

# LUCID®

## ORNAMENTAL MITICIDE/INSECTICIDE

ABAMECTIN GROUP 6 INSECTICIDE

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

For injection into ornamental and non-crop bearing trees and woody shrubs in nurseries, greenhouses, interior and exterior plantscapes, and in private, municipal, state, and national forested areas for control of mites, suppression and control of certain insects, and for prevention of pine wilt nematode.

### ACTIVE INGREDIENT:

Abamectin (CASRN: 65195-55-3 and 65195-56-4)..... 2.0%\*

OTHER INGREDIENTS: ..... 98.0%

TOTAL: ..... 100.0%

\*0.15 lb. 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 label booklet for additional First Aid, Precautionary Statements, Directions For Use, and Storage and Disposal.

EPA Reg. No. 83100-5-83979

Distributed by:

ROTAM NORTH AMERICA, INC.

4900 Koger Blvd., Suite #220

Greensboro, NC 27407

1-866-927-6826

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Net Contents: 1 Gallon

PRODUCT OF CHINA



# TABLE OF CONTENTS

	<b>Page</b>
<b>FIRST AID</b>	2
<b>PRECAUTIONARY STATEMENTS</b>	4
<b>PERSONAL PROTECTIVE EQUIPMENT</b>	5
<b>ENVIRONMENTAL HAZARDS</b>	6
<b>PHYSICAL OR CHEMICAL HAZARDS</b>	6
<b>DIRECTIONS FOR USE</b>	7
<b>AGRICULTURAL USE REQUIREMENTS</b>	7
<b>NON-AGRICULTURAL USE REQUIREMENTS</b>	8
<b>RESISTANCE MANAGEMENT</b>	8
<b>FOLIAR APPLICATION TO SHADEHOUSE, GREENHOUSE, FIELD-GROWN ORNAMENTALS, FOLIAGE PLANTS, CHRISTMAS TREES AND OTHER WOODY ORNAMENTALS</b>	11
<b>SPRAY DRIFT</b>	12
<b>RESTRICTIONS</b>	14
<b>TREE INJECTION APPLICATIONS</b>	15
<b>STORAGE AND DISPOSAL</b>	18
<b>CONDITIONS OF SALE AND</b>	
<b>LIMITATION OF WARRANTY AND LIABILITY</b>	19

## **FIRST AID (Avermectin B<sub>1</sub>)**

### **IF IN EYES**

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for further treatment advice.

### **IF SWALLOWED**

- Call poison control center or doctor for treatment advice.
- Do not induce vomiting unless told to do so by the poison control center or doctor.
- Have person sip a glass of water if able to swallow.
- Do not give anything by mouth to an unconscious person.

### **IF INHALED**

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
- Call poison control center or doctor for treatment advice.

### **IF ON SKIN OR CLOTHING**

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for further treatment advice.

### **Note to Physician:**

**Recommendations for Medical Treatment for LUCID (Avermectin B<sub>1</sub>) Acute Toxicity:** Early signs of intoxication include mydriasis (dilated pupils), ataxia (unsteadiness) and muscle tremors. Toxicity following accidental ingestion of the concentrate can be minimized by inducing vomiting within one-half hour of exposure.

**FIRST AID (Avermectin B<sub>1</sub>) / Note to Physician** (Continued)

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) 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 avermectin 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 avermectin exposure.

**(Avermectin B<sub>1</sub>)**

Have the product container or label with you when calling a poison control center or doctor or going for treatment. **For Medical Emergency treatment call your local Poison Control Center for assistance.**

## **PRECAUTIONARY STATEMENTS**

### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

WARNING. Causes substantial but temporary eye injury. Harmful if swallowed. Harmful if inhaled. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear protective eyewear (goggles or faceshield). Do not get in eyes, on skin, or on clothing. Do not breathe spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

This product contains a chemical (N-methyl pyrrolidone) known to the state of California to cause birth defects or other reproductive harm.

## **PERSONAL PROTECTIVE EQUIPMENT**

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

### **Applicators and other handlers must wear:**

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves - EPA chemical resistance category B (e.g. barrier laminate or butyl rubber > 14 mils)
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical resistant apron when mixing, loading, or cleaning equipment
- For shadehouse and greenhouse use, applicators and other handlers must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any R or P filter; OR a NIOSH-approved powered air purifying respirator with HE filters.

