

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

## NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

EPA Reg. Number:

Date of Issuance:

228-734

8/13/15

Term of Issuance:

Conditional

Name of Pesticide Product:

NUP-13026 Abamectin 0.15 Miticide/Insecticide

Name and Address of Registrant (include ZIP Code):

Carrie Tackema Nufarm Americas Inc. 4020 Aerial Center Parkway, Suite 101 Morrisville, NC 27560

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/registration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

**Signature of Approving Official:** 

Mark Suarez, Product Manager 07
Invertebrate & Vertebrate Branch 3, Registration Division

(7505P)

Date:

8/13/15

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EPA Form 8570-6

- 2. You are required to comply with the data requirements described in the DCI identified below:
  - a. Abamectin GDCI-122804-1388

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: http://www.epa.gov/oppsrrd1/contacts\_prd.htm

- 3. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.
- 4. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 228-734."
- 5. Submit one copy of the final printed label for the record before you release the product for shipment.

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

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 8/12/2015
- Alternate CSF 1 dated 8/12/2015

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If you have any questions, please contact Jessica Rogala by phone at 703-347-0263, or via email at rogala.jessica@epa.gov.

Sincerely,

Mark Suarez

Product Manager 07

Invertebrate & Vertebrate Branch 3

Registration Division (7505P)

Office of Pesticide Programs

# RESTRICTED USE PESTICIDE

# TOXIC TO FISH, MAMMALS, AND AQUATIC ORGANISMS

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

GROUP 6 INSECTICIDE

# NUP-13026 Abamectin 0.15 Miticide/Insecticide

ACTIVE INGREDIENT:	
Abamectin (CAS No.71751-41-2):	2.0%
OTHER INGREDIENTS:	
	TOTAL:100.09

[Contains VOC <20% EP; qualifies as "Low VOC" under California regulations]

# KEEP OUT OF REACH OF CHILDREN CAUTION

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

SEE INSIDE LABEL BOOKLET FOR ADDITIONAL FIRST AID AND PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300 For Medical Emergencies Only, Call (877) 325-1840

EPA REG. NO. 228-EPA EST. NO.:

MANUFACTURED FOR NUFARM AMERICAS INC. 11901 South Austin Avenue Alsip, IL 60803



[Nufarm	Grow	a better	tomorrow]
[Grow a	better	tomorr	ow]

NET CONTENTS GALS. ( Liters)

000228.00TGU.20150812.draft

ACCEPTED

08/13/2015

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

228-734

<sup>\*</sup>Contains 0.15 pounds Abamectin per gallon.

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. For more options, follow the instructions for Category B on an EPA chemical-resistant category selection chart.

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof or Chemical-resistant gloves, such as barrier laminate or butyl rubber > 14 mils
- Socks plus shoes

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. **DO NOT** reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **USER SAFETY RECOMMENDATIONS**

#### Users should:

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

FIRST AID			
If swallowed:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>DO NOT give any liquid to the person.</li> <li>DO NOT induce vomiting unless told to do so by the poison control center or doctor.</li> <li>DO NOT give anything by mouth to an unconscious person.</li> </ul>		
If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
If on skin or clothing:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
If inhaled:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>		
	HOT LINE NUMBER		

#### **HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

#### NOTE TO PHYSICIAN

Early signs of intoxication include dilation of pupils, muscular incoordination, and muscle tremors. Toxicity following accidental ingestion of this product can be minimized by early administration of chemical adsorbents (e.g., activated charcoal). If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral fluid replacement therapy should be given, along with other required supportive measures (such as maintenance of blood pressure levels and proper respiratory functionality) as indicated by clinical signs, symptoms, and measurements.

In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since abamectin is believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic abamectin exposure.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and wildlife. **DO NOT** apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. **DO NOT** apply when weather conditions favor drift from target areas. **DO NOT** contaminate water when disposing of equipment washwater or rinsate. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. **DO NOT** apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a medium potential for reaching both surface water and aquatic sediment via runoff for several weeks to months after application. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of abamectin from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours.

Use of this product may pose a risk to threatened and endangered species of fish, amphibians, crustaceans (including fresh water shrimp), and insects. All use of this product in the state of California should comply with the recommendations of the California Endangered Species Project. Before using this product in California, consult with your county agriculture commissioner to determine use limitations that apply in your area.

**ATTENTION:** This product contains chemicals known to the state of California to cause birth defects or other reproductive harm.

## **DIRECTIONS FOR USE**

## RESTRICTED USE PESTICIDE

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 12 hours. **Exception:** For grape girdling cane turning, and tying in grapes. **DO NOT** enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 days.

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
- Waterproof or Chemical-resistant gloves, such as barrier laminate or butyl rubber ≥ 14 mils
- Shoes plus socks

FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR PEST CONTROL, AND/OR ILLEGAL RESIDUES.

#### PRODUCT INFORMATION

When applied following the **Directions for Use** on this label, this product controls listed mites and insects in various crops. Optimum control of target insects requires this product to be mixed with sufficient amounts of water (and horticultural oil or nonionic surfactants, when recommended) to provide a thorough coverage of foliage. Spray volume in gallons will vary with the size and number of trees per acre or with the density of target crop foliage. Optimum insect control is achieved only if the foliage receives a thorough coverage of this product. Calibrate all spray equipment to ensure delivery of sufficient spray solution to thoroughly cover foliage of target crops.

**Horticultural Oils:** When specified on this label, apply this product with horticultural oils (NOT dormant oils) which are approved for use on the target crop. This combination of products will provide residual control and/or improved efficacy. If using concentrations of oils at greater than 2% (v/v), test this rate on small plots for phytotoxicity before using this rate to treat larger plots. To prevent crop injury, observe all precautions and restrictions on the oil label. See precautions under **Phytotoxicity**, below.

**Nonionic Surfactants:** Nonionic surfactants applied in combination with this product can provide better insect control by allowing the spray mixture to distribute evenly on the leaf and enter the leaf cuticle. When using this product in combination with a nonionic surfactant, carefully follow the Directions for Use and Precautions on the nonionic surfactant label and in official spray guides. See precautions under **Phytotoxicity**, below.

**Phytotoxicity:** Although this product has been tested for phytotoxicity and compatibility and is safe to use on a variety of crops and as a tank mix in combination with many commonly used products, it is not possible to test all crop varieties grown under a variety of growing conditions or to test all possible combination of products. Before use, test potential mixtures (pesticides, crop oils, nonionic surfactants, and nutritional additives) with this product to ensure physical compatibility and lack of phytotoxic effects to the target crop.

New York State Restrictions: Aerial applications of this product are prohibited in the State of New York.

DO NOT apply this product through any type of irrigation system.

# [OPTIONAL TEXT FOR TIP-N-MEASURE CONTAINERS]

Use Directions for Tip-N-Measure Container:

- 1. Remove the measuring chamber cap and seal over container opening.
- 2. Replace the cap and securely tighten.
- 3. Tip the container until the measuring chamber contains the desired amount of product.
- 4. Return container to its level position.
- 5. Remove measuring chamber cap and pour product into proper application equipment.
- 6. Replace the cap and securely tighten.

#### SPRAY DRIFT MANAGEMENT

Except as noted below for specific crops, do not apply with ground application equipment within 25 ft., or by aircraft within 150 ft. of lakes, reservoirs, rivers, permanent streams, marshes, potholes, or natural ponds; estuaries or commercial fish farm ponds. **DO NOT** cultivate within 25 ft. of the aquatic area so as to allow growth of a vegetative filter strip.

All aerial and ground application equipment must be properly calibrated and maintained using appropriate carriers. For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used and must not exceed 75% of wing span or rotor diameter.

Use the largest droplet size consistent with good pest control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure. Sprays should be released at the lowest height consistent with pest control and flight safety. Applications more than 10 ft. above the crop canopy should be avoided.

Make aerial or ground applications when the wind velocity favors on-target product deposition (approximately 3 to 10 mph). **DO NOT** apply when wind velocity exceeds 15 mph. Avoid applications when wind gusts approach 15 mph. Inclusion of a compatible drift reducing agent is encouraged. Risk of exposure to aquatic areas can be reduced by avoiding applications when wind direction is toward aquatic areas. **DO NOT** cultivate within 25 ft. of the aquatic area so as to allow growth of a vegetative filter strip.

Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature or, when making applications under these conditions, set up equipment to produce larger droplets to compensate for evaporation.

**DO NOT** make aerial or ground applications during temperature inversions or if heavy rainfall is expected during application. Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

Observe the following precautions when using ground application equipment to spray tree crops (almonds, apples, avocado, citrus, plums, prunes, walnuts) or hops in the vicinity of aquatic areas such as lakes, reservoirs, permanent streams, marshes, potholes, natural ponds, estuaries, or commercial fish ponds.

- DO NOT apply this product when weather conditions favor drift to aquatic areas
- DO NOT apply within 110 ft. upwind of aquatic areas or when wind speed is above 8 mph.
- Spray last 3 rows upwind of aquatic areas using nozzles on one side only, with spray directed away from the aquatic areas.
- Avoid spray going over tops of trees by adjusting or turning off top nozzles. Shut off nozzles on the side away from the grove/orchard when spraying the outside row. Shut off nozzles when turning at ends of row and passing tree gaps in rows.

