## PLEASE NOTE

This image contains more than one label approved for this product on this date.

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<b>\$EPA</b>	Environmenta	United States al Protection Agency hington, DC 20460			<b>V</b>	Registration Amendment  Other Notification		nt	OPP Identifier Number	
		<b>Applicati</b>	on for	Pestici	de - Sec	tion	1			
1. Company/Product Number 70051-2	or			1	Product Man Reilly	ager /	Branch Ch	ief		posed Classification
4. Company/Product (Name) Neem Oil 70%				PM# Bioch	emical Pes	ticide	s Branc	h	ا ا	, Hosticisa
5. Name and Address of Ap	plicant (Include ZIP C	ode)		J						FIFRA Section 3(c)(3) nposition and labeling
Certis USA, L.L.C. 9145 Guilford Road, Suite 175 Columbia, Maryland 21046				to:	Reg. No					
Check if this	s is a new address			Produ	ct Name _					
			Se	ction -	l					
Amendment - Explai	n below. conse to Agency lette	r dated			Final printed Agency lette "Me Too" A	er dat	ed			ATION: 29 Maros
Notification - Explain	below.				Other - Expl	ain be	olopa Parie	ewed	Ву:	M.DuggarD
Vegetable, Cereal Grains and M notification is consistent with the confidential statement of formuthat if this notification is not co- action and penalties under section	ne provisions of PR Notice la of this product. I under ensistent with the terms of	e 98-10 and EPA stand that it is a	A regulation violation of and 40 Cl	ns at 40 CFR f 18 U.S.C. S FR 152.46, th	152.46, and no sec. 1001 to wil sis product may	other . lfully i	changes ha make any f	ve been i alse state	nade to ment to	the labeling or the EPA. I further understand
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1. Material This Product Wil	1		T				I			
Child-Resistant Packaging Yes No	Unit Packaging Yes No		Wate	r Soluble P Yes No	ackaging		2. Type	Mi Pla Gli	etal Istic 188	
Certification must be submitted If "Yes" No. per container			If "Ye Packs	No. per Paper Other (Specify)		ecify)				
3. Location of Net Contents  Label C	Information container	4. Size(s) Re	tail Conta	iner		5. Loc	on col	Label Di ntainer	rection	S
6. Manner in Which Label is	Affixed to Product	Lithor Paper Stence	graph glued iled		Other					
			Sec	tion - I\	/				•	
1. Contact Point (Complete	items directly below t	for identification	on of indiv	vidual to be	contacted, it	nece	ssary, to	process	this e	pplication.)
Name Christine A. Dively		Title Director of Regulatory Affairs			· 1	p <b>hone</b>   183-38	No, (Include Area Code) 06			
i certify that the state I acknowledge that an both under applicable	y knowlinglly false or		all attacl						1	6. Date Application ficce/ye4 (Stamped)
2. Signature Christine K	1. Duely		3. Title Director	of Regulato	ry Affairs					
4. Typed Name Christine A. Dively			5. Date	ely 10	2,2004			_		

W-5.7.



Certis USA 9145 Guilford Road Suite 175 Columbia, MD 21046

(301) 604-7340

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5764378 | 332 MD 37

July 9, 2004

Ms. Linda Hollis
Team Leader
Biochemical Pesticides Branch
Biopesticides & Pollution Prevention Division (7511C)
Office of Pesticide Programs
U.S. Environmental Protection Agency
1921 Jefferson Davis Hwy, Crystal Mall 2
Arlington, VA 22202

RE: Notification of revisions to Master Label Neem Oil 70%, EPA Reg. No. 70051-2

Dear Ms. Hollis:

Certis USA, L.L.C. is respectfully submitting a Notification of revisions to the Master Label for Neem Oil 70%, EPA Reg. No. 70051-2. It has come to our attention that there are errors in the use directions for commercial outdoor applications on this label. The rate for outdoor applications is 1:100, as stated on page 4, under the "Landscape, Greenhouse and Nursery Ornamentals" paragraph. Additionally, under extreme outdoor conditions, the higher rate of 1:50 can be used as stated in the "Landscape Ornamentals" paragraph on page 4. However, the rate of 1:200 under the "Landscape Ornamentals" paragraph is an error. Therefore, we have corrected the range in this paragraph to read 1:50-1:100, and have updated the corresponding table on page 5.

In addition, there is a discrepancy between language on the table on page 7 and the use directions for Vegetable, Cereal Grains and Miscellaneous crops on page 12. A caveat has been added to the table to refer the User to specific use directions for these crops. Lastly, the language "Do not use Trilogy in nurseries, on turf, or landscape plantings" has been removed as Certis intends to market Trilogy for these uses. Enclosed in support of this action are:

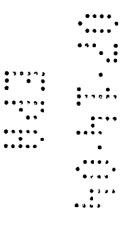
- 1) EPA form 8570-1
- 2) Revised label for Neem Oil 70% (mark-up and clean copy), NOTE: this label incorporates changes made to the Master Label by Notification submitted to the Agency on April 13, 2004.

If you have any questions about this submission, please do not hesitate to contact me. I can be reached by telephone at (301)483-3806 or by email at cdively@certisusa.com.

Sincerely,

Christine A. Dively
Director of Regulatory Affairs

Enclosures



Date Reviewed: 29 Marcs

Reviewed By: MDuagarD

#### MASTER LABEL

This master label bears directions for agricultural, commercial and homeowner use with various application rates specific to the associated container size.

The following Alternate Brand Names have been submitted to the Agency under this Master Label: Trilogy, Triact 70EC, Trilogy PHC, Ferti-lome Rose, Flower & Vegetable Spray, Ferti-lome Triple Action Plus, Neem Concentrate, Garden Safe Fungicide 3 Concentrate

# Neem Oil 70%

Fungicide/Miticide/Insecticide

FOR ORGANIC PRODUCTION



For Indoor/Outdoor Use on Ornamental Flowering Plants, Trees, Shrubs, Foliage, Vegetables, Fruits, Nuts, Agronomic Crops and Melons, and Row Crops Grown on Commercial Farms and Nurseries, Greenhouses, Landscapes and Homes and Residential Landscapes Controls Fungal Diseases Including Black Spot, Mildews, Rusts, and Scab Kills Mites and Insects Including Whiteflies, Aphids, and Scales For Foliar Control of Fungal Diseases and Insect Pests

#### **ACTIVE INGREDIENT:** Clarified Hydrophobic Extract of Neem Oil ......70% OTHER INGREDIENTS......30% TOTAL ......100%

This product contains 5.46 lb of clarified hydrophobic extract of neem oil per US gallon. This container will treat up to 0.5 acres when used at the highest application rate (only for containers less than 5 gallons).

#### **KEEP OUT OF REACH OF CHILDREN** CAUTION

Net Contents: 2.5 gallons, 100 gallons

Lot No.:

EPA Reg. No. 70051-2 EPA Est. No.70051-CA-001

Composition covered by US Patents 5,298,251; 5,356,629; 5,372,817; 5,405,612; and 5,409,708.

Manufactured by Certis USA, L.L.C. 9145 Guilford Road, Suite 175 Columbia, MD 21046

## ERTIS

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

#### FIRST AID

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

**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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Hot Line Number: 1-800-255-3924.

#### Personal Protective Equipment:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl
  - chloride (PVC) or Viton.
- · Shoes plus socks.

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

#### **User Safety Recommendations:**

Users should:

- · 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**

#### Agricultural/Commercial Use

This product is hazardous to fish and aquatic invertebrates.

For Terrestrial Uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

#### **Homeowner Use**

Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters or rinsate.

#### **BEE HAZARD**

This product is toxic to bees exposed to direct treatment. Do not apply this product while bees are actively visiting the treatment area.

#### PHYSICAL AND 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 through any type of irrigation system.

#### General Information:

- Kills eggs, larvae, and adult insects.
- Prevents and controls black spot on roses, anthracnose, rust and powdery mildew.
- · Kills insects and their eggs.
- Formulated for interiorscape use.
- · Shake well before using.
- For best results, maintain constant agitation in spray equipment.
- For optimal performance, do not mix with cold water (less than 45°F).
- Use spray solutions within several hours of preparation for maximum effectiveness. Do not store diluted solution for later use.
- Do not apply to wilted or otherwise stressed plants, or to newly transplanted materials or crops prior to root establishment.
- Do not apply to known sensitive plant species, such as impatiens flowers, fuchsia flowers, hibiscus flowers, some rose flowers, ornamental olive trees, or some carnation varieties without prior testing.
- When used in conjunction with beneficial insects, conduct a small trial to assure compatibility before using on a large scale.
- As with other oil-based products, exercise care in timing applications to early morning/late evening to minimize the potential for leaf burn.
- Use with care on plants with tender tissue. Check for leaf burn in small scale trials prior to use.
- Thorough coverage is necessary to provide good disease and mite control. Neem Oil 70% prevents fungal attack of plant tissue and contact activity to mite pressure on the plant. Avoid excessive runoff of spray material for maximum control.

#### Agricultural/Commercial Use

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 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 4 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
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl

chloride (PVC) or Viton.

Shoes plus socks.

#### **NON-AGRICULTURAL 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, nurseries, or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

**TANK MIXING:** Neem Oil 70% has been found to be compatible with most commonly used fungicides, insecticides and fertilizers. Check physical compatibility first with other products before mixing by using a jar test. Using a quart jar, add the proportionate amounts of the products to 1 quart of water. After thoroughly mixing, let mixture stand for at least 5 minutes. Growers must tank mix combinations for phytotoxicity on a sample of plants prior to use. Due to the wide variation in climatic conditions, cultural practices, and other factors, the User assumes full responsibility for any crop damage or other liability resulting from the use of Neem Oil 70% in a tank mix combination. Avoid tank mixes with Morestan, Captan, Sulfur, Bravo/Echo, chlorothalonil or other chemically similar products as unpredictable results or leaf burn may occur.

#### **COMMERCIAL USE**

Do not use Triact 70EC on food crops. (NOTE TO REVIEWER: Triact 70EC is not labeled for use on food crops)

#### GREENHOUSE, LANDSCAPE, AND NURSERY USE INSTRUCTIONS

#### **FUNGICIDE USE**

#### ORNAMENTAL DISEASE CONTROL

Neem Oil 70% is an effective fungicide for the prevention and control of various fungal diseases including black spot on roses, powdery mildew, downy mildew, anthracnose, rust, leaf spot, botrytis, needle rust, scab, flower, twig, and tip blight, and alternaria.

Landscape, Greenhouse and Nursery Ornamentals

Neem Oil 70% will provide broad spectrum control of many fungal diseases affecting ornamental flowering plants, trees, shrubs, and foliage when used at the rate of 1 gallon per 100-200 gallons of water, depending on the level of disease pressure. Use the lower rate (1:200) when spraying as a preventative in a greenhouse while the higher rate (1:100) is needed for outdoor applications. Determine the best rate for your particular situation.

#### Greenhouse

When Neem Oil 70% is used as a preventative, the lower rate (1:200) will provide adequate control for most greenhouse situations. If disease pressure is evident, use the higher rate (1:100). Make applications for disease prevention on a 7-14 day schedule depending on the anticipated severity of the disease pressure. To control existing disease, apply Neem Oil 70% on a 7-Day schedule until the disease pressure is eliminated. Use a 14-Day schedule to prevent disease pressure from returning. NOTE: Spray greenhouse roses only in a rotation program, which includes Neem Oil 70% once every 4 weeks.

#### **Landscape Ornamentals**

In outdoor landscape applications, apply Neem Oil 70% at rates of 1:50 - 1:100 rate (see table for detailed use rates). This will provide the necessary control under the extreme outdoor conditions. When using Neem Oil 70% as a preventative, make application on a 14-day schedule. If disease is present, use a 7-day application schedule to control the disease and prevent further damage from occurring.

#### MIXING INSTRUCTIONS

Add Neem Oil 70% to one-half (1/2) full tank under agitation containing water of 45°F or greater before filling to desired level. If water temperature is below 45°F, premix Neem Oil 70% at a 1:1 ratio with tepid water to ensure good emulsification. Then dilute to final volume. When combining with other products, such as wettable powder insecticides or fungicides, add these items first when the tank is approximately 1/3 full. Ensure that there is good agitation while mixing for complete emulsification. Maintain agitation during spray application. Do not use if this oil does not form a uniform, cloudy emulsion.

#### **APPLICATION INSTRUCTIONS**

Apply until plant surface is uniformly wet with minimal runoff at 25-40 psi with hand sprayer or 100-200 psi with power sprayer as a fine spray to both leaf surfaces. Avoid excessive application.

