)	
Strawberries	Two-spotted spider mite (Tetranychus	
	urticae)	
	Strawberry spider mite (Tetranychus	
	turkestani)	

RESTRICTION AND LIMITATIONS FOR ALMONDS, CITRUS, PISTACHIOS, POME FRUIT AND STRAWBERRIES NOT LISTED UNDER GENERAL RESTRICTIONS AND LIMITATIONS

- Maximum seasonal use rate: Do not apply more than a total of 62 fl oz of KANEMITE 15 SC per acre per season.
- Do not make more than two applications of KANEMITE 15 SC per year.
- Allow a minimum of 21 days between applications of KANEMITE 15 SC.
- Pre-Harvest Interval (PHI): Refer to Table 4 below.
- Restricted Entry Interval (REI): 12 hours.
- Do not use less than 100 gallons of water volume per acre.
- Crops other than strawberries may not be rotated for at least one year following treatment of strawberries.

Table 4. Crop-Specific Restrictions and Limitations

CROP	Pre-Harvest Interval (PHI)	Maximum Rate Per Acre Per Application	Maximum Rate Per Acre Per Season	Aircraft Application
Almond	7 days	31 fl oz	62 fl oz	No
Citrus	7 days	31 fl oz	62 fl oz	No
Pome Fruits	14 days	31 fl oz	62 fl oz	No
Pistachio	7 days	31 fl oz	62 fl oz	No
Strawberries	1 day	31 fl oz	62 fl oz	No

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a dry place away from excessive heat. Do not store near food or feed. Store in original container only. To close package, replace and tighten cap to form an airtight seal.

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: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or (if allowed by State and local authorities) by burning. If burned, stay out of smoke.

CONDITIONS OF SALE

- Arvesta Corporation. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with the Directions for Use under normal conditions of use.
- 2. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal use conditions, or under conditions not reasonably foreseeable to Arvesta. ARVESTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABLITY. SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE. ARVESTA DOES NOT AUTHORIZE ANY

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AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTY. GUARANTEE OR REPRESENTATION CONCERNING THIS PRODUCT.

3. Critical and unforeseeable factors beyond Arvesta's control prevent Arvesta from eliminating all risks in connection with the use of this product. Such risks include, but are not limited to, damage to plants and crops to which the product is applied, lack of complete control, and damage caused by drift to other plants or crops. Such risks occur even though the product is reasonably fit for the use stated on the label and even though label directions are followed. Except as stated in 1 above, Buyer and User acknowledge and assume all risks and liabilities resulting from handling, storage, and use of this product.