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, 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 clothes immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

## **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 wash water 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.

## **PHYSICAL OR CHEMICAL HAZARDS**

Do not use or store near heat or open flame.

## DIRECTIONS OF USE

It is a violation of Federal (U.S.A.) 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 – EPA chemical resistance category B (e.g. 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.**

### **Resistance Management**

For resistance management, **Lucid** contains a Group 6 insecticide. Any insect or mite population may contain individuals naturally resistant to **Lucid** and other Group 6 insecticides/acaricides. The resistant individuals may dominate the insect or mite population if this group of insecticides/acaricides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide/acaricide resistance, take the following steps:

- Rotate the use of **Lucid** or other Group 6 insecticides/acaricides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides/acaricides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).

- Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
- The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.

To manage susceptibility in *Liriomyza* leafminer species, apply a maximum of three applications of **Lucid** and then rotate to Citation® for a maximum of three applications, before rotating back to **Lucid** or using another product. The rotation between these two products with different modes of action should be based on the generation time of *Liriomyza* species to avoid applying **Lucid** to successive generations.

### **Foliar Application**

**Lucid** is an emulsifiable concentrate which when mixed with water according to the directions for use will control leafminers and mites and suppress whiteflies, thrips and aphids on ornamentals.

Mix with sufficient water and apply as a foliar spray to obtain uniform coverage. For mites, apply when mites first appear and repeat as necessary to maintain control. For leafminers, apply as needed and repeat at 7-day intervals or as necessary to maintain control.

For suppression of aphids, thrips and whiteflies, apply when young, immature stages of these pests are first observed and repeat every 7 days for two or three weeks. After which time, rotate to other products that have different modes of action than **Lucid** for at least two to three weeks. Refer to the

**Resistance Management** section for additional comments of rotation. Aphids, thrips and whiteflies are killed by direct contact with the **Lucid** spray.

Residual control of pests may be enhanced with the addition of a horticultural spray oil at 0.5 to 1.0% of the spray volume on field-grown woody ornamentals, landscape plants and Christmas trees. Repeat application as necessary, but no sooner than 7 days to maintain control. Some plants are sensitive to oils and so without prior experience the user should spray a small number of plants and observe plants for two weeks before spraying the remaining plants. Excessive cold or warm temperatures may increase the chance of plant damage following application with oils. Carefully read and follow directions on the oil label and do not exceed maximum rates listed on either label.

### **Tree Injection Application**

**Lucid** is a specially formulated water soluble Abamectin to be used for injection into non-crop bearing trees for control of mites, suppression and control of certain insects, and for prevention of pine wilt nematodes. **Lucid** can be used as directed by commercial applicators on all non-crop bearing species of ornamentals located in commercial and residential areas wherever trees and woody shrubs are grown. **Lucid** can also be used in commercial forestry production, nurseries, greenhouses, and recreational forests. Certain insecticide applications may result in an increase in mite populations on treated ornamentals; this product may be used immediately following an insecticide application to reduce follow-up outbreaks in mite populations.

## FOLIAR APPLICATION DOSAGE AND TIMING

### Shadehouse, Greenhouse, Field-Grown Ornamentals, Foliage Plants, Christmas Trees and Other Woody Ornamentals

Pests	fl. oz. Lucid/100 gals.	Comments
Mites <sup>1</sup> : European Red Mite Two-spotted Spider Mite Carmine Spider Mite Southern Red Mite Spruce Spider Mite  Tarsonemid Mites: Cyclamen and Broad Mites  Eriophyid Mites: Rust and Bud Mites	4	For Tarsonemid mites, repeat applications to newly developing tissue may be necessary to maintain control.
<i>Liriomyza</i> Leafminers <sup>2</sup>	8	Repeat at 7-day intervals or as necessary to maintain control.
Boxwood Leafminer	8	For control of mining larvae, make the application when adults are beginning to lay eggs in the new foliage.
Aphids, Thrips, and Whiteflies	8	For suppression of pest populations, young immatures must be contacted by the spray.

**General Information per Application:** Do not apply less than 8 fl. oz. or more than 16 fl. oz. per acre. Use sufficient water to obtain uniform plant coverage. Refer to the **RESISTANCE MANAGEMENT** section and the **RESTRICTIONS** section for additional information.