#### MANAGEMENT OF LANDSCAPE AND ORNAMENTAL DISEASES

SPRAY TARGET	CONCENTRATION	SPRAY INTERVAL	PRECAUTIONS
Potted Plants (Greenhouse)	1:100 - 1:200 (1.0% - 0.5%)	14 days	Trial first on open blooms
Flowering Bench Crops (Greenhouse)	1:100 - 1:200 (1.0% - 0.5%)	7 - 14 days	Trial first on open blooms - not suggested for cut roses
Outdoor Flowering Plants	1:50 - 1:100 (2.0% - 1.0%)	7 - 14 days	Do not spray impatiens flowers
Outdoor Woody Plants	1:50 - 1:100 (2.0% - 1.0%)	14 days	

#### **MANAGEMENT OF TURF DISEASES**

SPRAY TARGET	CONCENTRATION	SPRAY INTERVAL	PRECAUTIONS
Snow Mold	1:100 - 1:50 (1.0% - 2.0%)	14 days	In fall before first snow
Dollar Spot	1:100 - 1:200 (1.0% - 0.5%)	7 - 14 days	At first sign of disease
Brown Patch	1:100 - 1:200 (1.0% - 0.5%)	7 - 14 days	At first sign of disease

#### INSECTICIDE/MITICIDE USE

For use to control whiteflies, mealybugs, aphids, leafhoppers, mites and scales on ornamentals, trees, and shrubs in and around greenhouses, commercial nurseries and other commercial structures.

Use Neem Oil 70% at the rate of 1-2 gallons per 100 gallons of water. The low rate (1.0%) can be used when pest pressure is low. Use the high rate (2.0%) for high pest infestations or to control more troublesome pests, such as mites and scales. Determine the best rate for your particular situation.

Make sprays on a 7-14 day interval depending on the severity of the pest problem. Use the 7-day schedule until the pest population is reduced. Then use a 14-day interval for control.

#### **AGRICULTURAL USE DIRECTIONS**

- Neem Oil 70% is a broad spectrum fungicide of certain diseases and controls mites in citrus, deciduous fruits and nuts, vegetable crops, cereal grains, and other miscellaneous crops.
- Do not apply this product through any type of irrigation system.
- Do not use Neem Oil 70% after bloom on table grapes or following bunch closure on wine grapes. Do not use Neem Oil 70% after pit hardening on stone fruit.
- Use care when applying near streams, ponds, lakes, or other bodies of water. Do not apply Neem Oil 70% when weather conditions favor drift or when the likelihood of runoff is high.
- Thorough plant coverage is essential to obtain optimal levels of control.
- For insects and mites: For best results, apply Neem Oil 70% thoroughly before adult insects, mites, or eggs are present in large numbers.
- For Diseases: Apply Neem Oil 70% as a 1.0% solution in sufficient amounts of water to achieve complete

coverage of foliage. (See the following detailed directions per crop groupings). When used as a foliar fungicide, begin applications when conditions are favorable for disease but before infection. Apply Neem Oil 70% every 7-14 days until threat of disease is over. Use Neem Oil 70% in rotation with other fungicides to increase the spectrum of control.

- For Mites: For best results, apply Neem Oil 70% in sufficient amounts of water to achieve complete coverage.
   Neem Oil 70% is most effective when applied before mites or eggs are present in large numbers. (See the following detailed directions per crop groupings). Apply at a rate of 1.0-2.0% Neem Oil 70%. Reapply Neem Oil 70% every 7-21 days until pressure is over.
- For Insects: For best results, apply Neem Oil 70% at 1.0-2.0% in sufficient amounts of water to achieve complete coverage. Neem Oil 70% is most effective when applied before insects or eggs are present in large numbers. Repeat application based on pest pressure and field scouting for best results. Use the dilution tables to calculate dilution rates.
- Consult local agricultural extension service or experiment station for detailed information on timing of applications for the most effective control for your area.
- Apply Neem Oil 70% by conventional, low volume, and aerial application equipment.

#### **APPLICATION INSTRUCTIONS**

Ground Application: Apply Neem Oil 70% by ground application in a minimum of 25 gallons of water / acre.

Chemigation: Do not apply this product through any type of irrigation system.

**Aerial Application:** For those crops where aerial applications are indicated, apply a minimum of 5 gallons of water / acre unless otherwise specified. Avoid application under conditions when uniform coverage cannot be obtained or when excessive drift may occur. Do not apply directly to humans, animals or aquatic animals.

#### MIXING INSTRUCTIONS

Add Neem Oil 70% to one-half (1/2) full tank under agitation containing water of 45°F or greater before filling to desired level. If water temperature is below 45°F, premix Neem Oil 70% at a 1:1 ratio with tepid water to ensure good emulsification. Then dilute to final volume. When combining with other products, such as wettable powder insecticides or fungicides, add these items first when the tank is approximately 1/3 full. Ensure that there is good agitation while mixing for complete emulsification. Maintain agitation during spray application. Do not use if this oil does not form a uniform, cloudy emulsion.

## DILUTION TABLE FOR LOW VOLUME (INCLUDING AERIAL) APPLICATIONS (5-30 gallons per acre)

Gallons of Water	NEEM OIL 70%	DILUTION
5	1 Quart*	5%_
10	1 Quart*	2.5%
15	1 Quart*	1.67%
20	1 Quart*	1.25%
25	1 Quart*	1.0%
30	1 Quart*	0.83%

<sup>\*</sup>For citrus, stone fruit, tropical fruit, pome fruit, and nuts, refer to specific application instructions.

#### DILUTION TABLE FOR HIGH VOLUME APPLICATION

(25-250 gallons per acre)

Gallons	Gallons of	Gallons of	Gallons of	Gallons of
Water	Neem Oil 70%	Neem Oil 70%	Neem Oil 70%	Neem Oil 70%
	for 0.5% Solution	for 1.0% Solution	for 1.5% Solution	for 2.0% Solution
25	Use 1.0% solution *	0.25 (32 fluid oz.)	0.375 (48 fluid oz.)	0.5 (64 fluid oz.)
50	0.25 (32 fluid oz.)	0.5 (64 fluid oz.)	0.75 (96 fluid oz.)	1.0
75	0.375 (48 fluid oz.)	0.75 (96 fluid oz.)	1.125	1.5
100	0.5	1.0	1.5	2.0
125	0.625 (80 fluid oz.)	1.25	1.875	2.5
150	0.75	1.5	2.25	3.0
175	0.875 (112 fluid oz.)	1.75	2.625	3.5
200	1.0	2.0	3.0	4.0
225	1.125	2.25	3.375	4.5
250	1.25	2.5	3.75	5.0

<sup>\*</sup> For Vegetable, Cereal Grains, and Other Miscellaneous Crops, refer to specific use directions

#### CITRUS, POME (DECIDUOUS), STONE, TROPICAL FRUITS AND NUTS

#### Citrus

Use Neem Oil 70% on citrus to control diseases to include Anthracnose, Post-Bloom Fruit Drop, and Scab. Apply as a foliar application at the rate of 1.0% in 25-200 gallons of water for high volume applications or a minimum of 0.5 gallons Neem Oil 70% in a minimum of 5 gallons of water per acre for low volume applications. Do not apply more than 2.5 gallons of Neem Oil 70% per acre, per application. Reapply Neem Oil 70% every 7-14 days until threat of disease is over.

For control of Alternaria and Greasy Spot, apply Neem Oil 70% at a 1.0% solution in 25-125 gallons of water per acre in combination with Copper @ 2.0 lbs a.i. per acre (as found in EPA registered products such as Kocide® and Champ®) as a preventative disease spray tank mixture.

Use Neem Oil 70% on citrus to control mites at a rate of 1.0-2.0% in 25-200 gallons of water for high volume application or 0.5 gallon Neem Oil 70% in a minimum of 5 gallons of water per acre for low volume application. As a dormant oil spray, use Neem Oil 70% as a 2% solution or 1 quart Neem Oil 70% minimum per acre. Do not apply more than 5 gallons of Neem Oil 70% per acre, per application.

Stone and Tropical

**FUNGICIDE USE:** Apply Neem Oil 70% at a rate of 1.0% in 25-200 gallons of water for high volume applications or 0.5 gallons Neem Oil 70% in a minimum of 5 gallons of water per acre for low volume application. Reapply Neem Oil 70% every 7-14 days until threat of disease is over.

**MITICIDE USE:** Use Neem Oil 70% at first sign of pests or pest damage at the appropriate rate listed below as a foliar spray in sufficient water for thorough coverage. Repeat applications as needed for adequate control every 7-21 days. Apply a 1.0-2.0% solution of Neem Oil 70% for high volume application or a minimum of 1 quart Neem Oil 70% in a minimum of 5 gallons of water per acre for low volume application. Do not apply more than 5 gallons of Neem Oil 70% per acre, per application.

Do not use Neem Oil 70% after pit hardening on stone fruit.

Pome (Deciduous Fruits) and Nuts

**FUNGICIDE USE:** Apply Neem Oil 70% at a rate of 1.0% in 25-100 gallons of water per acre or 0.5 quarts Neem Oil 70% in a minimum of 5 gallons of water per acre for low volume application. Apply no more than 2.5 gallons Neem Oil 70% per acre in solution per application. Repeat applications every 7-14 days.

**MITICIDE USE:** Use Neem Oil 70% at a rate of 1.0-2.0% in 25-100 gallons of water per acre or 0.5 quarts Neem Oil 70% in a minimum of 5 gallons of water per acre for low volume application. Apply no more than 2 gallons of Neem Oil 70% per acre per solution. Apply at first sign of pests or pest damage. Repeat application as needed for adequate control every 7-21 days. Do not apply more than 5 gallons Neem Oil 70% per acre, per application.

Walnuts: Avoid spraying after husk split.

#### CITRUS, POME, STONE, AND TROPICAL FRUITS

rops (including but not limited to)			
Apples	Guavas	Oriental pears	
Apricots	Jujubes	Pineapples	
Avocados	Kiwifruit	Plantains	
Bananas	Kumquats	Plums Chickasaw Plums Damson Plums Japanese Plums	
Calamondin	Lemons		
Cherries	Limes		
Barbados cherries	Loquats		
Sour cherries	Lychee	Pomegranates	
Sweet cherries	Mangoes	Prunes	
Cherimoya	Mandarins	Pummelos	
Citrus citron	Satsuma mandarins	Quinces	
Citrus hybrids	Nectarines	Tangelos	
Coconuts	Olives	Tangerines	
Crabapples	Oranges		
Dates	Papayas		
Feijoa	Passion fruit		
Figs	Peaches		
Grapefruits	Pears		
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PESTS			
PESTS Aphids	Fruit flies	Calico scales	
ESTS  Aphids  Apple grain aphids	Leafminers	Frosted scales	
PESTS  Aphids  Apple grain aphids  Black cherry aphids	Leafminers Citrus leafminers	Frosted scales Lecanium scales	
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Aphids Apple grain aphids Black cherry aphids Green apple aphids Leafcurl aphids Mealy plum aphids Rosy apple aphids Woolly aphids Citrus blackflies	Leafminers Citrus leafminers Mealybugs Mites Rust mites Spider mites Psyllids	Frosted scales Lecanium scales San Jose scales Whiteflies Citrus whiteflies Silverleaf whiteflies	
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Aphids Apple grain aphids Black cherry aphids Green apple aphids Leafcurl aphids Mealy plum aphids Rosy apple aphids Woolly aphids Citrus blackflies  PISEASES Anthracnose	Leafminers Citrus leafminers Mealybugs Mites Rust mites Spider mites Psyllids Scales  Downy mildew	Frosted scales Lecanium scales San Jose scales Whiteflies Citrus whiteflies Silverleaf whiteflies Sweetpotato whiteflies	