## **RESISTANCE MANAGEMENT**

Because of the inherent risks of resistance development to any product, it is strongly advised that this product be used in a sound resistance management program which includes rotation with other products with different modes of action. Effective control of labeled pests will not be achieved if insect or mite-tolerant strains develop. When applying this product to plants that are hosts of labeled pests with multiple generations per crop per year, use resistance management practices such as the following.

- Rotate this product with other products that have different modes of action,
- **DO NOT** apply this product to successive insect generations,
- Follow the use rates and intervals between applications that are specified in this label,
- Use a non-chemical alternative (such as beneficial arthropods).
- Plant susceptible plants following non-susceptible plants, and
- Use other cultural practices

For additional information regarding the implementation of these or other resistance management practices, consult your local agricultural advisor or Nufarm representative.

# **CROP USE DIRECTIONS**

# Apple, Pears (including Oriental pear trees)

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/Insecticide fl. oz./A (fl. oz./100 gal)	Application Instructions and Timing	Restrictions
European red mites McDaniel spider mites Pear rust mites Pear psyllas Tentiform leafminers Two-spotted spider mites White apple leafhoppers Yellow mites	Concentrate Sprays: 10-20 fl. oz/A (Dilute Sprays: 2.5- 5.0 fl. oz./100 gal)  ADD a horticultural oil for best results	Apply using conventional dilute or concentrate ground equipment.  Use sufficient volumes (greater than 40 gal of water/A) to ensure thorough foliage coverage.  Spider Mites: Apply when mites first appear. For best results, apply before 5 spider mites per leaf is observed. Spray deposits of this product plus a horticultural spray oil on new foliage growth provides greater residual control. Apply this product for spider mite control only during petalfall and up to six weeks following petalfall.  Tentiform Leafminers: For best results, apply to control new hatch (eggs) and early stages of first and second generation leafminers. DO NOT apply during bloom.  White Apple Leafhopper (Not for use west of the Rocky Mountains): Apply this product only to the first generation soon after petalfall; use in combination with horticultural spray oil.  Application without horticultural spray oil may result in reduced efficacy and/or residual control. However, fruit injury to certain apple varieties (on light-skinned varieties such as Golden Delicious) may occur with this combination of this product and spray oil if other products are applied after this spray mix application. Refer to the Directions for Use and Precautions on horticultural spray oil labels.  If needed, a second application may be made but allow at least 21 days to elapse after the first application.	Pre-Harvest Interval – 28 days  DO NOT exceed 20 fl. oz/A per application or 40 fl. oz/A per growing season.  DO NOT apply this product to control white apple leafhopper west of the Rocky Mountains.  DO NOT make more than 2 applications per season.  DO NOT apply by air.  Refer to additional directions on spray oils in the PRODUCT INFORMATION section.  See specific restrictions for this crop in the SPRAY DRIFT MANAGEMENT section of this label.  To avoid phytotoxicity or loss of crop, do not apply this product plus oil if Captan was applied 14 days before the application or if Captan will be applied 14 days after application.  DO NOT graze livestock in treated orchards.  Horticultural Spray Oil (DO NOT use a dormant oil) 1 gal./A (minimum) (0.25%, v/v)

NOTE: Concentrate Spray rates (NUP-13026 Abamectin 0.15 Miticide/Insecticide/A) are determined by selecting the amount needed for a full cover dilute spray. The amount of NUP-13026 Abamectin 0.15 Miticide/Insecticide/A as a concentrate spray is the same amount as required for dilute sprays to the orchard and could be less than 10 fl oz. NUP-13026 Abamectin 0.15 Miticide/Insecticide/A for small trees. Rates of NUP-13026 Abamectin 0.15 Miticide/Insecticide/100 gal are based on 400 gal/A of dilute spray.

## **AVOCADOS**

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/ Insecticide fl. oz./A	Application Instructions and Timing	Restrictions
		Apply using ground equipment in 100 or more gal water/A. If using 400 gal/A or	Pre-Harvest Interval – 14 days
		more, apply 2.5 fl. oz. of this product/100 gal of water <b>and</b> 1.0-4.0% of NR (narrow range) 415 oil.	<b>DO NOT</b> make more than 2 applications per season.
	DO NOT use less than 10 fl. oz. of this product per Acre	Although aerial applications are permitted when this product is applied in 50 or more gal water/A, better control	DO NOT exceed 20 fl. oz/A per application or more than 40 fl. oz./A per season.
Avocado thrips (Scirtothrips	Low to moderate insect infestations: 10.0-15.0 Heavy pest infestations: 15.0-	of target insects is obtained using ground applications. Users accept all liability for level and duration of thrip control from aerial applications of this product.	<b>DO NOT</b> allow livestock to graze in treated orchards.
perseae) Persea Mites (Oligonychus perseae)			Refer to additional directions on spray oils in the PRODUCT INFORMATION
porcodo	20.0  ADD a horticultural oil	Apply this product when thrips first appear but prior to finding 5 immature thrips per leaf or fruit. For low to	section.
	for best results	moderate infestations, include 1.0-4.0% of NR 415 oil in combination with this product and the horticultural spray oil approved for use on avocados.	Horticultural Spray Oil ( <b>DO NOT</b> use a dormant oil), minimum 1 to 4%, v/v (minimum)
		If needed, a second application may be made but allow at least 30 days to elapse after the first application.	

# NOTE:

- Low infestations are defined as 1-2 immature thrips per leaf/fruit Moderate infestations are defined as 2-4 thrips per leaf/fruit;

Heavy/severe infestations are defined as more than 5 thrips per leaf/fruit.

NOTE: To prevent crop injury, observe all precautions and restrictions on the oil label. When using oil concentrations above 2.0%, treat a small test area before making a large-scale application.

# CELERIAC (Apium graveollens)

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/Insecticide fl. oz./A	Application Instructions and Timing	Restrictions
		Apply using ground equipment using conventional dilute or concentrate	Pre-Harvest Interval – 7 days
		sprayers.	product, do not apply more than
	16.0	Apply when mites first appear using sufficient volumes (greater than 20	two sequential applications.
Two-spotted spider mites		gal of water per acre) to ensure thorough foliage coverage.	<b>DO NOT</b> exceed 48 fl. oz/A after transplanting.
		If needed, a second application may be made but allow at least 7 days to elapse after the first application.	Refer to additional directions on nonionic surfactants in the <b>PRODUCT INFORMATION</b> section.
		For best results, use in combination with a non-ionic surfactant.	Section.

# **CITRUS FRUIT CROP**

Some of the crops in this group include calamondin, citrus citron, citrus hybrids (includes chironja, tangelo, tangor), grapefruit, kumquat, lemon, lime, mandarin (tangerine), pummelo, Satsuma mandarin, sour orange, and sweet orange.

Target Insects  Broad mites	Application Rate of NUP- 13026 Abamectin 0.15 Miticide/ Insecticide fl. oz./A (fl. oz./100 gal) Concentrate	Application Instructions and Timing	Restrictions  Pre-Harvest Interval
Citrus bud mites Two-spotted spider mites	Sprays: 10-20 fl. oz/A (Dilute Sprays: 1.0-2.0 fl. oz./100 gal)	Apply using conventional dilute or concentrate ground equipment.	<ul><li>7 days</li><li>To avoid insect resistance to this product, do not apply to citrus grown in</li></ul>
Citrus rust mites	Concentrate Sprays: 5-20 fl. oz/A (Dilute Sprays: 0.5-2.0 fl. oz./100 gal)	Use sufficient volumes (greater than 40 gal of water/A) to ensure thorough foliage coverage.  ADD a horticultural oil for best results  Asian citrus psylla: Apply to protect newly expanding foliage flush during the spring, summer or fall. NUP-13026 Abamectin 0.15 Miticide/Insecticide will only control adults and nymphs present at the time of application.	nurseries. <b>DO NOT</b> apply this product, or any other abamectin containing product within 30 days of the last treatment. <b>DO NOT</b> exceed 40 fl. oz/A (0.047 lb. a.i./A)
Citrus leafminers	Concentrate Sprays: 5-20 fl. oz/A (Dilute Sprays: NR)	Mites: Apply when mites first appear during spring, summer, and/or fall.  Citrus bud mite: For best results, time the spray at "bud swell".  Citrus leafminer: Apply to protect new growth during spring, summer, or fall.  Citrus thrips: Application targeted for citrus thrips will only control the current generation and must be correctly timed. Apply when economic thresholds have been reached (after egg hatch has begun - preferably	of this product, or any other abamectin containing product per growing season.  DO NOT make more than 3 applications of this product, or any other abamectin containing product per growing season.  DO NOT allow
Asian citrus psyllids Citrus thrips	Concentrate Sprays: 10-20 fl. oz/A (Dilute Sprays: NR)	early to mid-hatch).  For Asian citrus psylla, broad mites, citrus leafminers and citrus rust mites optimum results are achieved if spray applications are made at 150-300 gals. Spray mixture/A plus a minimum of 3 gal./A of horticultural oil. Apply with a ground speed of 1 to 1.5 mph.  To control citrus leafminer -Ground or aerial application is permitted: however, do not apply with aircraft to citrus in California. For Aerial application use a minimum of 10 gallons of finished spray volume per acre. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures) use a greater volume of water to insure adequate coverage.  To manage resistance, if pest infestation requires additional treatments, use other alternate insecticides with different modes of action which are labeled for use on these pests and crops.	livestock to graze in treated orchards.  Refer to additional directions on spray oils in the PRODUCT INFORMATION section.  See specific restrictions for this crop in the SPRAY DRIFT MANAGEMENT section of this label.  For all other pests besides to control citrus leafminer - DO NOT apply by air.  Horticultural Spray Oil (DO NOT use a dormant oil) 1 gal./A (minimum) (0.20%,

Target Insects	Application Rate of NUP- 13026 Abamectin 0.15 Miticide/ Insecticide fl. oz./A (fl. oz./100 gal)	Application Instructions and Timing	Restrictions
			v/v); see specific rates for certain pests under Application Instructions and Timing

NR = Not recommended.

