

Certis USA

NEEMIX®**Botanical Agricultural Insecticide/Insect Growth Regulator****BROAD SPECTRUM IGR INSECTICIDE**

An insecticide for use on food crops in and around agricultural areas and greenhouses. Kills/repels a variety of insect pests including whiteflies, leafminer, caterpillars, aphids, and diamondback moths.

ACTIVE INGREDIENT:

Azadirachtin* 0.25%

INERT INGREDIENTS 99.75%

TOTAL 100.00%

*Contains 0.017 pounds of azadirachtin per gallon.

EPA Reg. No. 70051-5

EPA Est. No. 44616-MO-01

KEEP OUT OF REACH OF CHILDREN**CAUTION****PRECAUTIONARY STATEMENTS****HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION: Harmful if swallowed. Avoid contact with skin, eyes or clothing. Avoid contamination of feed and foodstuffs. Avoid breathing spray mist. In case of eye contact, flush eyes with plenty of water. If on skin, wash with soap and water. If irritation persists, get medical attention.

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.

USE SAFETY RECOMMENDATIONS**Users should:**

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

ENVIRONMENTAL HAZARDS

This product may be hazardous to fish and aquatic invertebrates. 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 by cleaning of equipment or disposal of water.

PHYSICAL AND CHEMICAL HAZARDS

Flammable. Do not use or store near heat or open flame.

STORAGE AND DISPOSAL

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

Pesticide Storage: Keep in original container. Store in a cool, dry place, away from direct sunlight, feed or foodstuffs. Keep container tightly sealed when not in use. Do not store below 60°F (15°C) or above 95°F (35°C).

Pesticide Disposal: Rinsewater and unused diluted pesticide may be disposed of on-site in an approved waste disposal facility. Do not reuse empty container. Triple rinse empty containers and offer for recycling or puncture and dispose of in a sanitary landfill or by incineration, if allowed by state and local authorities. If burned, stay out of smoke.

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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 area until sprays have dried.

GENERAL

- Kills larval stages of insects only.
- Shake well before using.
- Spraying directly onto the pest and a longer duration of leaf wetting increases effectiveness. Apply in early to mid-morning or late afternoon. This is particularly important with whitefly adults which are sedentary on the undersides of leaves at these times.
- NEEMIX® in diluted solution should be maintained at pH between 3-8. Use outside of this pH range may cause product degradation. Spray solutions should be used 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 material prior to root establishment.

NEEMIX® has been found to be compatible when used in conjunction with most beneficial insects. It is recommended that a small trial be conducted to assure compatibility before using on a large scale.

TANK MIXING

NEEMIX® Botanical Agricultural Insecticide has been found to be compatible with most commonly used fungicides, insecticides, and fertilizers. Physical compatibility should first be checked by using the correct proportion of products in a small jar test. Growers should then test tank-mix combinations for phytotoxicity on a sample of plants prior to use. This is also recommended with combinations used before as environmental conditions can alter the interaction between compounds. *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 NEEMIX® in a tank combination.* Do not mix NEEMIX® with oxidizing agents such as bleach, or strong acids and bases as they will destabilize the product.

DIRECTIONS FOR FOOD CROP APPLICATION**General Directions**

Use care when applying near streams, ponds, lakes, or other bodies of water. NEEMIX® should not be applied when weather conditions favor drift or when the likelihood of runoff is high.

GREENHOUSE

- For use to control whiteflies, thrips, mealybugs, leafminers, loopers, caterpillars, beet armyworms, and aphids in and around greenhouses and commercial nurseries.
- NEEMIX® may be used on all listed fruits, vegetables, vegetable transplants, and herbs both inside and outside of the greenhouse.
- For high volume application, dilute NEEMIX® to a concentration of 64 to 128 ounces (4 to 8 pints) per 100 gallons of water (4 to 8 teaspoons of NEEMIX® per gallon of water). Mix thoroughly. Apply 25-40 psi with hand sprayer or 100-200 psi with power sprayer as a fine spray to both leaf surfaces to runoff. Usually 1-2 gallons of spray solution/1,000 sq. feet. Excessive applications is unnecessary and should be avoided.
- For low volume application, apply at a rate of 0.5 gallon of NEEMIX® per 1,000 square feet.
- Sprays may be applied on a preventative 7-day schedule or at the first sign of insect presence. This schedule is effective under low insect pressure. Under high insect pressure, apply every 3-4 days.
- For drench application in greenhouse planting, use 2.5 pints per 100 gallons and apply at the rate of 1 quart of diluted solution per square foot of growing media surface. Repeat at 14 day intervals during the growing season.

FIELD CROPS**Specific Crop Directions**

Application Rate: Apply 0.5-2.0 gallons of NEEMIX® per acre using conventional application equipment in a minimum of 30 gallons of water. The low rate should be used as a preventative when pest pressure is low, or if used in conjunction with adulticide products. Otherwise, the high rate should be used. The maximum application rate is 20 grams of active ingredient or less per acre according to the tolerance exemption (40 CFR 180.1119).

Mode of Action

This product controls targeted insect larvae when ingested or come in contact with it, by interfering with the insects ability to molt. It is effective on all larval stages and pupae. It also reduces damage by repelling and deterring feeding of all stages of insect.

Application Rate for Whiteflies, Aphids, Leafminers, Armyworms, and Other Pests

Pest	Rate Neemix Per Acre* (gallons)	Frequency	Remarks
Sweetpotato Whitefly Low Pressure High pressure	0.5-1.0 gallons 1.0-2.0 gallons	4-10 days 3-7 days	Foliar application to larvae and nymphs
Aphids	0.5-1.0 gallons	7-10 days	Suppression and adult feeding deterrence
Leafminer	0.5-1.0 gallons	14-21 days	Foliar application to larvae and nymphs
Armyworms	0.5-1.5 gallons	7-10 days	Foliar application to larvae
Others (including) Borers Leafhoppers Leafrollers Loopers	1.0-2.0 gallons	7-10 days	Foliar application to larvae and nymphs

*apply in sufficient water to obtain adequate plant coverage.