<b>Props</b> (including but not limited to)		
Almonds	Chestnuts	Macadamia nuts
Beech nuts	Chinquapins	Pecans
Brazil nuts	Filberts	Pistachios
Butternuts	Hickory nuts	Walnuts
Cashews	Japanese horse chestnuts	vvairiuts
Casnews	Japanese noise chestiluts	
PESTS		
Aphids	Rust mites	Lecanium scales
Woolly aphids	Spider mites	San Jose scales
Leafrollers	Scales	Weevils
Fruit tree leafrollers	Calico scales	Chestnut weevils
Mites	Frosted scales	
DISEASES		
Leaf spot		
Shothole		
CUCURBITS		
	ns found directly below the heading Ag	ricultural Use Directions.
Crops (including but not limited to)	Oh and the m	D12
Balsam pears (bitter melons)	Gherkins	Pumpkins
Cantaloupes	Gourds	Squashes
Casaba	Honey balls	Watermelons (incl. hybrids)
Chinese waxgourds	Melons (incl. hybrids)	Zucchini
Citron melons	Honeydew melons	
Crenshaw	Muskmelons	
Cucumbers	Persian melons	
PESTS		
	Aphids	
Leafcurl aphids	Frosted scales	Greenhouse whiteflies
Woolly aphids	Lecanium scales	_Silverleaf whiteflies
Leafminers	San Jose scales	Sweetpotato whiteflies
Mites	Scales	
Spider Mites	Squash bugs	
Calico scales	Whiteflies	
DISEASES		
Mildews		
Downy mildew		
Powdery mildew		
Powdery mildew		
·	RI ES	
BULB, COLE AND LEAFY VEGETA		ricultural Use Directions.
BULB, COLE AND LEAFY VEGETA Refer to specific application instruction	BLES ns found directly below the heading Ag	ricultural Use Directions.
BULB, COLE AND LEAFY VEGETA Refer to specific application instruction Crops (including but not limited to)	ns found directly below the heading Ag	
BULB, COLE AND LEAFY VEGETA	ns found directly below the heading Ag  Chinese cabbage (Bok choy, Napa) Chinese mustard cabbage (Gai choy)	Chicory Red chicory
BULB, COLE AND LEAFY VEGETA Refer to specific application instruction Crops (including but not limited to) Arugula Broccoli Broccoli	Chinese cabbage (Bok choy, Napa) Chinese mustard cabbage (Gai choy) Cauliflower	Chicory Red chicory Cilantro
BULB, COLE AND LEAFY VEGETA Refer to specific application instruction Crops (including but not limited to) Arugula Broccoli Broccoli raab Chinese broccoli (Gai Ion)	ns found directly below the heading Ag  Chinese cabbage (Bok choy, Napa) Chinese mustard cabbage (Gai choy)	Chicory Red chicory Cilantro Collards
BULB, COLE AND LEAFY VEGETA Refer to specific application instruction Crops (including but not limited to) Arugula Broccoli Broccoli	Chinese cabbage (Bok choy, Napa) Chinese mustard cabbage (Gai choy) Cauliflower	Chicory Red chicory Cilantro

Watercress	Kohlrabi	Rhubarb
Daikon	Leek	Shallots
Endive	Lettuce (head & leaf)	Spinach
Fennel	Low-bok	Chinese Spinach
Garlic	Onions	(Amaranth, Tampala)
Greens	Orach	Swiss chard
Collard greens	Parsley	Turnip tops
Mustard greens	Purslane	. a.mp tope
Rape greens	Raddichio	
Kale	Rappini	
PESTS		
Aphids	Rust Mites	Silverleaf whiteflies
Woolly aphids	Spider Mites	Sweetpotato whiteflies
Leafminers	Whiteflies	Sweetpotato writtenies
Mites	Greenhouse whiteflies	
DISCASCO		
DISEASES	Dougny mildou	NATI-1
Alternaria Rotrotio	Downy mildew Powdery mildew	White rust
Botrytis Mildews	Rusts	
INIIGEMS	Nusts	
LEGUME AND FRUITING VEGETABL	-	and the second second
Refer to specific application instructions	tound directly below the heading A	gricultural Use Directions.
Crops (including but not limited to)		
Beans	Guar	Pigeon peas
Broad beans	Lentils	Snow peas
Calabaza	Peas	Soybéans
Chickpeas	Peanuts	Tomatillos
Eggplants	Pepinos	Tomatoes
Ground cherries	Peppers	
PESTS		
Aphids	Mites	Sweetpotato whiteflies
Woolly aphids	Rust Mites	Scales
Beetles	Spider Mites	Calico scales
Bean leaf beetles	<sup>'</sup> Psyllids	Frosted scales
Colorado Potato Beetles	Whiteflies	Lecanium scales
Mexican bean beetles	Greenhouse whiteflies	San Jose scales
Leafminers	Silverleaf whiteflies	
DISEASES		
Blights	Powdery mildew	Leaf spots
Leaf blight	Molds	Rusts
Mildews	Gray mold	
ROOT AND TUBER VEGETABLES		
Refer to specific application instructions	found directly below the heading A	pricultural Use Directions
Crops (including but not limited to)	Touris an odly below the neutring 14	- Indicate of the second of th
Artichokes	Porchine	Yams
Artichokes Beets	Parsnips Potatoes	Yam beans
		ram beans
Cardone	Sweet potatoes	
Carrots	Radishes	
Cassava	Rutabaga	
Ginger	Taro (Dasheen)	
Ginseng	Turmeric	
Horseradish	Turnips	
DEGTO		
PESTS	D. P.	Oslavada Datat Daniia
Aphids	Beetles	Colorado Potato Beetles

Mites Rust Mites Spider Mites Psyllids Scales Calico scales Frosted scales Lecanium scales San Jose scales Whiteflies Greenhouse whiteflies Silverleaf whiteflies Sweetpotato whiteflies

**DISEASES** 

Blights Mildews Powdery mildew Rusts

**SMALL FRUITS AND BERRIES** 

Refer to specific application instructions found directly below the heading Agricultural Use Directions.

Crops (including but not limited to)

Blueberries Boysenberries Cranberries Currants Dewberries Blackberries
Elderberries
Gooseberries
Grapes
Huckleberries
Loganberries

Olallie berries Raspberries (black & red) Strawberries Youngberries

**PESTS** 

Aphids Woolly aphids Leafrollers Mites Rust Mites Spider Mites Scales Calico scales Frosted scales Lecanium scales San Jose scales

**DISEASES** 

Mildews Downy mildew Powdery mildew Rots Black rot

**HERBS AND SPICES** 

Refer to specific application instructions found directly below the heading Agricultural Use Directions.

Crops (including but not limited to)

Anise
Balm
Basil
Borage
Camomile
Caraway
Catnip
Celery
Chives
Coriander

Cumin
Curry leaf
Dandelion
Dill
Fennel
Marigold
Marjoram
Mint
Nasturtium
Pennyroyal
Peppermint

Rue Sage Savory Spearmint Sweet bay Tarragon Thyme Wintergreen

Rosemary

**PESTS** 

Aphids Woolly aphids Mites Rust Mites Spider Mites Scales Calico scales Frosted scales

Lecanium scales San Jose scales

**DISEASES** 

Mildews

Powdery mildew

Leaf spot

#### VEGETABLE, CEREAL GRAINS AND OTHER MISCELLANEOUS CROPS

#### **FUNGICIDE USE**

Apply Neem Oil 70% at a rate of 0.5%-1.0% in 25-100 gallons of water per acre or 2 pints Neem Oil 70% in a minimum of 5 gallons of water per acre for low volume applications. Repeat applications every 7-14 days. Apply no more than 2 gallons Neem Oil 70% per acre, per application. Larger plants will require higher amounts of water to obtain good coverage.

#### MITICIDE USE

Apply Neem Oil 70% at a rate of 0.5%-2.0% in 25-100 gallons of water per acre or 2 pints Neem Oil 70% in a minimum of 5 gallons of water per acre for low volume application. Apply no more than 2 gallons Neem Oil 70% per acre in solution per application. Apply in a solution of sufficient volume to achieve complete coverage of foliage. Reapply Neem Oil 70% every 7-21 days as needed for adequate control. Larger plants will require higher amounts of water to obtain good coverage.

Crops (including but not limited to)		
Acerola Alfalfa Araacaga (Apio) Asparagus Barley Breadfruit Buckwheat Canola Coffee Coriander Corn Popcorn	Sweet corn Cotton Hops Jicama Jojoba Kinep Mushrooms Nispero Oats Okra Quenepa Rice	Safflower Seagrapes Sesame Sorghum Soursup (Quanabanas) Star apples Sugarcane Sunflowers Tobacco Wheat
PESTS		
Beetles Asparagus Beetles Lygus bugs	Thrips Whiteflies Greenhouse whiteflies	Silverleaf whiteflies Sweetpotato whiteflies
DISEASES		
Rusts		

#### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Keep in original container. Store in a dry place, away from direct sunlight, feed, or foodstuffs. Keep container tightly sealed when not in use. Do not store below 40°F (4°C).

Agricultural/Commercial Use

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on-site or at an approved waste disposal facility.

Agricultural/Commercial Use

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

#### Homeowner

If empty: Do not reuse this container. Place in trash or offer for recycling if available.

If partly filled: Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

#### WARRANTY

Certis USA, L.L.C. warrants that the material contained herein conforms to the description on the label and is reasonably fit for the purposes referred to in the directions for use. Timing and method of application, weather, watering practices, nature of soil, the insect problem, condition of the crop, incompatibility with other chemicals not specifically recommended, and other influencing factors in the use of this product are beyond the control of

the seller. Buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given herein. NO OTHER EXPRESS OR IMPLIED WARRANTY OF THE FITNESS OR MERCHANTABILITY IS MADE.

Kocide® is a registered trademarks of Griffin L.L.C. Champ® is a registered trademark of Agtrol Chemical Products.

#### **HOMEOWNER USE DIRECTIONS**

#### **GENERAL INFORMATION**

- Do not add adjuvants (spreaders, stickers, extenders, etc.) to Neem Oil 70%.
- Stops powdery mildew in 24 hours

**FUNGICIDE USE:** For use on FRUITS, NUTS, VEGETABLES, HERBS, SPICES, ROSES, HOUSEPLANTS, FLOWERS, TREES, and SHRUBS

#### **APPLICATION INSTRUCTIONS:**

Neem Oil 70% is an effective fungicide for the prevention and control of various fungal diseases including powdery mildew, black spot, downy mildew, anthracnose, rust, leaf spot, botrytis, needle rust, scab and flower, twig, tip blight, and alternaria. As a preventative, apply Neem Oil 70% on a 7 to 14 day schedule until the potential for disease development is no longer present. To control disease already present, apply Neem Oil 70% on a 7 day schedule until disease pressure is eliminated. Then continue spraying on a 14 day schedule to prevent the disease from reoccurring. To prevent rust leaf spot diseases, anthracnose and scab, begin applications at the first sign of spring budding. To prevent powdery mildew, apply in mid-summer or when disease is first detected. Continue applications until disease pressure no longer exists.

#### **MIXING INSTRUCTIONS:**

Mix Neem Oil 70% at the rate of 2 tablespoons (1 fluid ounce) per gallon of water. Thoroughly mix solution and spray all plant surfaces (including undersides of leaves) until completely wet. Frequently mix solution as you spray.

INSECTICIDE/MITICIDE USE: For use on FRUITS, NUTS, VEGETABLES, HERBS, SPICES, ROSES, HOUSEPLANTS, FLOWERS, TREES, and SHRUBS

#### **APPLICATION INSTRUCTIONS:**

Apply Neem Oil 70% at first sign of insects/mites. For control of aphids, spider mites, scale, whiteflies, beetles, leafrollers, and other insect pests. Neem Oil 70% is most effective when applied every 7 to 14 days. For heavy insect populations, spray on a 7 day schedule.

#### **MIXING INSTRUCTIONS:**

Mix Neem Oil 70% at the rate of 2 tablespoons (1 fluid ounce) per gallon of water. Thoroughly mix solution and spray all plant surfaces (including underside of leaves) until completely wet. Frequently mix solution as you spray.

Net Contents: 1 Quart (0.946 liters)

M062904 v3 cln

# NEXT

# LABEL

**United States Environmental Protection Agency** 

o. 2070-0060	Approval expires 2-28-9
	OPP Identifier Number

POVO	<u>d. OMB No. 2070-006</u>	O, Approval expires 2-28-
	Registration	OPP Identifier Number
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	Washi	ington, DC 204	160		✓ Other	Notification			
		Application	on for Pestic	ide - Se	ction I				
1. Company/Product Number 70051-2				A Product Ma yl Reilly	snager /Branch Chi	ef 3, P	Proposed C	lassific	ation
4. Company/Product (Name)			PM#	yl remy	<b>→</b> -₩m	—— <u> </u>	None		Restricted
Trilogy (Neem Oil 70%)			Bioch	nemical Pe	sticides Branch	h			
5. Neme and Address of Appl Certis USA, L.L.C. 9145 Guilford Road, S Columbia, Maryland 2	Suite 175 21046	rde)	(b)(i), i	my product	eveiw. In accort is similar or ide	entical in co	ompositio	n and	
Check if this i	is a new address	<u>.</u>		uct Name					
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Explanation: Use additional Notification to add outdoor ornant 152.46, and no other changes have to willfully make any false statem may be in violation of FIFRA and	nental uses to the sub-lab e been made to the labeli tent to EPA. I further und	bel for Trilogy. The ling or the confidenderstand that if thi	This notification is co ential statement of fo- is notification is not	onsistent with the firmula of this p consistent with	product. I understand the terms of PR No	l that it is a vic	olation of 18	U.S.C.	Sec. 1001
			Section -	[]					
1. Material This Product Will E	3a Packaged In:								
Yes  V No  Certification must	Ves No  If "Yes" Unit Packaging wgt.	No. per container	Water Soluble f Yes No If "Yes" Package wgt	Packaging No. per		Glass Paper	r Specify)		
submitted									
3. Location of Net Contents In	nformation ntainer	4. Size(s) Reta	ail Container 2.5 gallans	5	5. Location of L		ons		
6. Manner in Which Label is A		Lithogra Peper g Stencile	aph	Othe	ir				
			Section - I	V					
1. Contact Point (Complete its	ems directly below fo	or identification	of individual to b	e contacted,	if necessery, to	process this	applicatio	n.)	
Name Christine A. Dively			Title Director of Regul	latory Affair:	s	Telephon 301-483-	e No. (Incl -3806	ude Ar	rea Code)
I certify that the stateme I acknowledge that any both under applicable law	knowlinglly false or r		all attachments th				6. Date A Receiv		
2. Signature Christ	Ine A. D	kiely 3	, Title Director of Regulat	tory Affairs					
4. Typed Name Christine A. Dively		5.	. Date	gunt	5,2004	i			