Maximum number of applications per year: 16

Maximum seasonal/yearly application rate: 259 fl. oz **Lucid** /A (0.304 lbs. active ingredient/A)

<sup>1</sup>Apply, for example, in 200-400 gals. of water per acre. In volumes of water below 200 gals., use a minimum of 8 fl. oz. per acre. If more than 400 gals. of water per acre are required for good plant coverage, apply maximum rate of 16 fl. oz. per acre. For example, if 650 gals. of water are required, use 2.5 fl. oz. per 100 gals.

<sup>2</sup>Apply, for example, in 100-200 gals. of water per acre. In volumes of water below 100 gals., use a minimum of 8 fl. oz. per acre. If more than 200 gals. of water per acre are required for good plant coverage, apply the maximum rate of 16 fl. oz. per acre. For example, if 400 gals. of water are required, use 4 fl. oz. per 100 gals.

### **RUNOFF PREVENTION**

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

## **SPRAY DRIFT**

### **Airblast applications:**

- Sprays must be directed into the canopy.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- User must turn off outward pointing nozzles at the row end and when spraying the outer row.
- Do not apply during temperature inversions.

### **Ground Boom Applications:**

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

### **Boomless Ground Applications:**

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

## **SPRAY DRIFT ADVISORIES**

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

### **IMPORTANCE OF DROPLET SIZE**

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### **Controlling Droplet Size – Ground Boom**

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

#### **BOOM HEIGHT – Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### **SHIELDED SPRAYERS**

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

## WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

### Boom-less Ground Applications:

- Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

### Handheld Technology Applications:

- Take precautions to minimize spray drift.

## RESTRICTIONS

Do not use **Lucid** for suppression of aphids, whiteflies and thrips on roses, chrysanthemums and gerbera. These ornamentals are primary hosts of mites and *Liriomyza* leafminers for which **Lucid** applications should be targeted. Additional applications of **Lucid** to suppress aphids, thrips and whiteflies on these plants will increase the selection pressure on mites and *Liriomyza* leafminers which may result in greater tolerance to **Lucid** among these pests.

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

Not for aerial application.

Do not use in citrus nurseries.

**Lucid** has been evaluated for phytotoxicity on a wide range of ornamental plants. However, since all combinations or sequences of pesticide sprays including surfactants and adjuvants have not been tested, it is recommended that a small area be sprayed first to make certain that no phytotoxicity occurs. Phytotoxicity has been observed following the use of **Lucid** on certain species of ferns (e.g., *Adiantum* spp.) and Shasta Daisy (*L. Eucanthemum* spp.). It is therefore recommended that **Lucid** not be used on ferns or Shasta Daisy.

### **Precautions**

- Time applications to allow **Lucid** to dry on the treated surface prior to a rain event.
- To limit unwanted surface runoff in outdoor ornamental uses, do not apply when growth media is saturated.

## TREE INJECTION APPLICATION – TIMING AND DOSAGE

Efficacy may vary depending on weather conditions, geographic conditions and other biological factors, as with most pesticides. Applicators should treat small scale outbreaks on a small number of trees prior to treating large numbers of trees.

<b>Mites on Woody Ornamentals</b>			
<b>Pests</b>	<b>Dosage</b>	<b>Timing</b>	<b>Comments</b>
Mites: European Red Mite Two-spotted Spider Mite Carmine Spider Mite Southern Red Mite Spruce Spider Mite Tarsonemid Mites: Cyclamen and Broad Mites Eriophyid Mites: Rust and Bud Mites	Use 5 mL Lucid per 2 inches of cumulative trunk diameter at 4.5' above ground level diluted in 10 mL of water, so that the injection device is filled with 15 mL of total solution.  Space injection sites approximately 6" apart around the circumference of the tree.	Apply 2 weeks before expected emergence of the pest or as pest appears.	To determine the number of injections needed, divide the tree diameter by 2. Round results up to the nearest whole number.