NOTE: Concentrate Spray rates (NUP-13026 Abamectin 0.15 Miticide/Insecticide /A) are adjusted to apply the amount/A equal to that used in full cover dilute spray. The amount of NUP-13026 Abamectin 0.15 Miticide/Insecticide/A as a concentrate spray is the same amount as required for dilute sprays to the orchard and could be less than 10 fl oz. NUP-13026 Abamectin 0.15 Miticide/Insecticide/A for small trees. Rates of NUP-13026 Abamectin 0.15 Miticide/Insecticide/100 gal are based on 1,000 gal/A of dilute spray.

# COTTON

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/Insecticide fl. oz./A	Application Instructions and Timing	Restrictions
		Apply this product when mites first appear.  Rate will depend on the cotton plant size and thickness of foliage. Use	
		the 4-6 fl. oz./A rate only early in season and for cotton plants 10 inches or less in height.	<b>DO NOT</b> apply more than 16 fl. oz/A per application.
Carmine spider mites Pacific spider	Early season: 4.0-6.0	Applications can be made by air or ground using a minimum of 5 gallons of water/A.	DO NOT make more than 2 applications per season with a 21-day interval between applications.
mites Strawberry spider mites		West of the Rockies: <b>DO NOT</b> apply less than 4 fl. oz./A and can only be applied by ground	<b>DO NOT</b> exceed 32 fl. oz/A per growing season.
Two-spotted spider mites		equipment.	Pre-Harvest Interval – 20 days  DO NOT graze livestock in
		Apply this product when mites first appear.	treated fields or feed cotton foliage to livestock.
	Mid-season/Lay-by: 8.0-16.0	Rate will depend on the cotton plant size and thickness of foliage.	
		Applications can be made by air or ground using a minimum of 5 gallons of water/A.	

# **CUCURBIT VEGTABLE CROP GROUP (CROP GROUP 9)**

Some of the crops in this group include chayote, Chinese waxgourd, citron melon, cucumbers, gherkin, edible gourds (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica* spp., (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon, (hybrids and/or cultivars of *Cucumis melo* includes true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon and snake melon), pumpkin, summer squash (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini), winter squash, (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash), watermelon (includes hybrids and/or varieties of Citrullus lanatus).

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/Insecticide fl. oz./A	Application Instructions and Timing	Restrictions
Leafminers Spider mites	Low to moderate pest infestations: 8.0-12.0  Heavy pest infestations: 16.0	Use ground equipment in 20 or more gal water/A. Although aerial applications are permitted when this product is applied in 5 or more gal water/A, better control of target insects is obtained using ground applications. Users accept all liability for level and duration of mite control from aerial applications of this product.  Apply when insects first appear. Increased water volumes are required under certain situations (severe pest infestations, highly dense foliage, elevated temperatures) to ensure thorough foliage coverage.  If needed, a second application may be made but allow at least 7 days to elapse after the first application.	Pre-Harvest Interval – 7 days  DO NOT exceed 48 fl. oz/A per growing season.  DO NOT make more than 2 sequential applications per season.  DO NOT apply by air in the State of New York.

# **DRY BEAN**

\* For use on cowpeas that are grown only for dry seed. Do not allow livestock to graze cowpea forage and do not harvest cowpea forage or hay for use as livestock feed.

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/ Insecticide fl. oz./A	Application Instructions and Timing	Restrictions
Liriomyza leafminers Spider mites	Low to moderate pest infestations: 8.0-12.0  Heavy pest infestations: 13.0-16.0	Do not apply in less than 10 gal. of water/A with ground application equipment. Do not apply in less than 5 gal. of water/A with aircraft. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.  Leafminers and Spider mites: Apply when adult leafminers or spider mites first appear, and repeat as needed to maintain control within constraints of a sound resistance management program.  If needed, a second application may be made but allow at least 6 days to elapse after the first application.	Pre-Harvest Interval – 7 days  DO NOT exceed 16 fl. oz/A per application.  DO NOT exceed 48 fl. oz/A per growing season.  DO NOT make more than 2 sequential applications.  Refer to additional directions on nonionic surfactants in the PRODUCT INFORMATION section.  DO NOT apply by air in the State of New York.

# FRUITING VEGETABLES CROP GROUP (CROP GROUP 8)

Some of the crops in this group include eggplant, groundcherry, pepino, peppers (including bell pepper, chili pepper, cooking pepper, pimento, sweet pepper); tomatillo and tomato.

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/ Insecticide fl. oz./A	Application Instructions and Timing	Restrictions
Broad mites Colorado potato beetles Liriomyza leafminers Potato psyllids Spider mites Thrips palmi Tomato psyllids Tomato Russet mites	Low to moderate pest infestations: 8.0-12.0  Heavy pest infestations: 16.0  ADD a nonionic surfactant for best results	Use ground equipment in 20 or more gal water/A. Although aerial applications are permitted when this product is applied in 5 or more gal water/A, better control of target insects is obtained using ground applications. Users accept all liability for level and duration of mite control from aerial applications of this product.  Apply when insects first appear. Increased water volumes are required under certain situations (severe pest infestations, highly dense foliage, elevated temperatures) to ensure thorough foliage coverage.  If needed, a second application may be made but allow at least 7 days to elapse after the first application.  A non-ionic surfactant (not binder or sticker-types) used in combination with this product provides improved wetting of foliage and allows an even deposition of the spray.  Mites: For best control apply with ground equipment.  Broad, russet, and spider mites: Apply when mites first appear.  Thrips palmi: Apply when thrips are first observed.  Leafminers: Apply when adult flies are first observed  Potato Psyllids: Sequential application 10-14 days apart may be needed for infestations with heavy egg and nymph populations.  Potato Psyllids: Sequential application 10-14 days apart may be needed for infestations with heavy egg and nymph populations.	Pre-Harvest Interval – 7 days  To avoid insect resistance to this product, do not apply to vegetables grown for transplant.  DO NOT exceed 48 fl. oz/A per growing season.  DO NOT make more than 2 sequential applications.  Refer to additional directions on nonionic surfactants in the PRODUCT INFORMATION section.  DO NOT apply by air in the State of New York.  For resistance management, DO NOT use on fruiting vegetables grown for transplanting.
Tomato pinworms	16.0	made from the time moth activity is detected up to, but no later than, the time when newly emerged larvae are present.	

# BERRY AND SMALL FRUIT GRAPES

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/ Insecticide fl. oz./A	Application Instructions and Timing	Restrictions
Pacific spider mites Two-spotted spider mites Variegated leafhoppers* Western grapeleaf skeletonizers Western grape leafhoppers* Willamette spider mites  *Note: This product only provides Knockdown control of pest.	Low to moderate pest infestations: 8.0-12.0  Heavy pest infestations: 16.0  ADD a nonionic surfactant for best results	Use conventional ground application equipment in 50 gal or more of water/A to ensure thorough foliage coverage, or with electrostatic spray equipment in 5 gal or more of water/A.  Spider mites: Apply when mites first appear (or before more than 5 motiles per leaf are observed).  Western grapeleaf skeletonizer: Apply with a non-ionic surfactant when the larvae are initially seen. For best results, apply shortly after eggs hatch.  Leafhoppers: For contact knockdown control of these pests, apply with a non-ionic surfactant when pest first appears.  European Grapevine Moth: Apply to aid in control of first generation of pest on grapes.  Maximum coverage is required to control these pests, and this product must be applied to both sides of the rows. DO NOT spray alternate rows.  If needed, a second application may be made but allow at least 21 days to elapse after the first application.  A non-ionic (not binder or stickertype) surfactant must be used in combination with this product to provide improved wetting of foliage	DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.  Exception: For grape girdling cane turning, and tying in grapes. DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 days.  Pre-Harvest Interval – 28 days  DO NOT exceed 16 fl. oz/A per application or 32 fl. oz/A per growing season.  DO NOT make more than 2 applications per season.  DO NOT graze livestock in treated vineyards.  Refer to additional directions on nonionic surfactants in the PRODUCT INFORMATION section.
European Grapevine Moth ( <i>Lobesia</i> botrana)	10-16	and an even deposition of the spray.  It is impossible to test the safety of this product plus non-ionic surfactants on all grape varieties under the various conditions which lead to phytotoxicity. Therefore carefully follow the directions for use on the nonionic surfactant label.	<b>DO NOT</b> apply by air.