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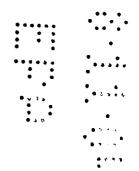
Certis USA 9145 Guilford Road Suite 175 Columbia, MD 21046

(301) 604-7340

FAX (301) 604-7015 www.certisusa.com

August 10, 2004

TAS P



Ms. Linda Hollis
Team Leader
Biochemical Pesticides Branch
Biopesticides & Pollution Prevention Division (7511C)
Office of Pesticide Programs
U.S. Environmental Protection Agency
1921 Jefferson Davis Hwy, Crystal Mall 2
Arlington, VA 22202

RE: Notification of revised sub-label for Trilogy, EPA Reg. No. 70051-2

Dear Ms. Hollis:

Certis USA, L.L.C. is respectfully submitting a Notification to revise the product label for Trilogy, a sub-label sold under the Master Label for Neem Oil 70%, EPA Reg. No. 70051-2. The purpose of this submission is to add outdoor ornamental uses to the label for Trilogy. These uses are already approved on the EPA Master Label and also appear on the Triact 70EC (commercial, ornamental use) sub-label, which is sold under the same EPA Registration Number. Although BPPD does not require the submission of supplemental label changes with language previously approved on the Master label, we are submitting the Trilogy label to update BPPD's files. Also, Trilogy is the product that is actually sold in the U.S. In addition, we have corrected a minor error found in the User Safety Recommendations box on the EPA stamped Master label, and incorporated the correction into the Trilogy label. The following documents are enclosed in support of this action:

- 1) EPA form 8570-1
- 2) Revised label for Trilogy, NOTE: this label includes changes that have been made to the Master Label and submitted to the Agency by Notification.
- 3) Copy of EPA stamped Master Label for Neem Oil 70% and Notification sent July 13, 2004.

4) Revised label for Neem Oil 70% with minor correction to User Safety Recommendations Box, NOTE: this label also includes changes that have been made previously by Notification.

If you have any questions about this submission, please do not hesitate to contact me. I can be reached by telephone at (301)483-3806 or by email at cdively@certisusa.com.

Sincerely,

Christine A. Dively

Director of Regulatory Affairs

Enclosures

#### NOTIFICATION

Date Reviewed: 29 Mar 05

Reviewed By: M. Duggard



### FUNGICIDE/MITICIDE/INSECTICIDE

For use on vegetables, fruits, nuts, melons, outdoor ornamental plants and agronomic crops

For foliar control of fungal disease and insect pests

#### FOR ORGANIC PRODUCTION



This product contains 5.46 lb of clarified hydrophobic extract of neem oil per US gallon.

This container will treat up to 0.5 acres when used at the highest application rate (only for containers less than 5 gallons).

# KEEP OUT OF REACH OF CHILDREN CAUTION

EPA Reg. No. 70051-2 EPA Est. No.70051-CA-001

Composition covered by US Patents 5,298,251; 5,356,629; 5,372,817; 5,405,612; and 5,409,708.

Manufactured by Certis USA, L.L.C. 9145 Guilford Road, Suite 175 Columbia, MD 21046

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through the 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.

#### FIRST AID

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

**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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Hot Line Number: 1-800-255-3924.

**Personal Protective Equipment:** 

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

#### Applicators and other handlers must wear:

Long-sleeved shirt and long pants.

 Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinylchloride (PVC) or Viton.

Shoes plus socks.

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

#### **User Safety Recommendations:**

Users should:

· 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**

This product is hazardous to fish and aquatic invertebrates.

For Terrestrial Uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

#### **BEE HAZARD**

This product is toxic to bees exposed to direct treatment. Do not apply this product while bees are actively visiting the treatment area.

#### PHYSICAL AND 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 through any type of irrigation system.

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 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 4 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

• Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinylchloride (PVC) or Viton.

· Shoes plus socks.

#### NON-AGRICULTURAL 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, nurseries, or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

#### **GENERAL INFORMATION:**

- Thorough coverage is necessary to provide good disease and mite control. Trilogy® prevents fungal attack of
  plant tissue and contact activity to mite pressure on the plant. Avoid excessive runoff of spray material for
  maximum control.
- For best results, maintain constant agitation in spray equipment.
- For optimal performance, do not mix with cold water (less than 45°F).
- Do not apply to wilted or otherwise stressed plants, or to newly transplanted materials or crops prior to root establishment.
- Do not apply to known sensitive plant species, such as impatiens flowers, fuchsia flowers, hibiscus flowers, some rose flowers, ornamental olive trees, or some carnation varieties without prior testing.
- When used in conjunction with beneficial insects, conduct a small trial to assure compatibility before using on a large scale.
- As with other oil-based products, exercise care in timing applications to early morning/late evening to minimize the potential for leaf burn.
- Use with care on plants with tender tissue. Check for leaf burn in small scale trials prior to use.

#### LANDSCAPE AND NURSERY USE INSTRUCTIONS

#### **FUNGICIDE USE**

#### ORNAMENTAL DISEASE CONTROL

Trilogy® is an effective fungicide for the prevention and control of various fungal diseases including black spot on roses, powdery mildew, downy mildew, anthracnose, rust, leaf spot, botrytis, needle rust, scab, flower, twig, and tip blight, and alternaria.

#### Landscape and Nursery Ornamentals

Trilogy® will provide broad spectrum control of many fungal diseases affecting ornamental flowering plants, trees, shrubs, and foliage when used at the rate of 1 gallon per 100 gallons of water. Apply Trilogy at a rate of 1:100 when spraying as a preventative for outdoor applications. Under extreme outdoor conditions, apply Trilogy at the 1:50 application rate (see table for detailed use rates). This will provide the necessary control under the extreme outdoor conditions. When using Trilogy® as a preventative, make application on a 14-day schedule. If disease is present, use a 7-day application schedule to control the disease and prevent further damage from occurring.

#### **MIXING INSTRUCTIONS**

Add Trilogy® to one-half (1/2) full tank under agitation containing water of 45°F or greater before filling to desired level. If water temperature is below 45°F, premix Trilogy® at a 1:1 ratio with tepid water to ensure good emulsification. Then dilute to final volume. When combining with other products, such as wettable powder insecticides or fungicides, add these items first when the tank is approximately 1/3 full. Ensure that there is good agitation while mixing for complete emulsification. Maintain agitation during spray application. Do not use if this oil does not form a uniform, cloudy emulsion.

#### **APPLICATION INSTRUCTIONS**

Apply until plant surface is uniformly wet with minimal runoff at 25-40 psi with hand sprayer or 100-200 psi with power sprayer as a fine spray to both leaf surfaces. Avoid excessive application.

#### MANAGEMENT OF LANDSCAPE AND ORNAMENTAL DISEASES

SPRAY TARGET	CONCENTRATION	SPRAY INTERVAL	PRECAUTIONS
Outdoor Flowering Plants	1:50 - 1:100 (2.0% - 1.0%)	7 - 14 days	Do not spray impatiens flowers
Outdoor Woody Plants	1:50 - 1:100 (2.0% - 1.0%)	14 days	

#### INSECTICIDE/MITICIDE USE

For use to control whiteflies, mealybugs, aphids, leafhoppers, mites and scales on ornamentals, trees, and shrubs in and around commercial nurseries and other commercial structures.

Use Trilogy® at the rate of 1-2 gallons per 100 gallons of water. The low rate (1.0%) can be used when pest pressure is low. Use the high rate (2.0%) for high pest infestations or to control more troublesome pests, such as mites and scales. Determine the best rate for your particular situation.

Make sprays on a 7-14 day interval depending on the severity of the pest problem. Use the 7-day schedule until the pest population is reduced. Then use a 14-day interval for control.

#### **AGRICULTURAL USE DIRECTIONS**

Trilogy® is a broad spectrum fungicide of certain diseases and controls mites in citrus, deciduous fruits and nuts, vegetable crops, cereal grains, and other miscellaneous crops.

- Do not use Trilogy® after bloom on table grapes or following bunch closure on wine grapes. Do not use Trilogy® after pit hardening on stone fruit.
- Use care when applying near streams, ponds, lakes, or other bodies of water. Do not apply Trilogy® when weather conditions favor drift or when the likelihood of runoff is high.
- Apply Trilogy® by conventional, low volume, and aerial application equipment.

#### **APPLICATION INSTRUCTIONS**

Ground Application: Apply Trilogy® by ground application in a minimum of 25 gallons of water / acre.

Chemigation: Do not apply this product through any type of irrigation system.

**Aerial Application:** For those crops where aerial applications are indicated, apply a minimum of 5 gallons of water / acre unless otherwise specified. Avoid application under conditions when uniform coverage cannot be obtained or when excessive drift may occur. Do not apply directly to humans, animals or aquatic animals.

## DILUTION TABLE FOR LOW VOLUME (INCLUDING AERIAL) APPLICATIONS (5-30 gallons per acre)

Gallons of Water	TRILOGY®	DILUTION
5	1 Quart*	5%
10	1 Quart*	2.5%
15	1 Quart*	1.67%
20	1 Quart*	1.25%
25	1 Quart*	1.0%
30	1 Quart*	0.83%

<sup>\*</sup>For citrus, stone fruit, tropical fruit, pome fruit, and nuts, refer to specific application instructions.

## DILUTION TABLE FOR HIGH VOLUME APPLICATION (25-250 gailons per acre)

Gallons	Gallons of	Gallons of	Gallons of	Gallons of
Water	Trilogy®	Trilogy®	Trilogy®	Trilogy®
	for 0.5% Solution	for 1.0% Solution	for 1.5% Solution	for 2.0% Solution
25	Use 1.0% solution *	0.25 (32 fluid oz.)	0.375 (48 fluid oz.)	0.5 (64 fluid oz.)
50	0.25 (32 fluid oz.)	0.5 (64 fluid oz.)	0.75 (96 fluid oz.)	1.0
75	0.375 (48 fluid oz.)	0.75 (96 fluid oz.)	1.125	1.5
100	0.5	1.0	1.5	2.0
125	0.625 (80 fluid oz.)	1.25	1.875	2.5
150	0.75	1.5	2.25	3.0
175	0.875 (112 fluid oz.)	1.75	2.625	3.5
200	1.0	2.0	3.0	4.0
225	1.125	2.25	3.375	4.5
250	1.25	2.5	3.75	5.0
	1			

<sup>\*</sup> For Vegetable, Cereal Grains, and Other Miscellaneous Crops, refer to specific use directions

#### **AGRICULTURAL USE DIRECTIONS (continued)**

- For Diseases: Apply Trilogy® as a 1.0% solution in sufficient amounts of water to achieve complete coverage
  of foliage. (See the following detailed directions per crop groupings). When used as a foliar fungicide, begin
  applications when conditions are favorable for disease but before infection. Apply Trilogy® every 7-14 days
  until threat of disease is over. Use Trilogy® in rotation with other fungicides to increase the spectrum of
  control.
- For Mites: For best results, apply Trilogy® in sufficient amounts of water to achieve complete coverage.
   Trilogy® is most effective when applied before mites or eggs are present in large numbers. (See the following detailed directions per crop groupings). Apply at a rate of 1.0-2.0% Trilogy®. Reapply Trilogy® every 7-21 days until pressure is over.
- For Insects: For best results, apply Trilogy® at 1.0-2.0% in sufficient amounts of water to achieve complete
  coverage. Trilogy® is most effective when applied before insects or eggs are present in large numbers.
  Repeat application based on pest pressure and field scouting for best results. Use the dilution tables to
  calculate dilution rates.

#### MIXING INSTRUCTIONS

Add Trilogy® to one-half (1/2) full tank under agitation containing water of 45°F or greater before filling to desired level. If water temperature is below 45°F, premix Trilogy® at a 1:1 ratio with tepid water to ensure good emulsification. Then dilute to final volume. When combining with other products, such as wettable powder insecticides or fungicides, add these items first when the tank is approximately 1/3 full. Ensure that there is good agitation while mixing for complete emulsification. Maintain agitation during spray application. Do not use if this oil does not form a uniform, cloudy emulsion.