<b>Insects on Woody Ornamentals</b>			
<b>Pests</b>	<b>Dosage</b>	<b>Timing</b>	<b>Comments</b>
Adelgids Aphids Boxwood Leafminer Elm leaf beetle Flathead borer Lacebug Lepidoptera insects (such as Eastern Tent Caterpillar and Fall Webworm) Leafminers Scale Thrips White pine weevil	Use 5 mL Lucid per 2 inches of cumulative trunk diameter at 4.5' above ground level diluted in 10 mL of water, so that the injection device is filled with 15 mL of total solution.  Space injection sites approximately 6" apart around the circumference of the tree.	Apply 2 weeks before expected emergence of the pest or as pest appears.	To determine the number of injections needed, divide the tree diameter by 2. Round results up to the nearest whole number.

<b>Pine Wilt Nematode</b>		
<b>Dosage</b>	<b>Timing</b>	<b>Comments</b>
30 mL of Lucid for the first 6 diameter inches at 4.5' above ground level. And an additional 15 mL of Lucid for each additional diameter inch.  Divide the total dosage evenly between each injection device.	Optimal results are obtained when injections are made in the spring of the year.	<b>Do Not dilute with water, inject concentrate into tree</b>  A single treatment will prevent pine wilt nematode infection for 2 growing seasons.  In some cases, it may take longer for each injection unit to empty out when injecting pine species.

**Pine Wilt Nematode Dosage Rate per Tree Diameter at Breast Height (DBH)**

<b>DBH</b>	<b>Amt Lucid Required (mL)</b>	<b>DBH</b>	<b>Amt Lucid Required (mL)</b>
6	30	24	300
7	45	25	315
8	60	26	330
9	75	27	345
10	90	28	360
11	105	29	375
12	120	30	390
13	135	31	405
14	150	32	420
15	165	33	435
16	180	34	450
17	195	35	465
18	210	36	480
19	225	37	495
20	240	38	510
21	255	39	525
22	270	40	540
23	285		

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

**Pesticide Storage:** Store in a tightly closed container in a cool, dry place.

**Pesticide Disposal:** Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the 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 this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Offer for recycling, if available.

**Residue Removal:** Triple rinse or pressure 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 1/4 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. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC at 1-800-424-9300.**

## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**Notice:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Rotam North America, Inc. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Rotam North America, Inc. and Seller harmless for any claims relating to such factors.

Rotam North America, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Rotam North America, Inc., and Buyer and User assume the risk of any such use. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ROTAM NORTH AMERICA, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

To the extent consistent with applicable law, Rotam North America, Inc. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ROTAM NORTH AMERICA, INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ROTAM NORTH AMERICA, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Rotam North America, Inc. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of Rotam North America, Inc.

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## PRECAUTIONARY STATEMENTS

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WARNING. Causes substantial but temporary eye injury. Harmful if swallowed. Harmful if inhaled. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear protective eyewear (goggles or faceshield). Do not get in eyes, on skin, or on clothing. Do not breathe spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

This product contains a chemical (N-methyl pyrolidone) known to the state of California to cause birth defects or other reproductive harm.

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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 – EPA chemical resistance category B (e.g. barrier laminate or butyl rubber  $\geq$  14 mils)
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead 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 wash water 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.

## FIRST AID (Avermectin B<sub>1</sub>)

<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 further treatment advice.</li></ul>
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"><li>• Call poison control center or doctor for treatment advice.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not give anything by mouth to an unconscious person.</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 mouth-to-mouth, if possible.</li><li>• Call poison control center or doctor for treatment advice.</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 further treatment advice.</li></ul>

**Note to Physician: Recommendations for Medical Treatment for LUCID (Avermectin B<sub>1</sub>) Acute Toxicity:** Early signs of intoxication include mydriasis (dilated pupils), ataxia (unsteadiness) and muscle tremors. Toxicity following accidental ingestion of the concentrate can be minimized by inducing vomiting within one-half hour of exposure.

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) 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 avermectin 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 avermectin exposure.

## (Avermectin B<sub>1</sub>)

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For Medical Emergency treatment call your local Poison Control Center for assistance.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

**Pesticide Storage:** Store in a tightly closed container in a cool, dry place.

**Pesticide Disposal:** Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the 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 this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Offer for recycling, if available.

**Residue Removal:** Triple rinse or pressure 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 1/4 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. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC at 1-800-424-9300.**

## DIRECTIONS FOR USE

It is a violation of Federal (U.S.A.) 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.