# HERB CROP SUBGROUP (CROP SUBGROUP 19A)

Some of the crops in this group include angelica, balm, basil, borage, burnet, camomile (or chamomile), catnip, chervil (dried), chives, chives (Chinese), cilantro (leaf), clary, coriander (leaf), costmary, culantro (leaf), curry (leaf), dill weed, horehound, hyssop, lavender, lemongrass, lovage (leaf), marigold, marjoram (*Origanum* species), nasturtium, parsley (dried), pennyroyal, rosemary, rue, sage, summer and winter savory, sweet bay, tansy, tarragon, thyme, wintergreen, woodruff, and wormwood.

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/ Insecticide fl. oz./A	Application Instructions and Timing	Restrictions	
		Apply using ground equipment using conventional dilute or concentrate	Pre-Harvest Interval for listed herbs except chive— 14 days.	
		sprayers.  Apply when adult leafminer flies first	<b>Pre-Harvest Interval for chives -</b> 7 days.	
	Low to moderate pest infestations:  8.0  appear using sufficient volumes (greater than 30 gal of water per acre) to ensure thorough foliage coverage.	DO NOT apply more than 6 applications of 8 fl. oz. of this product/A or 3 applications of 16 fl. oz. of this product/A per cropping		
Liriomyza leafminers Spider mites	Heavy pest infestations: 16.0	If needed, a second application may be made but allow at least 7 days to elapse after the first application.  A non-ionic surfactant (not binder or	season.  DO NOT make more than 2 applications per single cutting (harvest).	
	ADD a nonionic surfactant for best	sticker-types) used in combination with this product provides improved wetting of foliage and allows an even	sticker-types) used in combination	DO NOT apply by air.
	results		Refer to additional directions on nonionic surfactants in the <b>PRODUCT INFORMATION</b> section.	
			<b>DO NOT</b> graze livestock in treated fields or feed treated foliage to livestock.	

# **HOPS (EXCLUDING CALIFORNIA)**

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/ Insecticide fl. oz./A	Application Instructions and Timing	Restrictions
Two-spotted spider mites	8.0 (minimum)- 16.0 ADD a nonionic surfactant for best results	Use conventional ground application as dilute or concentrate sprays. Use sufficient volumes (greater than 40 gal of water/A) to ensure thorough foliage coverage. If trellis height is 6-8 feet, use 40 gal of water/A at the 8-16 fl. oz/A rate; if height is greater than 6-8 feet, use 100 gal/A at the 16 fl. oz/A rate.  Note that while concentrate sprays DO NOT require as much water, the amount of this product/A should be the same as for dilute sprays.  Apply when mites first appear. If needed, a second application may be made but allow at least 21 days to elapse after the first application and repeat application only after using an alternative miticide with a different mode of action.  A non-ionic surfactant (not binder or sticker-types) used in combination with this product provides improved wetting of foliage and allows an even deposition of the spray on the foliage.	Pre-Harvest Interval – 28 days  DO NOT exceed 16 fl. oz/A per application or 32 fl. oz/A per growing season.  DO NOT apply by air.  DO NOT apply more than 2 applications per growing season.  Refer to additional directions on nonionic surfactants in the PRODUCT INFORMATION section.  DO NOT graze livestock in treated hop yards.

# LEAFY VEGETABLE (Except Brassica Vegetables) CROP GROUP (CROP GROUP 4)

Some of the crops in this group include amaranth (leafy amaranth, Chinese spinach, tampala), arugula (roquette), cardoon, celery, celtuce, chervil, Chinese celery, chrysanthemum (edible leaved and garland), corn salad, cress (garden and upland (yellow rocket and winter cress)), dandelion, dock (sorrel), endive (escarole), fennel, Florence fennel, lettuce (head and leaf), New Zealand spinach, orach, parsley, purslane (garden and winter), radicchio (red chicory), rhubarb, spinach, Swiss chard and vine spinach.

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/ Insecticide fl. oz./A	Application Instructions and Timing	Restrictions
Carmine spider mites Liriomyza leafminers Two-spotted spider mites	Low to moderate pest infestations: 8.0-12.0  Heavy pest infestations: 16.0  ADD a nonionic surfactant for best results	Apply this product when mites or adult leafminer flies are observed and use ground equipment in 20 or more gal water/A. Although aerial applications are permitted when this product is applied in 5 or more gal water/A, better control of target insects is obtained using ground applications. Users accept all liability for level and duration of insect control from aerial applications of this product.  Spider mites: Apply when mites first appear, and repeat as needed to maintain control.  Leafminers: Apply when adult flies are first observed and repeat applications as needed to maintain control.  Increased water volumes are required under certain situations (severe pest infestations, highly dense foliage, elevated temperatures) to ensure thorough foliage coverage.  If needed, a second application may be made but allow at least 7 days to elapse after the first application.  A non-ionic surfactant (not binder or sticker-types) used in combination with this product provides improved wetting of foliage and allows an even deposition of the spray on the foliage.	Pre-Harvest Interval – 7 days  DO NOT exceed 48 fl. oz/A per growing season.  To avoid insect resistance to this product, do not apply to vegetables grown for transplants.  DO NOT make more than 2 sequential applications.  Refer to additional directions on nonionic surfactants in the PRODUCT INFORMATION section.  DO NOT apply by air in the State of New York.

# MINT (PEPPERMINT AND SPEARMINT)

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/ Insecticide fl. oz./A	Application Instructions and Timing	Restrictions
Two-spotted spider mites	8.0-12.0  ADD a nonionic surfactant for best results	Apply this product when mites first appear and use ground equipment in 20 or more gal water/A.  Although aerial applications are permitted when this product is applied in 5 or more gal water/A, better control of target insects is obtained using ground applications.  Users accept all liability for level and duration of insect control from aerial applications of this product.  Increased water volumes are required under certain situations (severe pest infestations, highly dense foliage, elevated temperatures) to ensure thorough foliage coverage.  If needed, a second application may be made but allow at least 7 days to elapse after the first application.  A non-ionic surfactant (not binder or sticker-types) used in combination with this product provides improved wetting of foliage and allows an even deposition of the spray on the foliage.	Pre-Harvest Interval – 28 days  DO NOT exceed 12 fl. oz./A per application or 36 fl. oz/A per growing season.  DO NOT make more than 2 sequential applications.  DO NOT apply by air in the State of New York.  Refer to additional directions on nonionic surfactants in the PRODUCT INFORMATION section.  DO NOT graze livestock in treated fields or feed treated foliage to livestock.

# ONION, BULB (CROP SUBGROUP 3-07A)

Some of the crops in this group are bulb onion, including bulb Chinese, bulb daylily, bulb fritillaria, bulb garlic, bulb great-headed garlic, bulb lily, bulb onion, pearl onion, potato onion, bulb serpent garlic, bulb shallot, cultivars, varieties, and/or hybrids of bulb onion, subgroup 3-07A.

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/Insecticide fl. oz./A	Application Instructions and Timing	Restrictions
Liriomyza leafminers Thrips	Low to moderate pest infestations: 8.0-12.0  Heavy pest infestations: 13.0-16.0	Do not apply in less than 20 gal. of water/A with ground application equipment. Do not apply in less than 5 gal. of water/A with aircraft. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.  Leafminers: Apply when adult leafminers first appear, and repeat as needed to maintain control within constraints of a sound resistance management program.  Thrips: Apply in a thrips management program and when thrips are at economic threshold. Repeat application, as needed, to maintain control within constraints of a sound resistance management program.  Do not use this product as a rescue treatment for trips control.  If needed, a second application may be made but allow at least 7 days to elapse after the first application.  Make 2 consecutive applications o then rotate to a chemistry with a different mode of action. Make at least 2 applications of a chemistry with a different mode of action before making additional applications of this product.	Pre-Harvest Interval – 30 days  DO NOT exceed 16 fl. oz/A per application.  DO NOT exceed 48 fl. oz/A per growing season.  DO NOT make more than 2 sequential applications.  Refer to additional directions on nonionic surfactants in the PRODUCT INFORMATION section.  DO NOT apply by air in the State of New York.

Note: Add a non-ionic activator type wetting, spreading and/or penetrating adjuvant approved for use on bulb onion. Do not use binder sticker type adjuvants. Tank mixing with products that have binder sticker type formulations can reduce performance of this product.

# STONE FRUIT CROP GROUP (CROP GROUP 12)

Some of the crops in this group include apricot, cherry (sweet and tart), nectarine, peach, plum, plum (chickasaw, damson, and Japanese), plumcot and prune (fresh).

