

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

December 16, 2015

Kelly K. Rahn Regulatory Product Manager AMVAC Chemical Corporation 4695 McArthur Court, Suite 1200 Newport Beach, CA 92660

Subject: PRIA Label Amendment – Add the Use on Pomegranate

Product Name: Tre-Hold Sprout Inhibitor A-112

EPA Registration Number: 5481-429 Application Date: September 05, 2014

Decision Number: 495105

Dear Ms. Rahn:

The application referred to above, submitted under the Federal Insecticide, Fungicide and Rodenticide Act, as amended is acceptable under FIFRA sec 3 (c)(5). You must submit and/or cite all data required for registration/registration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, you may contact Driss Benmhend at (703) 308-9525 or via email at Benmhend.driss@epa.gov.

Sincerely,
Rachel C. Holloman

Rachel C. Holloman, Chief Fungicide and Herbicide Branch Registration Division (7505P) Office of Pesticide Programs

Enclosure

# TRE-HOLD®

### SPROUT INHIBITOR A-112

Controls Sprouting or Sucker Growth on Apples, Avocados, Mamey sapote, Mangoes, Olives, Pears, Pomegranate, Woody Ornamental Plants and Other Listed Crops

For Commercial/Agricultural Use Only: Not Intended For Residential Use

#### **ACTIVE INGREDIENT:**

1-Naphthaleneacetic acid, ethyl ester - - 15.1% INERT INGREDIENTS: - - - - - - 84.9% Total

\*This product contains petroleum distillate

1-Naphthaleneacetic Acid (NAA) equivalent is 1 lb./gal. or 13.2% by weight.

## KEEP OUT OF REACH OF CHILDREN CAUTION

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		
If swallowed	Immediately call a poison control center or doctor.	
	• Do not induce vomiting unless told to do so by the poison control center or doctor.	
	Do not give any liquid to the person.	
	Do not give anything by mouth to an unconscious person.	
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 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.	
EMEDCENCY INFORMATION		

#### **EMERGENCY INFORMATION**

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

FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY:

#### NOTE TO PHYSICIAN

If ingested: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

Contains petroleum distillate - vomiting may cause aspiration pneumonia.

EPA Reg. No. 5481-429

EPA Est. No. 5481-CA-1



**ACCEPTED** 12/16/2015

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 5481-429

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are made of barrier laminate, butyl rubber, nitrile rubber or Viton<sup>®</sup>. If you want more options, follow the instructions for category F on an EPA chemical-resistance category selection chart.

All mixers, loaders, applicators, flaggers, and other handlers must wear:

Long-sleeved shirt and long pants,

Shoes plus socks, and

Chemical-resistant gloves.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, 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/PPE 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**

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water **when disposing of equipment wastewater or rinsate**. Do not contaminate irrigation ditches or water used for irrigation or domestic purposes. Do not apply when conditions favor drift from treated areas. Do not use in a greenhouse.

Do not store near extreme heat, open flame, or sources of ignition.

#### **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 responsible for pesticide regulation.

Periodic pruning to maintain line clearance is one of the major expenses of public utilities. Tre-Hold Sprout Inhibitor A-112 in combination with proper pruning techniques reduces the number of new sprouts on many tree species and provides a longer period between prunings.

Do not use the same spraying equipment for other purposes unless thoroughly cleaned. Do not apply Tre-Hold Sprout Inhibitor A-112 through any type of irrigation system.

Many trees sprout vigorously from the rootstock, base of the trunks, scaffold limbs, and around pruning cuts on limbs. Tre-Hold Sprout Inhibitor A-112 prevents or inhibits vegetative bud development in woody plants after pruning. Tre-Hold Sprout Inhibitor A-112 reduces resprouting on bearing and non-bearing apple, olive, pear, avocado, mamey sapote and mango trees and on ornamental olives, crabapples and woody ornamental plants.