TANK MIXING: Trilogy® has been found to be compatible with most commonly used fungicides, insecticides and fertilizers. Check physical compatibility first with other products before mixing by using a jar test. Using a quart jar, add the proportionate amounts of the products to 1 quart of water. After thoroughly mixing, let mixture stand for at least 5 minutes. Growers must tank mix combinations for phytotoxicity on a sample of plants prior to use. Due to the wide variation in climatic conditions, cultural practices, and other factors, the User assumes full responsibility for any crop damage or other liability resulting from the use of Trilogy® in a tank mix combination. Avoid tank mixes with Morestan, Captan, Sulfur, Bravo/Echo, chlorothalonil or other chemically similar products as unpredictable results or leaf burn may occur.

#### **CITRUS**

Use Trilogy® on citrus to control diseases to include Anthracnose, Post-Bloom Fruit Drop, and Scab. Apply as a foliar application at the rate of 1.0% in 25-200 gallons of water for high volume applications or a minimum of 0.5 gallons Trilogy® in a minimum of 5 gallons of water per acre for low volume applications. Do not apply more than 2.5 gallons of Trilogy® per acre, per application.

Reapply Trilogy® every 7-14 days until threat of disease is over.

For control of Alternaria and Greasy Spot, apply Trilogy® at a 1.0% solution in 25-125 gallons of water per acre in combination with Copper @ 2.0 lbs a.i. per acre (as found in EPA registered products such as Kocide® and Champ®) as a preventative disease spray tank mixture.

Use Trilogy® on citrus to control mites at a rate of 1.0-2.0% in 25-200 gallons of water for high volume application or 0.5 gallon Trilogy® in a minimum of 5 gallons of water per acre for low volume application. As a dormant oil spray, use Trilogy® as a 2% solution or 1 quart Trilogy® minimum per acre. Do not apply more than 5 gallons of Trilogy® per acre, per application.

#### STONE AND TROPICAL FRUITS

**FUNGICIDE USE:** Apply Trilogy® at a rate of 1.0% in 25-200 gallons of water for high volume applications or 0.5 gallons Trilogy® in a minimum of 5 gallons of water per acre for low volume application. Reapply Trilogy® every 7-14 days until threat of disease is over.

MITICIDE USE: Use Trilogy® at first sign of pests or pest damage at the appropriate rate listed below as a foliar spray in sufficient water for thorough coverage. Repeat applications as needed for adequate control every 7-21 days. Apply a 1.0-2.0% solution of Trilogy® for high volume application or a minimum of 1 quart Trilogy® in a minimum of 5 gallons of water per acre for low volume application. Do not apply more than 5 gallons of Trilogy® per acre, per application.

Do not use Trilogy® after pit hardening on stone fruit.

### VEGETABLE, CEREAL GRAINS AND OTHER MISCELLANEOUS CROPS FUNGICIDE USE

Apply Trilogy® at a rate of 0.5%-1.0% in 25-100 gallons of water per acre or 2 pints Trilogy® in a minimum of 5 gallons of water per acre for low volume applications. Repeat applications every 7-14 days. Apply no more than 2 gallons Trilogy® per acre, per application. Larger plants will require higher amounts of water to obtain good coverage.

#### MITICIDE USE

Apply Trilogy® at a rate of 0.5%-2.0% in 25-100 gallons of water per acre or 2 pints Trilogy® in a minimum of 5 gallons of water per acre for low volume application. Apply no more than 2 gallons Trilogy® per acre in solution per application. Apply in a solution of sufficient volume to achieve complete coverage of foliage. Reapply Trilogy® every 7-21 days as needed for adequate control. Larger plants will require higher amounts of water to obtain good coverage.

#### POME (DECIDUOUS FRUITS) AND NUTS

**FUNGICIDE USE:** Apply Trilogy® at a rate of 1.0% in 25-100 gallons of water per acre or 0.5 quarts Trilogy® in a minimum of 5 gallons of water per acre for low volume application. Apply no more than 2.5 gallons of Trilogy® per acre in solution per application. Repeat applications every 7-14 days.

MITICIDE USE: Use Trilogy® at a rate of 1.0-2.0% in 25-100 gallons of water per acre or 0.5 quarts Trilogy® in a minimum of 5 gallons of water per acre for low volume application. Apply no more than 2 gallons of Trilogy® per acre per solution. Apply at first sign of pests or pest damage. Repeat application as needed for adequate control every 7-21 days. Do not apply more than 5 gallons Trilogy® per acre, per application.

Walnuts: Avoid spraying after husk split.

#### CITRUS, POME, STONE, AND TROPICAL FRUITS

Crops (including but not limited to)		<del></del>
Apples	Grapefruits	Peaches
Apricots	Guavas	Pears
Avocados	Jujubes	Oriental pears
Bananas	Kiwifruit	Pineapples
Calamondin	Kumquats	Plantains
Cherries	Lemons	Plums
Barbados cherries	Limes	Pomegranates
Sour cherries	Loquats	Prunes
Sweet cherries	Lychee	Pummeios
Cherimoya	Mangoes	Quinces
Citrus citron	Mandarins	Tangelos
Citrus hybrids	Satsuma mandarins	Tangerines
Coconuts	Nectarines	33
Crabapples	Olives	
Dates	Oranges	
Feijoa	Papayas	
Figs	Passion fruit	

#### **CUCURBITS**

Refer to specific application instructions found directly below the heading Agricultural Use Directions.

Crops	(including	but not limited	to)

Balsam pears (bitter melons) **Gherkins** Pumpkins Cantaloupes Gourds Squashes Casaba Honey balls Watermelons (incl. hybrids) Chinese waxgourds Meions (incl. hybrids) Zucchini Citron melons Honeydew melons Crenshaw Muskmelons Cucumbers Persian melons

#### **SMALL FRUITS AND BERRIES**

Refer to specific application instructions found directly below the heading Agricultural Use Directions.

#### Crops (including but not limited to)

Blackberries
Blueberries
Boysenberries
Cranberries
Currants
Dewberries
Blueberries
Elderberries
Gooseberries
Grapes
Grapes
Huckleberries
Loganberries
Currants
Dewberries
Currants
Loganberries
Collie berries
Raspberries
Raspberries
Ptrawberries
Noungberries

#### NUTS

Crops (including but not limited to)

Almonds Chestnuts Macadamia nuts
Beech nuts Chinquapins Pecans
Brazil nuts Filberts Pistachios
Butternuts Hickory nuts Walnuts
Cashews Japanese horse chestnuts

#### **BULB, COLE AND LEAFY VEGETABLES**

Refer to specific application instructions found directly below the heading Agricultural Use Directions.

Crops (	(including	but not limited	l to)

Arugula
Broccoli
Broccoli raab
Chinese broccoli (Gai lon)
Brussels sprouts
Cabbage (head &leaf)
Chinese cabbage (Bok choy, Napa)
Chinese mustard cabbage (Gai choy)
Cauliflower
Celery
Celery
Cettuce
Chervil
Chicory
Red chicory

Corn salad
Cress
Watercress
Daikon
Endive
Fennel
Garlic
Greens
Collard greens
Mustard greens
Rape greens
Kale
Kohlrabi

Leek

Lettuce (head & leaf)

Low-bok

Onions
Orach
Parsley
Purslane
Raddichio
Rappini
Rhubarb
Shallots
Spinach
Chinese Spinach
(Amaranth, Tampala)
Swiss chard
Turnip tops

#### **LEGUME AND FRUITING VEGETABLES**

Cilantro

Collards

Refer to specific application instructions found directly below the heading Agricultural Use Directions.

#### Crops (including but not limited to)

Beans
Broad beans
Calabaza
Chickpeas
Eggplants
Ground cherries

Guar Lentils Peas Peanuts Pepinos Peppers Pigeon peas Snow peas Soybeans Tomatillos Tomatoes

#### **ROOT AND TUBER VEGETABLES**

Refer to specific application instructions found directly below the heading Agricultural Use Directions.

#### Crops (including but not limited to)

Artichokes
Beets
Cardone
Carrots
Cassava
Ginger
Ginseng

Horseradish
Parsnips
Potatoes
Sweet potatoes
Radishes
Rutabaga
Taro (Dasheen)

Turmeric Turnips Yams Yam beans

#### **HERBS AND SPICES**

Refer to specific application instructions found directly below the heading Agricultural Use Directions.

#### Crops (including but not limited to)

Anise
Balm
Basil
Borage
Camomile
Caraway
Catnip
Celery
Chives
Coriander

Cumin
Curry leaf
Dandelion
Dill
Fennel
Marigold
Marjoram
Mint
Nasturtium
Pennyroyal
Peppermint

Rosemary
Rue
Sage
Savory
Spearmint
Sweet bay
Tarragon
Thyme
Wintergreen

#### **VEGETABLE, CEREAL GRAINS AND OTHER MISCELLANEOUS CROPS**

Açerola	Sweet com	Safflower
Alfalfa	Cotton	Seagrapes
Araacaga (Apio)	Hops	Sešame
Asparagus '	Jicama -	Sorghum
Barley	Joioba	Soursup (Quanabanas)
Breadfruit	Kínep	Star apples
Buckwheat	Mushrooms	Sugarcane
Canola	Nispero	Sunflowers
Coffee	Oats	Tobacço
Coriander	Okra	Wheat
Corn	Quenepa	***************************************
Popcorn	Rice	

Pest Control	Suppression	Diseases		
Aphids Mealybugs Mites Rust mites Spider mites Scales (Soft scale)	Whiteflies Thrips	Alternaria Anthracnose Early blight Leaf blight Botrytis Greasy spot Leaf Spot Downy mildew	Powdery mildew Molds Scabs Rusts Shothole	
		Post-bloom fru	it drop	

#### STORAGE AND DISPOSAL

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

Pesticide Storage: Keep in original container. Store in a dry place, away from direct sunlight, feed, or foodstuffs.

Keep container tightly sealed when not in use. Do not store below 40°F (4°C).

Pesticide Disposal: Wastes resulting from the use of this product must 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 by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### WARRANTY

Certis USA, L.L.C. warrants that the material contained herein conforms to the description on the label and is reasonably fit for the purposes referred to in the directions for use. Timing and method of application, weather, watering practices, nature of soil, the insect problem, condition of the crop, incompatibility with other chemicals not specifically recommended, and other influencing factors in the use of this product are beyond the control of the seller. Buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given herein. NO OTHER EXPRESS OR IMPLIED WARRANTY OF THE FITNESS OR MERCHANTABILITY IS MADE.

Kocide® is a registered trademark of Griffin L.L.C.

Champ® is a registered trademark of Agtrol Chemical Products

M052405 V5 M080404

# NEXT

# LABEL

=	10051-2.	3
	read instructions on reverse before completing	form.

3-29-2005

Form Approved.	OMP No	2070.0080	Annrovel eve	/// <i>()</i>
Form Approved.	OMB No.	<u> 2070-0060.</u>	Approve exp	<u> </u>

9	EF	PA
~		

Registration
Amendment
0.45

OPP Identifier Number

<b>EPA</b> Environmental	Protection A	gency	Amend V Other	iment	
	Application fo	r Pesticide - Sec	ction I		
1. Company/Product Number 70051-2	<del></del>	2. EPA Product Ma Sheryl Reilly	nager /Branch Chie	f 3, P	roposed Classification
4. Company/Product (Name) Neem Oil 70%		PM# Biochemical Pe	sticides Branch		Note
5. Name and Address of Applicant <i>(Include ZIP Co</i> Certis USA, L.L.C. 9145 Guilford Road, Suite 175 Columbia, Maryland 21046 Check if this is a new address	de)	•	is similar or idea	ntical in co	FIFRA Section 3(c)(3) emposition and labeling
	S	ection - II			
Amendment - Explain below.  Resubmission in response to Agency letter  Notification - Explain below.		Agency le "Me Too"  Other - Ex		NOTIF Payrow	ed: 29 Maros
Explanation: Use additional page(s) if necessary Notification of minor changes to the label. Certis USA has identified this action as a Notification, not This notification is consistent with the provisions of PR Notification is accomplete that if this notification is not consistent with the terms of Provisions and penalties under sections 12 and 14 of FIFRA.	subject to fees under Potice 98-10 and EPA reand that it is a violation	RIA. gulations at 40 CFR 152.46, i of 18 U.S.C. Sec. 1001 to v	and no other changes villfully make any fal	s have been m se statement i	to EPA. I further understand
	Se	ection - III			
1. Material This Product Will Be Packaged In:		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	·	
Child-Resistant Packaging  Yes  No  Certification must  See Submitted  Unit Packaging  Unit Packaging  Unit Packaging  Unit Packaging wgt.	No. per If "	ter Soluble Packaging Yes No Yes* No. per kage wgt contains		Metal Plastic Glass Paper Other (5	
3. Location of Net Contents Information	4. Size(s) Retail Cor		5. Location of Le		ons
6. Manner in Which Label is Affixed to Product	2.5 gallons, 10 Lithograph Paper glued Stenciled	0 gallons, 20 fl. oz.	on con	tainer	
<del></del>	<del></del>	ction - IV			وجهيدة والمدالودية وراداست المحادث ومسروب والمساوا
Contact Point (Complete items directly below for			if necessary, to p	rocess this	application.)
Name Christine A. Dively	Title Direct	tor of Regulatory Affair	s	Telephon 301-483-	e No - (Include Area Code) 3806
I certify that the statements I have made on a acknowledge that any knowlingly false or reboth under applicable law.					6. Cuts Application Received .(Stamped)
2. Signature Christine A. Dively.	3. Title	or of Regulatory Affairs		<b>.</b>	•
4. Typed Name Christine A. Dively	5. Date	October 181	2004		



# **CERTIS**

Certis USA 9145 Guilford Road Suite 175 Columbia, MD 21046

(301) 604-7340

FAX (301) 604 7015 www.certisusa.com

October 20, 2004

Ms. Linda Hollis
Team Leader
Biochemical Pesticides Branch
Biopesticides & Pollution Prevention Division (7511C)
Office of Pesticide Programs
U.S. Environmental Protection Agency
1921 Jefferson Davis Hwy, Crystal Mall 2
Arlington, VA 22202

RE: Notification of revised Master label for Neem Oil 70%, EPA Reg. No. 70051-2 Not subject to Pesticide Registration Improvement Act (PRIA) fees

Dear Ms. Hollis:

Certis USA, L.L.C. is respectfully submitting a Notification of minor revisions to the label for Neem Oil 70%, EPA Reg. No. 70051-2. The following information is submitted to support this Notification:

- Completed EPA Form 8570-1
- Two (2) revised labels (including one with highlighted changes). NOTE: The enclosed label also includes changes that have been previously submitted to the Agency by Notification.