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/Insecticide fl. oz./A (fl. oz./100 gal)	Application Instructions and Timing	Restrictions
European red mites Pacific spider mites Two-spotted spider mites	Concentrate Sprays: 10-20 fl. oz/A (Dilute Sprays: 2.5- 5.0 fl. oz./100 gal)  PLUS a horticultural oil or nonionic surfactant (required for optimum insect control)	Apply using conventional dilute or concentrate ground equipment.  Make applications when mites first are seen. Use sufficient volumes (greater than 40 gal of water/A) to ensure thorough foliage coverage.  If needed, a second application may be made but allow at least 21 days to elapse after the first application.  Always apply this product in combination with either a nonionic surfactant, or with horticultural spray oil (not a dormant oil), but use caution since oil may cause phytotoxicity to foliage and fruit.	Pre-Harvest Interval – 21 days  DO NOT exceed 20 fl. oz/A per application or 40 fl. oz/A per growing season.  DO NOT make more than 2 applications per season.  Refer to additional directions on spray oils and nonionic surfactants in the PRODUCT INFORMATION section.  See specific restrictions for this crop in the SPRAY DRIFT MANAGEMENT section of this label.  DO NOT apply by air.  DO NOT graze livestock in treated orchards.  Horticulture Spray Oil (NOT
			a dormant oil) 1 gal/A (minimum) (0.25%, v/v) Nonionic Surfactant – labeled rate

NOTE: Concentrate Spray rates (NUP-13026 Abamectin 0.15 Miticide/Insecticide/A) are determined by selecting the amount needed for a full cover dilute spray. The amount of NUP-13026 Abamectin 0.15 Miticide/Insecticide/A as a concentrate spray is the same amount as required for dilute sprays to the orchard and could be less than 10 fl oz. NUP-13026 Abamectin 0.15 Miticide/Insecticide/A for small trees. Rates of NUP-13026 Abamectin 0.15 Miticide/Insecticide/100 gal are based on 400 gal/A of dilute spray.

#### NOTE:

- 1) A nonionic surfactant that spreads on and/or penetrates the leaf cuticle can improve insect control. It is impossible to test on all stone fruit varieties under the variety of conditions that may cause crop injury. Therefore, when using NUP-13026 Abamectin 0.15 Miticide/Insecticide in combination with a non-ionic surfactant, carefully follow the **Directions for Use** and **Precautions** on the surfactant label and in official spray guides
- 2) A horticultural oil (not a dormant oil) may improve efficacy and may be used but it may increase the possibility of phytotoxicity to foliage and fruit.

# BERRY AND SMALL FRUIT STRAWBERRIES

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/Insecticide fl. oz./A	Application Instructions and Timing	Restrictions
		Apply using conventional ground equipment or electrostatic sprayers.	
Aphids Carmine mites Cyclamen mites Strawberry spider mites Thrips Two-spotted spider mites Whiteflies	16.0	Optimum coverage of the leaves (tops and bottoms) can be achieved by adjusting the spray volumes and placement of the nozzles.  Apply when mites first appear using sufficient volumes (greater than 50 gal of water/A for conventional sprayers, greater than 10 gal of water/A for electrostatic sprayers) to ensure thorough foliage coverage.  Make a second application at 7-10 day intervals. Repeat the two step application process, if needed, but only 21-days after the second application is made.  A non-ionic or silicone-based (not a sticker or binder type) surfactant used in combination with this product provides improved wetting of foliage and allows an even deposition of the spray.	Pre-Harvest Interval – 3 days  To avoid insect resistance to this product, do not apply to strawberries grown in nurseries.  DO NOT exceed 16 fl. oz/A per application or more than 64 fl. oz./A per growing season.  Refer to additional directions on nonionic surfactants in the PRODUCT INFORMATION section.  DO NOT apply by air.

# TREE NUTS CROP GROUP (CROP GROUP 14) AND PISTACHIO

Some of the crops in this group include almond, beech nut, Brazil nut, butternut, cashew, chestnut, chinquapin, filbert (hazelnut), hickory nut, macadamia nut, pecan, and walnuts (black and English).

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/Insecticide fl. oz./A (fl. oz./100 gal)	Application Instructions and Timing	Restrictions
European red mites Pacific spider mites Strawberry spider mites Two-spotted spider mites	Concentrate Sprays: 10-20 fl. oz/A  (Dilute Sprays: 2.5- 5.0 fl. oz./100 gal)  Plus  a horticultural spray oil (required for optimum insect control)	Apply using conventional dilute or concentrate ground equipment.  Use sufficient volumes (greater than 40 gal of water/A) to ensure thorough foliage coverage.  Apply this product when spider mites first appear. Greater residual spider mite control is achieved when spray is deposited on new foliage growth.  If needed, a second application may be made but allow at least 21 days to elapse after the first application.  To manage resistance, if pest infestation requires additional treatments, use other alternative insecticides with different modes of action which are labeled for use on these pests and crops.	Pre-Harvest Interval – 21 days  DO NOT exceed 20 fl. oz/A per application or 40 fl. oz/A per growing season.  DO NOT make more than 2 applications per season.  DO NOT apply by air.  Refer to additional directions on spray oils in the PRODUCT INFORMATION section.  See specific restrictions for this crop in the SPRAY DRIFT MANAGEMENT section of this label.  DO NOT graze livestock in treated orchards.  Horticultural Spray Oil (DO NOT use a dormant oil) 1 gal./A (minimum) (0.25%, v/v)

NOTE: Concentrate Spray rates (NUP-13026 Abamectin 0.15 Miticide/Insecticide/A) are determined by selecting the amount needed for a full cover dilute spray. The amount of NUP-13026 Abamectin 0.15 Miticide/Insecticide/A as a concentrate spray is the same amount as required for dilute sprays to the orchard and could be less than 10 fl oz. NUP-13026 Abamectin 0.15 Miticide/Insecticide/A for small trees. Rates of NUP-13026 Abamectin 0.15 Miticide/Insecticide/100 gal are based on 400 gal/A of dilute spray.

# TUBEROUS AND CORM VEGETABLES CROP SUBGROUP (CROP SUBGROUP 1 C)

Some of the crops in this group include arracacha, arrowroot, artichoke, Chinese artichoke, edible canna, Jerusalem artichoke, cassava (bitter and sweet), chayote (root), chufa, dasheen, ginger, leren, potato, sweet potato, tanier, turmeric, yam bean, and yam (true).

Target Insects	Application Rate of NUP-13026 Abamectin 0.15 Miticide/ Insecticide fl. oz./A	Application Instructions and Timing	Restrictions
		Apply using conventional ground or aerial application equipment.	Pre-Harvest Interval – 14
		Apply when mites and adult leafminer flies first	days
Colorado potato pes  Liriomyza  Leafminers		appear. Use sufficient volumes (greater than 20 gal of water/A for ground applications and greater than 5 gal of water/A for aerial applications) to ensure thorough foliage	DO NOT exceed 32 fl. oz/A per crop season for control of spider mites or Colorado potato beetle.
	Low to moderate pest infestations: 8.0-12.0 Heavy pest	coverage.  Colorado potato beetle: Begin applications when 50% of the egg masses have hatched or	<b>DO NOT</b> exceed 48 fl. oz/A per crop season for control of <b>leafminers</b> .
		larvae are observed. If a second application is made, ensure it is to control a single Colorado potato beetle generation.	DO NOT make more than 2 applications to control Colorado potato beetle per
Potato psyllids	infestations: 16.0	Liriomyza leafminers: Make the first application	crop season.
Spider mites		when adult flies are first observed. Repeat applications as needed to maintain control.	<b>DO NOT</b> make more than two sequential applications.
		<b>Spider mites:</b> Make the first application when mites first appear. Repeat application as needed to maintain control.	<b>DO NOT</b> apply by air in the State of New York.
		If needed, a second application may be made but allow at least 7 days to elapse after the first application.	Refer to additional directions on nonionic surfactants in the PRODUCT INFORMATION section.
		A non-ionic or silicone-based (not a sticker or binder type) surfactant used in combination with this product provides improved wetting of foliage and allows an even deposition of the spray.	DO NOT graze or feed treated foliage to livestock.

#### STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

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

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

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

**SPILLS:** For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire or other emergency, call 1-800-424-9300, day or night.

#### WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

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If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV081215)

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# **NUP-13026 MINX Miticide/Insecticide**

For Control of Leafminers and Mites and Suppression of Aphids, Whiteflies and Thrips on Ornamental Plants

ACTIVE INGREDIENT:		
Abamectin (CAS No.'s 65195-56-4 and 65195-55-3):		2.0%
OTHER INGREDIENTS:		98.0%
	TOTAL:	100.0%
*Contains 0.15 pounds Abamectin per gallon.		
[Contains VOC <20% EP; qualifies as "Low VOC" under California re	gulations]	

# KEEP OUT OF REACH OF CHILDREN CAUTION

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

SEE INSIDE LABEL BOOKLET FOR ADDITIONAL FIRST AID AND PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300 For Medical Emergencies Only, Call (877) 325-1840

EPA REG. NO. 228-EPA EST. NO.:

MANUFACTURED FOR NUFARM AMERICAS INC. 11901 South Austin Avenue Alsip, IL 60803



[Nufarm Grow a better tomorrow] [Grow a better tomorrow]		
NET CONTENTS	GALS.	(Liters)
000228.00TGU.20150812.draft		

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. For more options, follow the instructions for Category B on an EPA chemical-resistant category selection chart.

## Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof or Chemical-resistant gloves, such as barrier laminate or butyl rubber > 14 mils
- Socks plus shoes

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. **DO NOT** reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **USER SAFETY RECOMMENDATIONS**

#### Users should:

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

	FIRST AID				
	Call a poison control center or doctor immediately for treatment advice.				
If swallowed:	DO NOT give any liquid to the person.				
ii Swalloweu.	DO NOT induce vomiting unless told to do so by the poison control center or doctor.				
	DO NOT give anything by mouth to an unconscious person.				
	Hold eye open and rinse slowly and gently with water for 15-20 minutes.				
If in eyes:	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.				
	Call a poison control center or doctor for treatment advice.				
If on skin or	Take off contaminated clothing.				
clothing:	Rinse skin immediately with plenty of water for 15-20 minutes.				
ciotining.	Call a poison control center or doctor for treatment advice.				
	Move person to fresh air.				
If inhaled:	• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by				
ii iiiiiaicu.	mouth-to-mouth, if possible.				
	Call a poison control center or doctor for further treatment advice.				
LIGHT LINE NUMBER					

#### **HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

# NOTE TO PHYSICIAN

Early signs of intoxication include dilation of pupils, muscular incoordination, and muscle tremors. Toxicity following accidental ingestion of this product can be minimized by early administration of chemical adsorbents (e.g., activated charcoal). If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral fluid replacement therapy should be given, along with other required supportive measures (such as maintenance of blood pressure levels and proper respiratory functionality) as indicated by clinical signs, symptoms, and measurements.

In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since abamectin is believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic abamectin exposure.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and wildlife. **DO NOT** apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwater or rinsate. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. **DO NOT** apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

**ATTENTION:** This product contains chemicals known to the state of California to cause birth defects or other reproductive harm.

# **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 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof or Chemical-resistant gloves, such as barrier laminate or butyl rubber ≥ 14 mils
- 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.

DO NOT re-enter treated areas until sprays have dried.

# **GENERAL INFORMATION**

This product contains the active ingredient abamectin which mixes readily with water for control of leafminers and mites on ornamental plants. This product also acts to suppress whiteflies, thrips and aphids, is applied as a foliar spray and must be mixed in enough water to ensure thorough coverage of the foliage.

## [OPTIONAL TEXT FOR TIP-N-MEASURE CONTAINERS]

Use Directions for Tip-N-Measure Container:

- 7. Remove the measuring chamber cap and seal over container opening.
- 8. Replace the cap and securely tighten.
- 9. Tip the container until the measuring chamber contains the desired amount of product.
- 10. Return container to its level position.
- 11. Remove measuring chamber cap and pour product into proper application equipment.
- 12. Replace the cap and securely tighten.

# **Resistance Management**

To avoid development of resistance to this product, use resistance management practices. A number of options exist to prevent resistance including the use of other insecticides/miticides with different modes of action, alternating the use of the same product in treating successive generations of insects, applying at the use rate and spray intervals specified on the product label, non-chemical alternatives, rotation of susceptible to non-susceptible plants, etc. Consult your State Cooperative Extension Service for assistance with these or other resistance management strategies.

*Liriomyza* leafminers resistance can be managed by making three applications of this product followed by three applications of a registered alternative insecticide with a different mode of action; then return to making this product or an alternate insecticide. Rotation of insecticides should be timed so that this product is not applied to successive generations of this pest.

#### RESTRICTIONS

- Roses, chrysanthemums, and gerbera are primary hosts of mites and *Liriomyza* leafminers which this product effectively controls. Attempts to use this product to suppress aphids, thrips, and whiteflies on ornamental plants leads to resistance in mites and *Liriomyza* leafminers.
- DO NOT apply this product through any type of irrigation system.
- DO NOT apply by air.
- DO NOT use in citrus nurseries.
- Testing of this product has shown it to be safe on many ornamental species. However, this product is not specified
  for use on ferns (e.g., Adiantum spp.) or Shasta Daisy (L. eucanthemum spp.) to avoid the possibility of phytotoxicity.

Although this product has been found to be safe to use on most ornamental species, it is not possible to test all possible spray combinations of this product mixed with different adjuvants and surfactants. Spray mixtures should be tested by applying to a few plants and evaluating the ornamentals for phytotoxicity prior to using that spray mixture on a commercial scale.

# DIRECTIONS FOR USE ON SHADEHOUSE, GREENHOUSE, AND FIELD-GROWN ORNAMENTALS, FOLIAGE PLANTS. CHRISTMAS TREES, AND OTHER WOODY ORNAMENTAL PLANTS

Pests	Application Rate of NUP-13026 Minx Miticide/Insecticide (fl. oz./100 gallons of water)	Application Timing	Application Dilutions
European red mite Carmine spider mite Eriophyid mites (rust and bud mites) Southern red mite Spruce spider mite Tarsonemid mites (cyclamen &	4.0	Apply this product when mites first appear. Make repeat applications as needed for control of pest.  Apply this product when leafminers appear and repeat applications at 7-day intervals or as needed to maintain control.	Apply this product in 200-400 gallons of water per acre. If the water volume must be greater for sufficient foliage coverage (ex., 650 gal.), use 2.5 fl. oz. per 100 gallons.  Mix a minimum of 8 fl. oz of this product per Acre when water volumes are less than 200 gallons.
broad mites) Two-spotted spider mite		Control of Tarsonemid mites requires repeat applications to newly developing foliage.	Mix a minimum of 16 fl. oz of this product per Acre when water volumes are more than 400 gallons.
Liriomyza Leafminers		Repeat at 7-day intervals or as necessary to maintain control.	
Boxwood leafminer		Apply when adults begin to lay eggs in the new foliage.	Apply this product in 100-200 gallons of
Aphids, Thrips and Whiteflies	8.0	Suppression of immature stages of these pests requires direct contact with the spray of this product.  Make repeat applications at 7-day intervals for up to three weeks.  Then use insecticides with modes of action different from this product for up to three weeks.  Direct contact of the spray of this product can kill aphids, thrips and whiteflies.	water per acre. If the water volume must be greater for sufficient foliage coverage (ex., 400 gal.), use 4.0 fl. oz. per 100 gallons.  Mix a minimum of 8 fl. oz of this product per Acre when water volumes are less than 100 gallons.  Mix a minimum of 16 fl. oz of this product per Acre when water volumes are more than 200 gallons.

**NOTE: DO NOT** apply less than specified amount of this product. Mix with a sufficient volume of water to ensure thorough coverage of the plant. Read the section above on **Resistance Management** and comply with all label restrictions.

Addition of horticultural spray oil at concentrations of between 0.5 and 1.0% of the spray volume prolongs control of target pests infesting field-grown woody ornamentals, landscape plants and Christmas trees. Make repeat applications as necessary at 7-day intervals to maintain control. To avoid damage to plants which are sensitive to oils, apply the spray mixture to a small number of plants and observe plants for two weeks before making applications on a large scale. Plants can also be damaged when using spray oils when temperature extremes occur. Carefully read and follow directions on the oil label. **DO NOT** exceed maximum use rates listed on either label.

# **BACKYARD FRUIT AND NUT USE DIRECTIONS**

# Apple, Pears (including Oriental pear trees)

Target Insects	Application Rate of NUP-13026 Minx Miticide/Insecticide fl. oz./A (fl. oz./100 gal)	Application Instructions and Timing	Restrictions
European red mites McDaniel spider mites Pear rust mites Pear psyllas Tentiform leafminers Two-spotted spider mites White apple leafhoppers Yellow mites	Concentrate Sprays: 10-20 fl. oz/A (Dilute Sprays: 2.5- 5.0 fl. oz./100 gal)  ADD a horticultural oil for best results	Apply using conventional dilute or concentrate ground equipment.  Use sufficient volumes (greater than 40 gal of water/A) to ensure thorough foliage coverage.  Spider Mites: Apply when mites first appear. For best results, apply before 5 spider mites per leaf is observed. Spray deposits of this product plus a horticultural spray oil on new foliage growth provides greater residual control. Apply this product for spider mite control only during petalfall and up to six weeks following petalfall.  Tentiform Leafminers: For best results, apply to control new hatch (eggs) and early stages of first and second generation leafminers. DO NOT apply during bloom.  White Apple Leafhopper (Not for use west of the Rocky Mountains): Apply this product only to the first generation soon after petalfall; use in combination with horticultural spray oil.  Application without horticultural spray oil may result in reduced efficacy and/or residual control. However, fruit injury to certain apple varieties (on light-skinned varieties such as Golden Delicious) may occur with this combination of this product and spray oil if other products are applied after this spray mix application. Refer to the Directions for Use and Precautions on horticultural spray oil labels.  If needed, a second application may be made but allow at least 21 days to elapse after the first application.	Pre-Harvest Interval – 28 days  DO NOT exceed 20 fl. oz/A per application or 40 fl. oz/A per growing season.  DO NOT apply this product to control white apple leafhopper west of the Rocky Mountains.  DO NOT make more than 2 applications per season.  DO NOT apply by air.  Refer to additional directions on spray oils in the PRODUCT INFORMATION section.  See specific restrictions for this crop in the SPRAY DRIFT MANAGEMENT section of this label.  To avoid phytotoxicity or loss of crop, do not apply this product plus oil if Captan was applied 14 days before the application or if Captan will be applied 14 days after application.  DO NOT graze livestock in treated orchards.  Horticultural Spray Oil (DO NOT use on a dormant oil). 1 gal./A (minimum) (0.25%, v/v)
		artor the met application.	