Tre-Hold Sprout Inhibitor A-112 is formulated for dilution in water or mixed with interior latex paint. After mixing, the solution should be applied to pruning cuts on the scaffold limbs, base of trunks and on rootstock suckers to control resprouting. Thorough coverage of treated areas is essential for most effective sprout control.

#### SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application can influence pesticide drift. The applicator and grower must evaluate all factors and make appropriate adjustments when applying this product. Do not apply by spray when wind speeds are greater than 10 mph at the application site. Use only medium or coarse spray nozzles or droplets.

For broadcast use, the maximum application rate is 0.11 pound active ingredient per acre of NAA equivalent for all uses, except olive trees which may use up to 0.33 pound active ingredient per acre of NAA equivalent. The minimum interval between applications is to be no less than 5 days.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 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 intervals (REI). 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 REI of 12 hours.

Personal Protective Equipment (PPE) required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls,

Shoes plus socks,

Chemical-resistant gloves made of any waterproof material.

#### MIXING DIRECTIONS

Tre-Hold Sprout Inhibitor A-112 must be diluted before use.

#### **NEW PLANTINGS**

For use on newly established plantings of apples and pears, dilute Tre-Hold Sprout Inhibitor A- 112 to a 0.5% a.i. solution.

EXAMPLES FOR PREPARATION OF APPROXIMATELY 0.5% A.I.			
(EXPRESSED AS NAA ACTIVE INGREDIENT)			
AMOUNT OF	AMOUNT OF	TOTAL VOLUME	
TRE-HOLD SPROUT A-112	WATER	TOTAL VOLUME	
1.25 fl.oz.	30.75 fl. oz.	1 quart	
5.0 fl.oz.	123.0 fl.oz.	1 gallon	
2.0 gallons	48 gallons	50 gallons	

#### **ESTABLISHED PLANTINGS**

The following dilution volumes are examples for typical small and large scale needs. For most uses on established plantings, Tre-Hold Sprout Inhibitor A-112 is diluted to a 1% a.i. concentration with water.

EXAMPLES FOR PREPARATION OF APPROXIMATELY 1% A.I.			
(EXPRESSED AS NAA ACTIVE INGREDIENT)			
AMOUNT OF TRE-HOLD SPROUT A-112	AMOUNT OF WATER	TOTAL VOLUME	
2.5 fl.oz.	29.5 fl.oz.	1 quart	
10.0 fl.oz.	118.0 fl.oz.	1 gallon	
4.0 gallons	46 gallons	50 gallons	

For marking purposes, white latex paint may be substituted for an equal volume of water as indicated below. The white paint also provides protection from sun scald damage in thin barked trees or shrubs.

EXAMPLES FOR PREPARATION OF APPROXIMATELY 1% A.I. (EXPRESSED AS NAA ACTIVE INGREDIENT) WITH LATEX PAINT				
AMOUNT OF TRE-HOLD SPROUT A-112	AMOUNT OF LATEX PAINT	ADD WATER TO MAKE TOTAL OF		
2.5 fl.oz.	4 to 15 fl.oz.	1 quart		
10.0 fl.oz.	15 to 60 fl.oz.	1 gallon		
4.0 gallons	5 to 20 gallons	50 gallons		

Use the higher rate of white latex paint where bark damage from sun scald is likely to be most severe. Be sure the paint used is not harmful to trees.

#### APPLICATION INSTRUCTIONS – APPLES and PEARS - NEW PLANTINGS

Young apple and pear trees which are healthy and vigorous may be treated after planting in the grove when the trees have established normal growth. Remove sprouts and follow the application procedures described below. Use only 0.5% dilution of Tre-Hold Sprout Inhibitor A-112. Do not apply to very young or stressed trees as injury and stand loss may result. Do not apply more than 3 gallons of spray mix per acre per application or 9 gallons of spray mix per acre per year.