#### Labeling revisions include the following:

- Added the phrase "Can be used up to day of harvest" to be consistent with other approved labeling for products containing neem oil as the active ingredient (Trilogy XL, EPA Reg. No. 70051-75 and Trilogy XL RTU, EPA Reg. No. 70051-74) and to clarify for the user that there is no preharvest interval (PHI) requirement.
- Added the language "For Organic Gardening" to be used on the homeowner sub label. This product was approved for NOP compliance, per PR Notice 2003-1 on February 6, 2004 and the additional language is more appropriate for homeowner use.
- Corrected a typo under the PPE requirements.
- Removed first bullet in User Safety Recommendations box. The Precamionary Statements on the label (per the 3<sup>rd</sup> Edition of the Label Review Manual) now include this language, therefore, it is redundant and has been removed from the User Safety Recommendations.

2/16

- Removed non-Agricultural Use Requirements box. It is our understanding that this language applies only to non-WPS uses on the label (occupational uses) and since the homeowner uses are not within the scope of WPS, the non-Agricultural Use Box is not required on the Master Label.
- Removed 2<sup>nd</sup> bullet in Agricultural Use Directions "Do not apply this product through any type of irrigation system" as the statement also appears under "Chemigation".
- Added the heading "Pesticide and Container Disposal" to the homeowner disposal statements, per PR Notice 2001-6 and the Label Review Manual.
- Corrected a minor typo in the Homeowner Use Directions.
- Updated alternate brand names on the top of the first page of the label. Please note that the presence of this language on the label requires Certis to submit a label Notification anytime an alternate brand name is added or deleted. It is our understanding that this language is not required, therefore, we would like to remove it from the label. However, we would like confirmation from the Agency that it can be removed at the next label update.

If you have any questions about this submission, please do not hesitate to contact me. I can be reached by telephone at (301)483-3806 or by email at cdively@certisusa.com.

Sincerely.

Christine A. Dively - Christine A. Dively

Director of Regulatory Affairs

Enclosures

Date Reviewed: 29 Mar 05

Reviewed By: M Tryggam

#### MASTER LABEL

This master label bears directions for agricultural, commercial and homeowner use with various application rates specific to the associated container size.

The following Alternate Brand Names have been submitted to the Agency under this Master Label: Trilogy, Triact 70EC, Trilogy PHC, Ferti-lome Rose, Flower & Vegetable Spray, Ferti-lome Triple Action Plus, Garden Safe Fungicide 3 Concentrate, UltraStop Fruit Tree 3-in-3 Concentrate, Concern from the Earth For the Earth Garden Defense Multi-Purpose Spray Concentrate

# Neem Oil 70%

Fungicide/Miticide/Insecticide

**✓ FOR ORGANIC PRODUCTION**



FOR ORGANIC GARDENING

For Indoor/Outdoor Use on Ornamental Flowering Plants, Trees, Shrubs, Foliage, Vegetables, Fruits, Nuts, Agronomic Crops and Melons, and Row Crops Grown on Commercial Farms and Nurseries, Greenhouses, Landscapes and Homes and Residential Landscapes

Controls Fungal Diseases Including Black Spot, Mildews, Rusts, and Scab Kills Mites and Insects Including Whiteflies, Aphids, and Scales For Foliar Control of Fungal Diseases and Insect Pests

Can be Used Up to Day of Harvest

#### **ACTIVE INGREDIENT:**

Clarified Hydrophobic Extract of Neem Oil	70%
OTHER INGREDIENTS	
TOTAL	100%

This product contains 5.46 lb of clarified hydrophobic extract of neem oil per US gallon. This container will treat up to 0.5 acres when used at the highest application rate (only for containers less than 5 gallons).

# CAUTION

Net Contents: 2.5 gatlons, 100 gallons

Lot No.:

EPA Reg. No. 70051-2 EPA Est. No. 70051-CA-001

Composition covered by US Patents 5,298,251; 5,356,629; 5,372,817; 5,405,612; and 5,409,708.

Manufactured by Certis USA, L.L.C. 9145 Guilford Road, Suite 175 Columbia, MD 21046

**CERTIS** 

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through the 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.

#### **FIRST AID**

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

**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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Hot Line Number: 1-800-255-3924.

#### **Personal Protective Equipment:**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl
  - chloride (PVC) or Viton.
- Shoes plus socks.

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

#### **User Safety Recommendations:**

Users should:

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

#### **ENVIRONMENTAL HAZARDS**

#### Agricultural/Commercial Use

This product is hazardous to fish and aquatic invertebrates.

For Terrestrial Uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

#### Homeowner Use

Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters or rinsate.

#### **BEE HAZARD**

This product is toxic to bees exposed to direct treatment. Do not apply this product while bees are actively visiting the treatment area.

#### PHYSICAL AND 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 through any type of irrigation system.

#### General Information:

- · Kills eggs, larvae, and adult insects.
- Prevents and controls black spot on roses, anthracnose, rust and powdery mildew.
- Kills insects and their eggs.
- Formulated for interiorscape use.
- · Shake well before using.
- For best results, maintain constant agitation in spray equipment.
- For optimal performance, do not mix with cold water (less than 45°F).
- Use spray solutions within several hours of preparation for maximum effectiveness. Do not store diluted solution for later use.
- Do not apply to wilted or otherwise stressed plants, or to newly transplanted materials or crops prior to root establishment.
- Do not apply to known sensitive plant species, such as impatiens flowers, fuchsia flowers, hibiscus flowers, some rose flowers, ornamental olive trees, or some carnation varieties without prior testing.
- When used in conjunction with beneficial insects, conduct a small trial to assure compatibility before using on a large scale.
- As with other oil-based products, exercise care in timing applications to early morning/late evening to minimize the potential for leaf burn.
- Use with care on plants with tender tissue. Check for leaf burn in small scale trials prior to use.
- Thorough coverage is necessary to provide good disease and mite control. Neem Oil 70% prevents fungal attack of plant tissue and contact activity to mite pressure on the plant. Avoid excessive runoff of spray material for maximum control.

#### Agricultural/Commercial Use

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 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 4 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
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl
  - chloride (PVC) or Viton.
- Shoes plus socks.

**TANK MIXING:** Neem Oil 70% has been found to be compatible with most commonly used fungicides insecticides and fertilizers. Check physical compatibility first with other products before mixing by using a jar test. Using a quart jar, add the proportionate amounts of the products to 1 quart of water. After thoroughly mixing, let mixture stand for at least 5 minutes. Growers must tank mix combinations for phytotoxicity on a sample of plants prior to use. Due to the wide variation in climatic conditions, cultural practices, and other factors, the User assumes full responsibility for any crop damage or other liability resulting from the use of Neem Oil 70% in a tank mix combination. Avoid tank mixes with Morestan, Captan, Sulfur, Bravo/Echo, chlorothalonil or other chemically similar products as unpredictable results or leaf burn may occur.

#### **COMMERCIAL USE**

• Do not use Triact 70EC on food crops. (NOTE TO REVIEWER: Triact 70EC is not labeled for use on food crops)

#### GREENHOUSE, LANDSCAPE, AND NURSERY USE INSTRUCTIONS

#### **FUNGICIDE USE**

#### **ORNAMENTAL DISEASE CONTROL**

Neem Oil 70% is an effective fungicide for the prevention and control of various fungal diseases including black spot on roses, powdery mildew, downy mildew, anthracnose, rust, leaf spot, botrytis, needle rust, scab, flower, twig, and tip blight, and alternaria.

#### Landscape, Greenhouse and Nursery Ornamentals

Neem Oil 70% will provide broad spectrum control of many fungal diseases affecting ornamental flowering plants, trees, shrubs, and foliage when used at the rate of 1 gallon per 100-200 gallons of water, depending on the level of disease pressure. Use the lower rate (1:200) when spraying as a preventative in a greenhouse while the higher rate (1:100) is needed for outdoor applications. Determine the best rate for your particular situation.

#### Greenhouse

When Neem Oil 70% is used as a preventative, the lower rate (1:200) will provide adequate control for most greenhouse situations. If disease pressure is evident, use the higher rate (1:100). Make applications for disease prevention on a 7-14 day schedule depending on the anticipated severity of the disease pressure. To control existing disease, apply Neem Oil 70% on a 7-Day schedule until the disease pressure is eliminated. Use a 14-Day schedule to prevent disease pressure from returning. NOTE: Spray greenhouse roses only in a rotation program, which includes Neem Oil 70% once every 4 weeks.

#### Landscape Ornamentals

In outdoor landscape applications, apply Neem Oil 70% at rates of 1:50 - 1:100 rate (see table for detailed use rates). This will provide the necessary control under the extreme outdoor conditions. When using Neem Oil 70% as a preventative, make application on a 14-day schedule. If disease is present, use a 7-day application schedule to control the disease and prevent further damage from occurring.

#### MIXING INSTRUCTIONS

Add Neem Oil 70% to one-half (1/2) full tank under agitation containing water of 45°F or greater before filling to desired level. If water temperature is below 45°F, premix Neem Oil 70% at a 1:1 ratio with tepid water to ensure good emulsification. Then dilute to final volume. When combining with other products, such as wettable powder insecticides or fungicides, add these items first when the tank is approximately 1/3 full. Ensure that there is good agitation while mixing for complete emulsification. Maintain agitation during spray application. Do not use if this oil does not form a uniform, cloudy emulsion.

#### **APPLICATION INSTRUCTIONS**

Apply until plant surface is uniformly wet with minimal runoff at 25-40 psi with hand sprayer or 100-200 psi with power sprayer as a fine spray to both leaf surfaces. Avoid excessive application.

#### MANAGEMENT OF LANDSCAPE AND ORNAMENTAL DISEASES

SPRAY TARGET	CONCENTRATION	SPRAY INTERVAL	PRECAUTIONS
Potted Plants (Greenhouse)	1:100 - 1:200 (1.0% - 0.5%)	14 days	Trial first on open blooms
Flowering Bench Crops (Greenhouse)	1:100 - 1:200 (1.0% - 0.5%)	7 - 14 days	Trial first on open blooms - not suggested for cut roses
Outdoor Flowering Plants	1:50 - 1:100 (2.0% - 1.0%)	7 - 14 days	Do not spray impatiens flowers
Outdoor Woody Plants	1:50 - 1:100 (2.0% - 1.0%)	14 days	

#### MANAGEMENT OF TURF DISEASES

SPRAY TARGET	CONCENTRATION	SPRAY INTERVAL	PRECAUTIONS	
Snow Mold	1:100 - 1:50 (1.0% - 2.0%)	14 days	In fall before first snow	
Dollar Spot	1:100 - 1:200 (1.0% - 0.5%)	7 - 14 days	At first sign of disease	
Brown Patch	1:100 - 1:200 (1.0% - 0.5%)	7 - 14 days	At first sign of disease	

#### INSECTICIDE/MITICIDE USE

For use to control whiteflies, mealybugs, aphids, leafhoppers, mites and scales on ornamentals, trees, and shrubs in and around greenhouses, commercial nurseries and other commercial structures.

