

09/04/2013

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

Carrie Tackema  
Cleary Chemicals, LLC  
11901 South Austin Ave.  
Alsip, IL 60803

SEP 04 2013

Subject: Label and formulation amendment  
Product Name: Minx Ornamental Miticide/Insecticide  
EPA Registration No. 1001-83  
Submission Date: April 16, 2013  
Decision Number: # 477778

Dear Carrie Tackema,

The labeling referred to above, submitted under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable. Submit two copies of your final printed labeling before you release the product for shipment. A stamped copy is enclosed for your records. Please note that the record for this product currently contains the following CSF's:

- Basic Formulation dated 4/16/2013
- Alternate CSF 1 dated 4/16/2013
- Alternate CSF 2 dated 4/16/2013
- Alternate CSF 3 dated 4/16/2013
- Alternate CSF 4 dated 4/16/2013
- Alternate CSF 5 dated 4/16/2013

Any previously dated CSFs are superseded. If you have any questions, please contact Jessica Rogala at 703-347-0263 or [rogala.jessica@epa.gov](mailto:rogala.jessica@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Reuben Baris", written over a horizontal line.

Reuben Baris  
Acting Product Manager 07  
Insecticide-Rodenticide Branch  
Registration Division (7505P)

GROUP 6 INSECTICIDE

# MINX

## ORNAMENTAL 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%

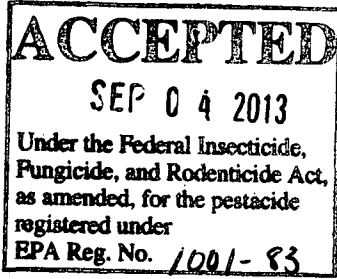
\*Contains 0.15 pounds Abamectin per gallon.

**KEEP OUT OF REACH OF CHILDREN  
WARNING/AVISO**

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. 1001-83  
EPA EST. NO. \_\_\_\_\_

MANUFACTURED FOR  
CLEARY CHEMICALS, LLC  
11901 S. AUSTIN AVE.  
ALSIP, IL 60803



NET CONTENTS \_\_\_\_\_ GALS. ( \_\_\_\_\_ Liters)

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
WARNING**

May be fatal if swallowed. Causes substantial but temporary eye injury. Harmful if absorbed through the skin. Harmful if inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing spray mist or vapor. Wear protective eyewear (goggles, face shield, safety glasses) long sleeved shirt, long pants, shoes, socks and chemical resistant gloves (barrier laminate, butyl rubber, selection category B).

**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:**

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves, such as barrier laminate or butyl rubber ≥ 14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing, or loading
- For shadehouse and greenhouse uses, applicators and other handlers must wear a dust/mist filtering NIOSH approved respirator with any R, P, or HE filter.

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**

<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor.</li> <li>• <b>DO NOT</b> induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• <b>DO NOT</b> give any liquid to the person.</li> <li>• <b>DO NOT</b> give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <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>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <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>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <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>

**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.

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.

**PHYSICAL OR CHEMICAL HAZARDS**

**DO NOT** use or store near heat or open flame. Do not mix or allow coming in contact with oxidizing agent, water and 10% monoammonium phosphate. Hazardous chemical reaction may occur.

**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 over short-sleeved shirt and short pants
- Chemical-resistant gloves, such as barrier laminate or butyl rubber  $\geq$  14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

**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:

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.

**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. eucantherum* 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	Product Application Rate (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 & broad mites) Two-spotted spider mite	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.  Control of Tarsonemid mites requires repeat applications to newly developing foliage.	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.  Mix a minimum of 16 fl. oz of this product per Acre when water volumes are more than 400 gallons.
<i>Liriomyza</i> Leafminers	8.0	Repeat at 7-day intervals or as necessary to maintain control.	Apply this product in 100-200 gallons of 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.
Boxwood leafminer		Apply when adults begin to lay eggs in the new foliage.	
Aphids, Thrips and Whiteflies		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	

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	product can kill aphids, thrips and whiteflies.	
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**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.

**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.

**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.

(RV082813)

LABEL HISTORY

File Name	Revision Mark	Comment
001001-00083.20130416.EPA Amendment	RV041613	EPA Amendment (228-657)
001001-00083.20130821.EPA Amendment	RV082113	EPA required changes
001001-00083.20130828.EPA Amendment	RV082813	EPA required changes