## ESTABLISHED PLANTINGS SCAFFOLD LIMBS

Prune existing sprouts and treat during the dormant season. Thoroughly cover area where existing sprouts were removed but restrict treatment to the cut surfaces and 2 to 3 inches of the surrounding area below the cut. Apply a 1% solution of Tre-Hold Sprout Inhibitor A-112 with a brush or small hand held pump-up type sprayer. Use low pressure (not to exceed 25 p.s.i.) to avoid fine spray particles from drifting or splashing on surrounding fruiting wood or buds. The addition of interior white latex paint is optional and will help reflect sunlight and reduce high bark temperatures.



Do not treat scaffold limbs after bud activity starts in the Spring. Some fruit size reduction on Golden Delicious and Anjou pears has been observed from excessive treatments to scaffold limbs on older, weaker trees. To minimize the chance of injury, limit treated areas to 10 percent of the total bark area of the tree. Do not treat weak trees and do not repeat applications on the same tree for at least one year.

#### TRUNK AND BASAL SPROUTS AND ROOT SUCKERS

Prune existing sprouts and apply a 1% solution of Tre-Hold Sprout Inhibitor A-112 during the dormant season prior to green tip stage or during the summer pruning season when the new shoots are 6 to 12 inches in height. The later applications have been the most effective. On bearing trees, do not treat suckers during bud swell, bloom or fruit set. This period is from the start of growth to 4 weeks after petal fall. Application during this time can result in excessive thinning.

Apply Tre-Hold Sprout Inhibitor A-112 with a brush, small hand-held sprayer or back pack sprayer. For large projects, power-operated herbicide type spray equipment with attached handgun or trunk directed nozzle can be used. Maintain low spray pressure (not to exceed 25 p.s.i.) to avoid spray drift of fine spray particles. Do not apply more than 1.5 gallons of spray mix per acre per application or 4.5 gallons of spray mix per acre per year.

#### PRUNING CUTS ON LARGE LATERAL OR UPRIGHT LIMBS

To control sprouts in the vicinity of pruning cuts, paint the 1% dilute mixture of Tre-Hold Sprout Inhibitor A-112 on the bark in the immediate vicinity of the cut. Treat several inches of bark around the cut. Apply with a brush, small hand-held sprayer or back pack sprayer. Do not allow the mixture to splash or drip onto other parts of the tree. Treat only in the dormant season prior to bud activity. Spray application is not recommended, due to the possibility of spray contacting fruit buds. Do not apply more than 1.5 gallons of spray mix per acre per application or 4.5 gallons of spray mix per acre per year.

#### **OLIVES - TRUNK BASAL SPROUTS AND ROOT SUCKERS**

(Do not treat scaffold branches or pruning cuts on olive trees). Prune off existing sprouts or suckers and allow new sprout to regrow. Treat with a 1% solution of Tre-Hold Sprout Inhibitor A-112 when sprouts are not more than 10 inches tall. Apply with a brush, small hand-held sprayer or back pack sprayer. Tre-Hold Sprout Inhibitor A-112 will control new sprout growth of olives, but will not control old woody sprouts. Do not treat during olive bloom or fruit set. Limit treated areas to 10% of the plants total bark surface. Do not apply more than 4.25 gallons of spray mix per acre per year.

#### Tre-Hold A-112 Use Directions for Avocado, Mamey Sapote and Mango trees

Use Tre-Hold A-112 on pruned branches or limbs to maintain overall tree architecture or on trees which have been severely cut back (stumped).

**Dosage**: Tre-Hold Sprout Inhibitor A-112 should be diluted in water or a mixture of water and white latex paint to make an approximate 1.1% (w/w) final concentration of active ingredient.

Tre-Hold Sprout Inhibitor A-112 should first be added to water and then the solution added to the latex paint. Mix well.

DIRECTIONS TO PREPARE A 1.15% A.I. (NAA) WHITE LATEX PAINT MIXTURE				
		Add water to make total		
Amount of Tre-Hold A-112	Amount of White Latex Paint	volume of:		
2.8 fl. oz.	4-15 fl. oz.	1 quart		
11 fl. oz.	15-60 fl. oz.	1 gallon		
4.5 gallons	5-20 gallons	50 gallons		

**Method of Application**: Prune branches and remove excessive sprouts or dead and diseased limbs. When a tree is being stumped or severely pruned ensure proper cuts are made at the right angles. Apply TreHold A-112 mixture with a small hand-held sprayer equipped with a directed nozzle, brush, sponge or paint roller or other suitable equipment within a few days after pruning operations have been completed. Do not allow the mixture to splash or drip on to other parts of the tree at the time of application.