NOTE: Concentrate Spray rates (NUP-13026 Minx Miticide/Insecticide/A) are determined by selecting the amount needed for a full cover dilute spray. The amount of NUP-13026 Minx Miticide/Insecticide/A as a concentrate spray is the same amount as required for dilute sprays to the orchard and could be less than 10 fl oz. NUP-13026 Minx Miticide/Insecticide/A for small trees. Rates of NUP-13026 Minx Miticide/Insecticide/100 gal are based on 400 gal/A of dilute spray.

## **AVOCADOS**

Target Insects	Application Rate of NUP-13026 Minx Miticide/Insecticide fl. oz./A	Application Instructions and Timing	Restrictions
Avocado thrips (Scirtothrips perseae) Persea Mites (Oligonychus perseae)	DO NOT use less than 10 fl. oz. of this product per Acre  Low to moderate insect infestations: 10.0-15.0 Heavy pest infestations: 15.0-20.0  ADD a horticultural oil for best results	Apply using ground equipment in 100 or more gal water/A. If using 400 gal/A or more, apply 2.5 fl. oz. of this product/100 gal of water and 1.0-4.0% of NR (narrow range) 415 oil.  Although aerial applications are permitted when this product is applied in 50 or more gal water/A, better control of target insects is obtained using ground applications. Users accept all liability for level and duration of thrip control from aerial applications of this product.  Apply this product when thrips first appear but prior to finding 5 immature thrips per leaf or fruit. For low to moderate infestations, include 1.0-4.0% of NR 415 oil in combination with this product and the horticultural spray oil	Pre-Harvest Interval – 14 days  DO NOT make more than 2 applications per season.  DO NOT exceed 20 fl. oz/A per application or more than 40 fl. oz./A per season.  DO NOT allow livestock to graze in treated orchards.  Refer to additional directions on spray oils in the PRODUCT INFORMATION section.  Horticultural Spray Oil (DO NOT use a dormant oil), minimum 1 to 4%, v/v
		approved for use on avocados.  If needed, a second application may be made but allow at least 30 days to elapse after the first application.	(minimum)

# NOTE:

- Low infestations are defined as 1-2 immature thrips per leaf/fruit
- Moderate infestations are defined as 2-4 thrips per leaf/fruit;

Heavy/severe infestations are defined as more than 5 thrips per leaf/fruit.

NOTE: To prevent crop injury, observe all precautions and restrictions on the oil label. When using oil concentrations above 2.0%, treat a small test area before making a large-scale application.

# **CITRUS FRUIT CROP**

Some of the crops in this group include calamondin, citrus citron, citrus hybrids (includes chironja, tangelo, tangor), grapefruit, kumquat, lemon, lime, mandarin (tangerine), pummelo, Satsuma mandarin, sour orange, and sweet orange.

Target Insects	Application Rate NUP-13026 Minx Miticide/Insecticide fl. oz./A (fl. oz./100 gal)	Application Instructions and Timing	Restrictions
Broad mites Citrus bud mites Two-spotted spider mites  Concentrate Sprays 10-20 fl. oz/A (Dilute Sprays: 1.0 2.0 fl. oz./100 gal)		Apply using conventional dilute or concentrate	Pre-Harvest Interval  – 7 days  To avoid insect resistance to this product, do not apply to citrus grown in
Citrus rust mites	Concentrate Sprays: 5-20 fl. oz/A (Dilute Sprays: 0.5- 2.0 fl. oz./100 gal)	ground equipment.  Use sufficient volumes (greater than 40 gal of water/A) to ensure thorough foliage coverage.  ADD a horticultural oil for best results  Asian citrus psylla: Apply to protect newly expanding foliage flush during the spring, summer or fall. NUP-13026 Minx will only control adults and nymphs present at the time of application.	nurseries.  DO NOT apply this product, or any other abamectin containing product within 30 days of the last treatment.  DO NOT exceed 40 fl. oz/A (0.047 lb.
Citrus leafminers	Concentrate Sprays: 5-20 fl. oz/A (Dilute Sprays: NR)	Mites: Apply when mites first appear during spring, summer, and/or fall.  Citrus bud mite: For best results, time the spray at "bud swell".  Citrus leafminer: Apply to protect new growth during spring, summer, or fall.  Citrus thrips: Application targeted for citrus thrips will only control the current generation and must be correctly timed. Apply when economic thresholds	a.i./A) of this product, or any other abamectin containing product per growing season.  DO NOT make more than 3 applications of this product, or any other abamectin containing product per growing season.
Asian citrus psyllids Citrus thrips	Concentrate Sprays: 10-20 fl. oz/A (Dilute Sprays: NR)	have been reached (after egg hatch has begun - preferably early to mid-hatch).  For Asian citrus psylla, broad mites, citrus leafminers and citrus rust mites optimum results are achieved if spray applications are made at 150-300 gals. Spray mixture/A plus a minimum of 3 gal./A of horticultural oil. Apply with a ground speed of 1 to 1.5 mph.	Ivestock to graze in treated orchards.  Refer to additional directions on spray oils in the PRODUCT INFORMATION section.
Horticultural Spray Oil ( <b>DO</b> <b>NOT</b> use a dormant oil)	1 gal./A (minimum) (0.20%, v/v); see specific rates for certain pests under Application Instructions and Timing	To control <b>citrus leafminer</b> -Ground or aerial application is permitted: however, do not apply with aircraft to citrus in California. For Aerial application use a minimum of 10 gallons of finished spray volume per acre. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures) use a greater volume of water to insure adequate coverage.  To manage resistance, if pest infestation requires additional treatments, use other alternate insecticides with different modes of action which are labeled for use on these pests and crops.	See specific restrictions for this crop in the SPRAY DRIFT MANAGEMENT section of this label.  For all other pests besides to control citrus leafminer - DO NOT apply by air.  Horticultural Spray Oil (DO NOT use a dormant oil) 1 gal./A (minimum) (0.20%); see specific rates for certain pests under Application Instructions and

Target Insects	Application Rate NUP-13026 Minx Miticide/Insecticide fl. oz./A (fl. oz./100 gal)	Application Instructions and Timing	Restrictions
			Timing.

NR = Not recommended.

NOTE: Concentrate Spray rates (NUP-13026 Minx Miticide/Insecticide /A) are adjusted to apply the amount/A equal to that used in full cover dilute spray. The amount of NUP-13026 Minx Miticide/Insecticide/A as a concentrate spray is the same amount as required for dilute sprays to the orchard and could be less than 10 fl oz. NUP-13026 Minx Miticide/Insecticide/A for small trees. Rates of NUP-13026 Minx Miticide/Insecticide/100 gal are based on 1,000 gal/A of dilute spray.

# STONE FRUIT CROP GROUP (CROP GROUP 12)

Some of the crops in this group include apricot, cherry (sweet and tart), nectarine, peach, plum, plum (chickasaw, damson, and Japanese), plumcot and prune (fresh).

Target Insects	Application Rate of NUP-13026 Minx Miticide/Insecticide fl. oz./A (fl. oz./100 gal)	Application Instructions and Timing	Restrictions
European red mites Pacific spider mites Two-spotted spider mites	Concentrate Sprays: 10-20 fl. oz/A (Dilute Sprays: 2.5- 5.0 fl. oz./100 gal)  PLUS a horticultural oil or nonionic surfactant (required for optimum insect control)	Apply using conventional dilute or concentrate ground equipment.  Make applications when mites first are seen. Use sufficient volumes (greater than 40 gal of water/A) to ensure thorough foliage coverage.  If needed, a second application may be made but allow at least 21 days to elapse after the first application.  Always apply this product in combination with either a nonionic surfactant, or with horticultural spray oil (not a dormant oil), but use caution since oil may cause phytotoxicity to foliage and fruit.	Pre-Harvest Interval – 21 days  DO NOT exceed 20 fl. oz/A per application or 40 fl. oz/A per growing season.  DO NOT make more than 2 applications per season.  Refer to additional directions on spray oils and nonionic surfactants in the PRODUCT INFORMATION section.  See specific restrictions for this crop in the SPRAY DRIFT MANAGEMENT section of this label.  DO NOT apply by air.  DO NOT graze livestock in treated orchards.  Horticulture Spray Oil (NOT a dormant oil) 1 gal/A (minimum) (0.25%, v/v)  Nonionic Surfactant – labeled rate

NOTE: Concentrate Spray rates (NUP-13026 Minx Miticide/Insecticide/A) are determined by selecting the amount needed for a full cover dilute spray. The amount of NUP-13026 Minx Miticide/Insecticide/A as a concentrate spray is the same amount as required for dilute sprays to the orchard and could be less than 10 fl oz. NUP-13026 Minx Miticide/Insecticide/A for small trees. Rates of NUP-13026 Minx Miticide/Insecticide/100 gal are based on 400 gal/A of dilute spray.

## NOTE:

- A nonionic surfactant that spreads on and/or penetrates the leaf cuticle can improve insect control. It is impossible to test on all stone fruit varieties under the variety of conditions that may cause crop injury. Therefore, when using NUP-13026 Minx in combination with a non-ionic surfactant, carefully follow the Directions for Use and Precautions on the surfactant label and in official spray guides
- 2) A horticultural oil (not a dormant oil) may improve efficacy and may be used but it may increase the possibility of phytotoxicity to foliage and fruit.