CITRUS, POME AND STONE FRUITS**Crops (including, but not limited to)**

Apples	Jujubes	Oranges
Apricots	Kumquats	Peaches
Avocado	Lemons	Pears
Cherries	Limes	Plums
Crabapple	Mangoes	Prunes
Grapefruits	Nectarines	Quinces

CUCURBITS**Crops (including, but not limited to)**

Balsam pears	Cucumbers	Pumpkins
Cantaloupes	Gherkins	Squashes
Chinese waxgourds	Gourds	Watermelons
	Honeydew melons	

BULB, COLE AND LEAFY VEGETABLES**Crops (including, but not limited to)**

Asparagus	Collards	Mustard greens
Argula	Cress	Onions
Bok choy	Endive	Parsley
Broccoli	Fennel	Rhubarb
Brussels sprouts	Garlic	Shallots
Cabbage	Kale	Spinach
Cauliflower	Kohlrabi	Swiss chard
Celery	Leek	Turnip tops
Chinese spinach	Lettuce	

LEGUME AND FRUITING VEGETABLES**Crops (including but not limited to)**

Beans	Lentils	Soybeans
Chick peas	Peanuts	Tomatoes
Eggplants	Peas	
Ground cherries	Peppers	

ROOT AND TUBER VEGETABLES**Crops (including, but not limited to)**

Artichokes	Horseradish	Sweet potatoes
Beets	Parsnips	Turmeric
Carrots	Potatoes	Turnips
Cassava	Radishes	Yam beans
Ginger	Rutabaga	Yams

SMALL FRUITS AND BERRIES**Crops (including, but not limited to)**

Blackberry	Dewberry	Loganberry
Blueberry	Elderberry	Raspberry
Boysenberry	Gooseberry	Strawberry
Cranberry	Grape	Youngberry
Currant	Huckleberry	

HERBS AND SPICES**Crops (including, but not limited to)**

Anise	Cumin	Rosemary
Balm	Curry leaf	Rue
Basil	Dandelion	Sage
Borage	Dill	Savory
Camomile	Fennel	Spearmint
Caraway	Mint	Sweet bay
Catnip	Marigold	Tarragon
Celery	Marjoram	Thyme
Chives	Pennyroyal	Wintergreen
Coriander	Peppermint	

NUTS**Crops (including, but not limited to)**

Almond	Cashew	Macadamia
Beech nut	Chestnut	Pecan
Brazil nut	Filberts	Pistachio
Butternut	Hickory nuts	Walnut

MISCELLANEOUS**Crops (including, but not limited to)**

Cotton	Alfalfa	for seed
Sweet Corn	Other crops grown	

INSECT PESTS CONTROLLED BY NEEMIX®**Aphids, such as:**

Cotton Aphid	Green Peach Aphid
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Armyworms, such as:

Beet Armyworm	Yellowstriped Armyworm
Fall Armyworm	True Armyworm
Southern Armyworm	

Borers, such as:

Peachtwig Borer	Squash Vine Borer
Peachtree Borer	

Caterpillars & Loopers, such as:

Cabbage Looper	Pickleworm
Diamond Moth	Rindworm
Imported Cabbage Looper	Melonworm
Navel Orangeworm	Sod Webworm
Soybean Looper	Pecan Nut Casebearer
Tobacco Budworm	Walnut Caterpillars
Squashes	Hickory Shuckworms
Grapeleaf Skeletonizer	Corn Earworms
Hornworm	Budworm
Fall Webworm	Webworm
Lesser Webworm	Garden Webworm

Cutworms, such as:

Black Cutworm	Citrus Cutworm
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Leafhoppers, such as:

Grape Leafhopper	Variiegated Leafhopper
Potato Leafhopper	Aster Leafhopper

Leafminers, such as:

Holly Leafminer	Vegetable Leafminer
Sepentine Leafminer	

Leafrollers, such as:

Oblique Banded Leafroller	Fruitree Leafroller
Omnivorous Leafroller	Blueberry Leafroller
Grape Leafroller	Filbert Leafroller

Moths, such as:

Artichoke Plume Moth	Diamondback Moth
Codling Moth	Grape Berry Moth
Gypsy Moth	

Thrips, such as:

Thrips Palmi

Whiteflies, such as:

Greenhouse Whitefly	Sweetpotato Whitefly
Silverleaf Whitefly	

Psyllids**Spittle Bugs****Mealybugs****Beetles, Grubs and Weevils, such as:**

Pecan Weevils	Colorado Potato Beetle
Alfalfa Weevils	Black Vine Weevil
Chestnut Weevils	Twig Girdlers

Strawberry Beetle
Potato Flea Beetle

Mexican Bean Beetle

Miscellaneous, such as:

Fruitfly
Grasshopper
Squash Bug
Onion Maggot
Tomato Pinworm
Cherry Fruitworm
Grape Leafroller

Filbert Worm
Squash Bug
Pecan Leaf Phylloxera
Pecan Stem Phylloxera
Bollworm
Cotton Leafperforator

CHEMIGATION

Refer to supplemental labeling entitled "Thermo Trilogy's Chemigation Bulletin" for use directions for chemigation. Do not apply this product through any irrigation system unless the supplemental labeling on chemigation is followed. For a copy of this bulletin, please call Thermo Trilogy's Customer Service.

WARRANTY

Thermo Trilogy Corp. 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.

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