Use Neem Oil 70% at the rate of 1-2 gallons per 100 gallons of water. The low rate (1.0%) can be used when pest pressure is low. Use the high rate (2.0%) for high pest infestations or to control more troublesome pests, such as mites and scales. Determine the best rate for your particular situation.

Make sprays on a 7-14 day interval depending on the severity of the pest problem. Use the 7-day schedule until the pest population is reduced. Then use a 14-day interval for control.

#### **AGRICULTURAL USE DIRECTIONS**

- Neem Oil 70% is a broad spectrum fungicide of certain diseases and controls mites in citrus, deciduous fruits and nuts, vegetable crops, cereal grains, and other miscellaneous crops.
- Do not use Neem Oil 70% after bloom on table grapes or following bunch closure on wine grapes. Do not use Neem Oil 70% after pit hardening on stone fruit.
- Use care when applying near streams, ponds, lakes, or other bodies of water. Do not apply Neem Oi! 70% when weather conditions favor drift or when the likelihood of runoff is high.
- Thorough plant coverage is essential to obtain optimal levels of control.
- For insects and mites: For best results, apply Neem Oil 70% thoroughly before adult insects, mites, or eggs
  are present in large numbers.
- For Diseases: Apply Neem Oil 70% as a 1.0% solution in sufficient amounts of water to achieve complete coverage of foliage. (See the following detailed directions per crop groupings). When used as a foliar fungicide, begin applications when conditions are favorable for disease but before infection. Apply Neom Oil

70% every 7-14 days until threat of disease is over. Use Neem Oil 70% in rotation with other fungicides to increase the spectrum of control.

- For Mites: For best results, apply Neem Oil 70% in sufficient amounts of water to achieve complete coverage. Neem Oil 70% is most effective when applied before mites or eggs are present in large numbers. (See the following detailed directions per crop groupings). Apply at a rate of 1.0-2.0% Neem Oil 70%. Reapply Neem Oil 70% every 7-21 days until pressure is over.
- For Insects: For best results, apply Neem Oil 70% at 1.0-2.0% in sufficient amounts of water to achieve complete coverage. Neem Oil 70% is most effective when applied before insects or eggs are present in large numbers. Repeat application based on pest pressure and field scouting for best results. Use the dilution tables to calculate dilution rates.
- Consult local agricultural extension service or experiment station for detailed information on timing of applications for the most effective control for your area.
- Apply Neem Oil 70% by conventional, low volume, and aerial application equipment.

#### **APPLICATION INSTRUCTIONS**

Ground Application: Apply Neem Oil 70% by ground application in a minimum of 25 gallons of water / acre.

Chemigation: Do not apply this product through any type of irrigation system.

**Aerial Application:** For those crops where aerial applications are indicated, apply a minimum of 5 gallons of water / acre unless otherwise specified. Avoid application under conditions when uniform coverage cannot be obtained or when excessive drift may occur. Do not apply directly to humans, animals or aquatic animals.

#### MIXING INSTRUCTIONS

Add Neem Oil 70% to one-half (1/2) full tank under agitation containing water of 45°F or greater before filling to desired level. If water temperature is below 45°F, premix Neem Oil 70% at a 1:1 ratio with tepid water to ensure good emulsification. Then dilute to final volume. When combining with other products, such as wettable powder insecticides or fungicides, add these items first when the tank is approximately 1/3 full. Ensure that there is good agitation while mixing for complete emulsification. Maintain agitation during spray application. Do not use if this oil does not form a uniform, cloudy emulsion.

## DILUTION TABLE FOR LOW VOLUME (INCLUDING AERIAL) APPLICATIONS (5-30 gallons per acre)

Gallons of Water	NEEM OIL 70%	DILUTION
5	1 Quart*	5%
10	1 Quart*	2.5%
15	1 Quart*	1.67%
20	1 Quart*	1.25%
25	1 Quart*	1.0%
30	1 Quart*	0.83%

\*For citrus, stone fruit, tropical fruit, pome fruit, and nuts, refer to specific application instructions.

#### DILUTION TABLE FOR HIGH VOLUME APPLICATION

(25-250 gallons per acre)

Gallons	Gallons of	Gallons of	Gallons of	Gallons of
Water	Neem Oil 70%	Neem Oil 70%	Neem Oil 70%	Neem Oil 70%
	for 0.5% Solution	for 1.0% Solution	for 1.5% Solution	for 2.0% Solution
25	Use 1.0% solution *	0.25 (32 fluid oz.)	0.375 (48 fluid oz.)	0.5 (64 fluid oz.)
50	0.25 (32 fluid oz.)	0.5 (64 fluid oz.)	0.75 (96 fluid oz.)	1.0
75	0.375 (48 fluid oz.)	0.75 (96 fluid oz.)	1.125	1.5
100	0.5	1.0	1.5	2.0
125	0.625 (80 fluid oz.)	1.25	1.875	2.5
150	0.75	1.5	2.25	3.0
175	0.875 (112 fluid oz.)	1.75	2.625	3.5
200	1.0	2.0	3.0	4.0
225	1.125	2.25	3.375	4.5
250	1.25	2.5	3.75	5.0

<sup>\*</sup> For Vegetable, Cereal Grains, and Other Miscellaneous Crops, refer to specific use directions

#### CITRUS, POME (DECIDUOUS), STONE, TROPICAL FRUITS AND NUTS

#### Citrus

Use Neem Oil 70% on citrus to control diseases to include Anthracnose, Post-Bloom Fruit Drop, and Scab. Apply as a foliar application at the rate of 1.0% in 25-200 gallons of water for high volume applications or a minimum of 0.5 gallons Neem Oil 70% in a minimum of 5 gallons of water per acre for low volume applications. Do not apply more than 2.5 gallons of Neem Oil 70% per acre, per application. Reapply Neem Oil 70% every 7-14 days until threat of disease is over.

For control of Alternaria and Greasy Spot, apply Neem Oil 70% at a 1.0% solution in 25-125 gallons of water per acre in combination with Copper @ 2.0 lbs a.i. per acre (as found in EPA registered products such as Kocide® and Champ®) as a preventative disease spray tank mixture.

Use Neem Oil 70% on citrus to control mites at a rate of 1.0-2.0% in 25-200 gallons of water for high volume application or 0.5 gallon Neem Oil 70% in a minimum of 5 gallons of water per acre for low volume application. As a dormant oil spray, use Neem Oil 70% as a 2% solution or 1 quart Neem Oil 70% minimum per acre. Do not apply more than 5 gallons of Neem Oil 70% per acre, per application.

Stone and Tropical

FUNGICIDE USE: Apply Neem Oil 70% at a rate of 1.0% in 25-200 gallons of water for high volume applications or 0.5 gallons Neem Oil 70% in a minimum of 5 gallons of water per acre for low volume application. Reapply Neem Oil 70% every 7-14 days until threat of disease is over.

MITICIDE USE: Use Neem Oil 70% at first sign of pests or pest damage at the appropriate rate listed below as a foliar spray in sufficient water for thorough coverage. Repeat applications as needed for adaquate control every 7-21 days. Apply a 1.0-2.0% solution of Neem Oil 70% for high volume application or a minimum of 1 quart Neem Oil 70% in a minimum of 5 gallons of water per acre for low volume application. Do not apply more than 5 gallons of Neem Oil 70% per acre, per application.

Do not use Neem Oil 70% after pit hardening on stone fruit.

Pome (Deciduous Fruits) and Nuts

**FUNGICIDE USE:** Apply Neem Oil 70% at a rate of 1.0% in 25-100 gallons of water per acre or 0.5 quarts Neem Oil 70% in a minimum of 5 gallons of water per acre for low volume application. Apply no more than 2.5 gallons Neem Oil 70% per acre in solution per application. Repeat applications every 7-14 days.

MITICIDE USE: Use Neem Oil 70% at a rate of 1.0-2.0% in 25-100 gallons of water per acre or 0.5 quarts Neem Oil 70% in a minimum of 5 gallons of water per acre for low volume application. Apply no more than 2 gallons of Neem Oil 70% per acre per solution. Apply at first sign of pests or pest damage. Repeat application as needed for adequate control every 7-21 days. Do not apply more than 5 gallons Neem Oil 70% per acre, per application.

Walnuts: Avoid spraying after husk split.

#### CITRUS, POME, STONE, AND TROPICAL FRUITS

rops (including but not limited to)		
Apples	Guavas	Oriental pears
Apricots	Jujubes	Pineapples
Avocados	Kiwifruit	Plantains
Bananas	Kumquats	Plums
Calamondin	Lemons	Chickasaw Plums
Cherries	Limes	Damson Plums
Barbados cherries	Loquats	Japanese Plums
Sour cherries	Lychee	Pomegranates
Sweet cherries	Mangoes	Prunes
Cherimoya	Mandarins	Pummelos
Citrus citron	Satsuma mandarins	Quinces
Citrus hybrids	Nectarines	Tangelos
Coconuts	Olives	Tangerines
Crabapples	Oranges	_
Dates	Papayas	
Feijoa	Passion fruit	
Figs	Peaches	
Grapefruits	Pears	
ESTS		
Aphids	Fruit flies	Calico scales
Aphids Apple grain aphids	Leafminers	Frosted scales
Aphids Apple grain aphids Black cherry aphids	Leafminers Citrus leafminers	Frosted scales Lecanium scales
Aphids Apple grain aphids Black cherry aphids Green apple aphids	Leafminers Citrus leafminers Mealybugs	Frosted scales Lecanium scales San Jose scales
Aphids Apple grain aphids Black cherry aphids Green apple aphids Leafcurl aphids	Leafminers Citrus leafminers Mealybugs Mites	Frosted scales Lecanium scales San Jose scales Whiteflies
Aphids Apple grain aphids Black cherry aphids Green apple aphids Leafcurl aphids Mealy plum aphids	Leafminers Citrus leafminers Mealybugs Mites Rust mites	Frosted scales Lecanium scales San Jose scales Whiteflies Citrus whiteflies
Aphids Apple grain aphids Black cherry aphids Green apple aphids Leafcurl aphids Mealy plum aphids Rosy apple aphids	Leafminers Citrus leafminers Mealybugs Mites Rust mites Spider mites	Frosted scales Lecanium scales San Jose scales Whiteflies Citrus whiteflies Silverleaf whiteflies
Aphids Apple grain aphids Black cherry aphids Green apple aphids Leafcurl aphids Mealy plum aphids Rosy apple aphids Woolly aphids	Leafminers Citrus leafminers Mealybugs Mites Rust mites Spider mites Psyllids	Frosted scales Lecanium scales San Jose scales Whiteflies Citrus whiteflies
Aphids Apple grain aphids Black cherry aphids Green apple aphids Leafcurl aphids Mealy plum aphids Rosy apple aphids	Leafminers Citrus leafminers Mealybugs Mites Rust mites Spider mites	Frosted scales Lecanium scales San Jose scales Whiteflies Citrus whiteflies Silverleaf whiteflies
Aphids Apple grain aphids Black cherry aphids Green apple aphids Leafcurl aphids Mealy plum aphids Rosy apple aphids Woolly aphids	Leafminers Citrus leafminers Mealybugs Mites Rust mites Spider mites Psyllids	Frosted scales Lecanium scales San Jose scales Whiteflies Citrus whiteflies Silverleaf whiteflies
Aphids Apple grain aphids Black cherry aphids Green apple aphids Leafcurl aphids Mealy plum aphids Rosy apple aphids Woolly aphids Citrus blackflies	Leafminers Citrus leafminers Mealybugs Mites Rust mites Spider mites Psyllids Scales	Frosted scales Lecanium scales San Jose scales Whiteflies Citrus whiteflies Silverleaf whiteflies Sweetpotato whiteflies
Aphids Apple grain aphids Black cherry aphids Green apple aphids Leafcurl aphids Mealy plum aphids Rosy apple aphids Woolly aphids Citrus blackflies  ISEASES  Anthracnose	Leafminers Citrus leafminers Mealybugs Mites Rust mites Spider mites Psyllids Scales  Downy mildew	Frosted scales Lecanium scales San Jose scales Whiteflies Citrus whiteflies Silverleaf whiteflies
Aphids Apple grain aphids Black cherry aphids Green apple aphids Leafcurl aphids Mealy plum aphids Rosy apple aphids Woolly aphids Citrus blackflies  ISEASES  Anthracnose Alternaria	Leafminers Citrus leafminers Mealybugs Mites Rust mites Spider mites Psyllids Scales  Downy mildew Powdery mildew	Frosted scales Lecanium scales San Jose scales Whiteflies Citrus whiteflies Silverleaf whiteflies Sweetpotato whiteflies
Aphids Apple grain aphids Black cherry aphids Green apple aphids Leafcurl aphids Mealy plum aphids Rosy apple aphids Woolly aphids Citrus blackflies  ISEASES  Anthracnose	Leafminers Citrus leafminers Mealybugs Mites Rust mites Spider mites Psyllids Scales  Downy mildew	Frosted scales Lecanium scales San Jose scales Whiteflies Citrus whiteflies Silverleaf whiteflies Sweetpotato whiteflies