# TREE NUTS CROP GROUP (CROP GROUP 14) AND PISTACHIO

Some of the crops in this group include almond, beech nut, Brazil nut, butternut, cashew, chestnut, chinquapin, filbert (hazelnut), hickory nut, macadamia nut, pecan, and walnuts (black and English).

Target Insects	Application Rate of NUP-13026 Minx Miticide/Insecticide fl. oz./A (fl. oz./100 gal)	Application Instructions and Timing	Restrictions
<b>.</b>	Concentrate Sprays: 10-20 fl. oz/A	Apply using conventional dilute or concentrate ground equipment.	Pre-Harvest Interval – 21 days
European red mites Pacific spider mites	(Dilute Sprays: 2.5- 5.0 fl. oz./100 gal)	Use sufficient volumes (greater than 40 gal of water/A) to ensure thorough foliage	<b>DO NOT</b> exceed 20 fl. oz/A per application or 40 fl. oz/A per growing season.
Strawberry		coverage.  Apply this product when spider	<b>DO NOT</b> make more than 2 applications per season.
spider mites Two-spotted	Plus	mites first appear. Greater	DO NOT apply by air.
spider mites	a horticultural spray oil (required for	residual spider mite control is achieved when spray is deposited on new foliage growth.	Refer to additional directions on spray oils in the <b>PRODUCT INFORMATION</b> section.
	optimum insect control)	If needed, a second application may be made but allow at least	See specific restrictions for this crop in the SPRAY DRIFT MANAGEMENT section of this label.
		21 days to elapse after the first application.	DO NOT graze livestock in treated orchards.
Horticultural Spray Oil ( <b>DO</b> <b>NOT</b> use a dormant oil)	1 gal./A (minimum) (0.25%, v/v)	To manage resistance, if pest infestation requires additional treatments, use other alternative insecticides with different modes of action which are labeled for use on these pests and crops.	Horticultural Spray Oil ( <b>DO NOT</b> use a dormant oil), 1 gal./A (minimum) (0.25%, v/v)

NOTE: Concentrate Spray rates (NUP-13026 Minx Miticide/Insecticide/A) are determined by selecting the amount needed for a full cover dilute spray. The amount of NUP-13026 Minx Miticide/Insecticide/A as a concentrate spray is the same amount as required for dilute sprays to the orchard and could be less than 10 fl oz. NUP-13026 Minx Miticide/Insecticide/A for small trees. Rates of NUP-13026 Minx Miticide/Insecticide/100 gal are based on 400 gal/A of dilute spray.

## **Cucurbit Vegetables Crop Group (Crop Group 9)**

Crops in this group are: Chayote, Chinese waxgourd, Citron Melon, Cucumber, Gherkin, Edible Gourd, (includes hyotan, cucuzza, hechima, Chinese okra); Momordica spp., (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); Muskmelon (hybrids and/or cultivars of Cucumis melo) includes true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon), Pumpkin, Summer Squash (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini), Winter Squash (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash), Watermelon (includes hybrids and/or varieties of Citrullus lanatus).

# For Control of Leafminers and Spider Mites

Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control. For best control of mites, apply NUP-13026 Minx Miticide/Insecticide with ground application equipment.

Pest	fl. oz./A.	Instructions
Leafminers Spider Mites	8.0-16.0	<ul> <li>Use 8 - 12 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations.</li> <li>Apply when adult leafminer flies or spider mites are first observed and repeat application, as necessary to maintain control within constraints of a sound resistance management program. (See Use Restrictions.)</li> </ul>

<sup>&</sup>lt;sup>a</sup> The rate of NUP-13026 Minx Miticide/Insecticide per 100 gal. is based on a volume of 400 gal./A dilute spray.

# **Use Restrictions - Cucurbit Vegetables Crop Group**

- PHI: Do not apply within 7 days of harvest.
- Application Method: Ground or aerial application is permitted; however, do not apply with aircraft in New York State.
- Maximum Amount per Application: Do not apply more than 16 fl oz./A (or 0.019 lb. a.i./A) of NUP-13026 Minx Miticide/Insecticide or any other foliarly applied abamectin-containing product per application.
- Application Interval: Wait at least 7 days before repeating application.
- Number of Applications: Do not make more than 2 sequential applications of NUP-13026 Minx Miticide/Insecticide or any other foliarly applied abamectin-containing product.
- Maximum Amount per Season: Do not apply more than 48 fl. oz./A (or 0.056 lb. a.i./A) of NUP-13026 Minx Miticide/Insecticide or any other foliarly applied abamectin-containing product in a growing season.

## Fruiting Vegetables (except Cucurbits) Crop Group (Crop Group 8)

Crops in this group are: Eggplant, Groundcherry, Pepino, Peppers (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper), Tomatillo, and Tomato

For control of Broad mite, Colorado potato beetle, Liriomyza leafminers, Spider mites, Thrips palmi, Tomato pinworm, Tomato psyllid, and Tomato russet mite.

Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control. For best control of mites, apply NUP-13026 Minx Miticide/Insecticide with ground application equipment.

Pest	For Dilute Sprays	Instructions
	fl. oz./100 gal.	
Broad mite Colorado potato beetle Liriomyza leafminers Spider mites Thrips palmi Tomato psyllid Tomato russet mite	2.5-4.0	<ul> <li>Broad, russet, and spider mites: Apply when mites first appear.</li> <li>Thrips palmi: Apply when thrips are first observed.</li> <li>Tomato pinworm: Application may be made from the time moth activity is detected up to, but no later than, the time</li> </ul>
		<ul><li>when newly emerged larvae are present.</li><li>Mites, leafminers, Thrips palmi, and Colorado potato</li></ul>
Tomato pinworm	4.0	beetle: Use 8 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations.
		Repeat application as necessary to maintain control.  (See Use Restrictions.)
		• Note: NUP-13026 Minx Miticide/Insecticide may be used without a wetting agent. Spreading and penetrating surfactants can improve insect control when necessary to improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant is recommended. Do not use binder or sticker-type surfactants.

The rate of NUP-13026 Minx Miticide/Insecticide per 100 gal. is based on a volume of 400 gal./A dilute spray.

## **Use Restrictions - Fruiting Vegetables Crop Group**

- PHI: Do not apply within 7 days of harvest.
- Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to insure adequate coverage.
- Maximum Amount per Application: Do not apply more than 16 fl. oz./A (or 0.019 lb. a.i./A) of NUP-13026 Minx Miticide/Insecticide or any other foliarly applied abamectin-containing product per application.
- Application Interval: Wait at least 7 days before repeating application.
- Number of Applications: Do not make more than 2 sequential applications of NUP-13026 Minx Miticide/Insecticide or any other foliarly applied abamectin-containing product.
- Maximum Amount per Season: Do not apply more than 48 fl. oz./A (or 0.056 lb. a.i./A) of NUP-13026 Minx Miticide/Insecticide or any other foliarly applied abamectin-containing product in a growing season.

# HERB CROP SUBGROUP (CROP SUBGROUP 19A)

Some of the crops in this group include angelica, balm, basil, borage, burnet, camomile (or chamomile), catnip, chervil (dried), chives, chives (Chinese), cilantro (leaf), clary, coriander (leaf), costmary, culantro (leaf), curry (leaf), dill weed, horehound, hyssop, lavender, lemongrass, lovage (leaf), marigold, marjoram (*Origanum* species), nasturtium, parsley (dried), pennyroyal, rosemary, rue, sage, summer and winter savory, sweet bay, tansy, tarragon, thyme, wintergreen, woodruff, and wormwood.

Target Insects	Application Rate of NUP-13026 Minx Miticide/Insecticide fl. oz./A	Application Instructions and Timing	Restrictions
Liriomyza leafminers Spider mites	Low to moderate pest infestations: 8.0  Heavy pest infestations: 16.0  ADD a nonionic surfactant for best results	Apply using ground equipment using conventional dilute or concentrate sprayers.  Apply when adult leafminer flies first appear using sufficient volumes (greater than 30 gal of water per acre) to ensure thorough foliage coverage.  If needed, a second application may be made but allow at least 7 days to elapse after the first application.  A non-ionic surfactant (not binder or sticker-types) used in combination with this product provides improved wetting of foliage and allows an even deposition of the spray on the foliage.	Pre-Harvest Interval for listed herbs except chive— 14 days.  Pre-Harvest Interval for chives - 7 days.  DO NOT apply more than 6 applications of 8 fl. oz. of this product/A or 3 applications of 16 fl. oz. of this product/A per cropping season.  DO NOT make more than 2 applications per single cutting (harvest).  DO NOT apply by air.  Refer to additional directions on nonionic surfactants in the PRODUCT INFORMATION section.  DO NOT graze livestock in treated fields or feed treated foliage to livestock.

## STORAGE AND DISPOSAL

**DO NOT** contaminate water, food, or feed by storage or disposal.

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

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

**CONTAINER DISPOSAL:** Nonrefillable container. **DO NOT** reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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