**Frequency/Timing of Applications**: Two applications may be made per year with a minimum of 45 days between treatments. The Preharvest Interval (PHI) is 10 days.

# Use Directions To Control Excessive Sprouting on Mature, Healthy Azarole, Crabapple, Loquat, Mayhaw, Medlar, Asian Pear, Quince, Chinese Quince, Japanese Quince, Tejocote and Cultivars, Varieties and/or Hybrids of These Trees:

#### **ESTABLISHED PLANTINGS - SCAFFOLD LIMBS**

Prune existing sprouts and treat during the dormant season. Thoroughly cover area where existing sprouts were removed but restrict treatment to the cut surfaces and 2 to 3 inches of the surrounding area below the cut. Apply a 1% solution of Tre-Hold Sprout Inhibitor A-112 with a brush or small hand held pump-up type sprayer. Use low pressure (not to exceed 25 p.s.i.) to avoid fine spray particles from drifting or splashing on surrounding fruiting wood or buds.

EXAMPLES FOR PREPARATION OF APPROXIMATELY 1% A.I. SPRAY TANK SOLUTION				
(EXPRESSED AS NAA ACTIVE INGREDIENT)				
AMOUNT OF TRE-HOLD SPROUT A-112	AMOUNT OF WATER	TOTAL VOLUME		
2.7 fl.oz.	29.3 fl.oz.	1 quart		
10.6 fl.oz.	117.4 fl.oz.	1 gallon		
4.1 gallons	45.9 gallons	50 gallons		
8.2 gallons	91.8 gallons	100 gallons		

## FOR CONTROLLING POMEGRANATE BASAL TRUNK SPROUTS AND ROOT SUCKERS

Apply Tre-Hold A112 as a directed spray to the lower tree trunks and immediate surrounding area. Best results are obtained when first treatment is made after the trees resume growth and suckers become visible (usually between February to May in the San Joaquin Valley). For best results, treat early before suckers attain 12" in length. Dilute Tre-Hold A112 in the correct amount of water to prepare a 1% A.I. solution (See dilution chart). Make applications in a diluent volume of up to 44 g.p.a. using a coarse nozzle sprayer directed to the base of the trees. If needed, retreatment can be made after 60 days. The Pre-harvest Interval (PHI) is 45 days. Aerial applications are prohibited.

#### **WOODY ORNAMENTAL PLANTS**

#### CONTROLS REGROWTH OF TREE SPROUTS FOLLOWING PRUNING OPERATIONS

Tre-Hold A-112 prevents and inhibits vegetative growth in woody plants. After proper pruning, prepare 1% dilute mixture with/or without white latex paint according to the mixing directions. Apply with a brush, small hand held sprayer or back pack sprayer. Tre-Hold A-112 is effective on many ornamental flowering and shade trees such as:

American Elm Crepe Myrtle Sugar Maple
Chinese Elm Pyracantha Sycamore
Coast Redwood Red Maple Water Oak

Crabapples Silver Maple Willow spp. (Black Marsh)

For most effective control of re-sprouts, prune to a lateral branch (drop crotch pruning), and apply Tre-Hold A-112 after growth has begun. Do not leave stubs and avoid severe trimming. Treatment of all cuts is important to obtain

consistent results. Do not apply more than 1.5 gallons of spray mix per acre per application or 4.5 gallons of spray mix per acre per year.

#### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Do not use or store near heat or open flame.

**PESTICIDE STORAGE:** Do not store in the same area as food or feed. Do not freeze.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows; Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

#### LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use, subject to the inherent risks referred to herein, when it is used in accordance with such directions; and (c) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties of food crops and plants, or in all states or under all conditions.

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