Crops (including but not limited to)		
Almonds	Chestnuts	Macadamia nuts
Beech nuts	Chinquapins	Pecans
Brazil nuts	Filberts	Pistachios
Butternuts	Hickory nuts	Walnuts
Cashews	Japanese horse chestnuts	viamato
	<u> </u>	
PESTS		
Aphids	Rust mites	Lecanium scales
Woolly aphids	Spider mites	San Jose scales
Leafrollers	Scales	Weevils
Fruit tree leafrollers	Calico scales	Chestnut weevils
Mites	Frosted scales	
DISEASES		<u></u>
Leaf spot		
Shothole		
CUCURBITS  Refer to enecific application instruct	ions found directly below the heading <b>Agr</b> i	icultural Use Directions
Crops (including but not limited to)	ions round directly below the neading Agr	ivaltarai 036 Difections.
Balsam pears (bitter melons)	Gherkins	Pumpkins
Cantaloupes	Gourds	Squashes
Casaba	Honey balls	Watermelons (incl. hybrids)
Chinese waxgourds	Melons (incl. hybrids)	Zucchini
Citron melons	Honeydew melons	2400/////
Crenshaw	Muskmelons	
Cucumbers	Persian melons	
PESTS		
	Aphids	
Leafcurl aphids	Frosted scales	Greenhouse whiteflies
Woolly aphids	Lecanium scales	Silverleaf whiteflies
Leafminers	San Jose scales	Sweetpotato whiteflies
Mites	Scales	•
Spider Mites	Squash bugs	
Calico scales	Whiteflies	
DISEASES		
Mildews		
Downy mildew		
Powdery mildew		
BUILD 0015 400 15450777555	A 51 50	
BULB, COLE AND LEAFY VEGET. Refer to specific application instructi	ABLES ons found directly below the heading <b>Agri</b>	cultural Use Directions
Crops (including but not limited to)	ons found directly below the heading Agri	Cultural OSE Directions.
Arugula	Chinese cabbage (Bok choy, Napa)	Chicory
	Chinese mustard cabbage (Gai choy)	Red chicory
DIDCCOR	Timeses madala dabbago (dan dilay)	
Broccoli Broccoli raab	Cauliflower	Cilantro
Broccoli raab Chinese broccoli (Gai Ion)	Cauliflower Celery	C⊍llards
Broccoli raab		

Watercress Kohlrabi Rhubarb Daikon Leek Shallots Endive Lettuce (head & leaf) Spinach Fennel Chinese Spinach Low-bok Garlic **Onions** (Amaranth, Tampala) Greens Orach Swiss chard Collard greens **Parsley** Turnip tops Mustard greens Purslane Rape greens Raddichio Kale Rappini **PESTS** Rust Mites Silverleaf whiteflies Aphids Woolly aphids Spider Mites Sweetpotato whiteflies Leafminers Whiteflies Mites Greenhouse whiteflies **DISEASES** Alternaria Downy mildew White rust Powdery mildew **Botrytis** Mildews Rústs **LEGUME AND FRUITING VEGETABLES** Refer to specific application instructions found directly below the heading Agricultural Use Directions. Crops (including but not limited to) Beans Pigeon peas Guar Broad beans Lentils Snow peas Peas Calabaza Soybeans Chickpeas **Peanuts** Tomatillos Eggplants **Pepinos Tomatoes** Ground cherries Peppers **PESTS Aphids** Mites Sweetpotato whiteflies Woolly aphids **Rust Mites** Scales Beetles Spider Mites Calico scales Bean leaf beetles **Psyllids** Frosted scales Colorado Potato Beetles Whiteflies Lecanium scales Mexican bean beetles Greenhouse whiteflies San Jose scales Leafminers Silverleaf whiteflies **DISEASES** Leaf spots Blights Powdery mildew Leaf blight Molds Rusts Mildews Gray mold **ROOT AND TUBER VEGETABLES** Refer to specific application instructions found directly below the heading Agricultural Use Directions. Crops (including but not limited to) **Artichokes Parsnips** Yams Beets **Potatoes** Yam beans Cardone Sweet potatoes Carrots Radishes Cassava Rutabaga Ginger Taro (Dasheen) Ginseng Turmeric Horseradish **Turnips PESTS** Aphids Beetles Colorado Potato Beeiles

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Mites Rust Mites Spider Mites Psyllids Scales

**DISEASES** 

Mildews

Calico scales Frosted scales Lecanium scales San Jose scales Whiteflies Greenhouse whiteflies Silverleaf whiteflies Sweetpotato whiteflies

Leaf spot

DISEASES		
Blights Mildews	Powdery mildew Rusts	
SMALL FRUITS AND BERRIES		
Refer to specific application instructio	ns found directly below the heading	Agricultural Use Directions.
Crops (including but not limited to)	Plankharrian	
Blueberries	Blackberries Elderberries	Olallie berries
		Raspberries (black & red)
Boysenberries Cranberries	Gooseberries	Strawberries
	Grapes	
Currants Dewberries	Huckleberries	Youngberries
Dewnetties	Loganberries	
PESTS		
Aphids	Rust Mites	Frosted scales
Woolly aphids	Spider Mites	Lecanium scales
Leafrollers	Scales	San Jose scales
Mites	Calico scales	
DISEASES		
Mildews	Powdery mildew	Black rot
Downy mildew	Rots	Diddik Fot
HERBS AND SPICES		
Refer to specific application instruction	ns found directly below the heading	Agricultural Use Directions.
Crops (including but not limited to)	<u> </u>	
Anise	Cumin	Rosemary
Balm	Curry leaf	Rue <sup>*</sup>
	Dandelion	0
Basil		Sage
Basil	Dill	Savory
Basil Borage Camomile	Dill Fennel	Savory Spearmint
Basil Borage Camomile Caraway	Dill Fennel Marigold	Savory Spearmint Sweet bay
Basil Borage Camomile Caraway Catnip	Dill Fennel Marigold Marjoram	Savory Spearmint Sweet bay Tarragon
Basil Borage Camomile Caraway Catnip Celery	Dill Fennel Marigold Marjoram Mint	Savory Spearmint Sweet bay Tarragon Thyme
Basil Borage Camomile Caraway Catnip Celery Chives	Dill Fennel Marigold Marjoram Mint Nasturtium	Savory Spearmint Sweet bay Tarragon
Basil Borage Camomile Caraway Catnip Celery	Dill Fennel Marigold Marjoram Mint	Savory Spearmint Sweet bay Tarragon Thyme
Basil Borage Camomile Caraway Catnip Celery Chives Coriander	Dill Fennel Marigold Marjoram Mint Nasturtium Pennyroyal	Savory Spearmint Sweet bay Tarragon Thyme
Basil Borage Camomile Caraway Catnip Celery Chives Coriander  PESTS  Aphids	Dill Fennel Marigold Marjoram Mint Nasturtium Pennyroyal Peppermint  Spider Mites	Savory Spearmint Sweet bay Tarragon Thyme
Basil Borage Camomile Caraway Catnip Celery Chives Coriander  Aphids Woolly aphids	Dill Fennel Marigold Marjoram Mint Nasturtium Pennyroyal Peppermint  Spider Mites Scales	Savory Spearmint Sweet bay Tarragon Thyme Wintergreen
Basil Borage Camomile Caraway Catnip Celery Chives Coriander  PESTS  Aphids	Dill Fennel Marigold Marjoram Mint Nasturtium Pennyroyal Peppermint  Spider Mites	Savory Spearmint Sweet bay Tarragon Thyme Wintergreen  Lecanium scales

Powdery mildew

#### **VEGETABLE, CEREAL GRAINS AND OTHER MISCELLANEOUS CROPS**

#### **FUNGICIDE USE**

Apply Neem Oil 70% at a rate of 0.5%-1.0% in 25-100 gallons of water per acre or 2 pints Neem Oil 70% in a minimum of 5 gallons of water per acre for low volume applications. Repeat applications every 7-14 days. Apply no more than 2 gallons Neem Oil 70% per acre, per application. Larger plants will require higher amounts of water to obtain good coverage.

#### MITICIDE USE

Apply Neem Oil 70% at a rate of 0.5%-2.0% in 25-100 gallons of water per acre or 2 pints Neem Oil 70% in a minimum of 5 gallons of water per acre for low volume application. Apply no more than 2 gallons Neem Oil 70% per acre in solution per application. Apply in a solution of sufficient volume to achieve complete coverage of foliage. Reapply Neem Oil 70% every 7-21 days as needed for adequate control. Larger plants will require higher amounts of water to obtain good coverage.

Crops (including but not limited to)		
Acerola Alfalfa Araacaga (Apio) Asparagus Barley Breadfruit Buckwheat Canola Coffee Coriander Corn Popcorn	Sweet corn Cotton Hops Jicama Jojoba Kinep Mushrooms Nispero Oats Okra Quenepa Rice	Safflower Seagrapes Sesame Sorghum Soursup (Quanabanas) Star apples Sugarcane Sunflowers Tobacco Wheat
PESTS		
Beetles Asparagus Beetles Lygus bugs	Thrips Whiteflies Greenhouse whiteflies	Silverleaf whiteflies Sweetpotato whiteflies
DISEASES		

Rusts

STORAGE AND DISPOSAL
Do not contaminate water, food, or feed by storage and disposal.

**Pesticide Storage:** Keep in original container. Store in a dry place, away from direct sunlight, feed, or foodstuffs. Keep container tightly sealed when not in use. Do not store below 40°F (4°C).

Agricultural/Commercial Use

**Pesticide Disposal**: Wastes resulting from the use of this product must be disposed of on-site or at an approved waste disposal facility.

Agricultural/Commercial Use

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

#### Homeowner

Pesticide and Container Disposal:

If empty: Do not reuse this container. Place in trash or offer for recycling if available.

**If partly filled:** Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

#### WARRANTY

Certis USA, L.L.C. warrants that the material contained herein conforms to the description on the label and is reasonably fit for the purposes referred to in the directions for use. Timing and method of application, weather, watering practices, nature of soil, the insect problem, condition of the crop, incompatibility with other chemicals

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not specifically recommended, and other influencing factors in the use of this product are beyond the control of the seller. Buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given herein. NO OTHER EXPRESS OR IMPLIED WARRANTY OF THE FITNESS OR MERCHANTABILITY IS MADE.

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#### HOMEOWNER USE DIRECTIONS

#### **GENERAL INFORMATION**

- Do not add adjuvants (spreaders, stickers, extenders, etc.) to Neem Oil 70%.
- Stops powdery mildew in 24 hours

**FUNGICIDE USE:** For use on FRUITS, NUTS, VEGETABLES, HERBS, SPICES, ROSES, HOUSEPLANTS, FLOWERS, TREES, and SHRUBS

#### **APPLICATION INSTRUCTIONS:**

Neem Oil 70% is an effective fungicide for the prevention and control of various fungal diseases including powdery mildew, black spot, downy mildew, anthracnose, rust, leaf spot, botrytis, needle rust, scab and flower, twig and tip blight, and alternaria. As a preventative, apply Neem Oil 70% on a 7 to 14 day schedule until the potential for disease development is no longer present. To control disease already present, apply Neem Oil 70% on a 7 day schedule until disease pressure is eliminated. Then continue spraying on a 14 day schedule to prevent the disease from reoccurring. To prevent rust leaf spot diseases, anthracnose and scab, begin applications at the first sign of spring budding. To prevent powdery mildew, apply in mid-summer or when disease is first detected. Continue applications until disease pressure no longer exists.

#### MIXING INSTRUCTIONS:

Mix Neem Oil 70% at the rate of 2 tablespoons (1 fluid ounce) per gallon of water. Thoroughly mix solution and spray all plant surfaces (including undersides of leaves) until completely wet. Frequently mix solution as you spray.

INSECTICIDE/MITICIDE USE: For use on FRUITS, NUTS, VEGETABLES, HERBS, SPICES, ROSES, HOUSEPLANTS, FLOWERS, TREES, and SHRUBS

#### **APPLICATION INSTRUCTIONS:**

Apply Neem Oil 70% at first sign of insects/mites. For control of aphids, spider mites, scale, whiteflies, beetles, leafrollers, and other insect pests. Neem Oil 70% is most effective when applied every 7 to 14 days. For heavy insect populations, spray on a 7 day schedule.

#### **MIXING INSTRUCTIONS:**

Mix Neem Oil 70% at the rate of 2 tablespoons (1 fluid ounce) per gallon of water. Thoroughly mix solution and spray all plant surfaces (including underside of leaves) until completely wet. Frequently mix solution as you spray.

Net Contents: 1 Quart (0.946 liters)

M062904 v4 mu M101804 v3 cln