MAJESTENE™
BIONEMATICIDE

Active Ingredient:
Heat-killed Burkholderia spp. strain A396 cells and spent fermentation media ........................................... 94.46%
Other Ingredients: .................................................................................................................................. 5.54%
Total: ....................................................................................................................................................... 100.00%

*Contains not less than 1,500 Beet Armyworm Killing Units (BAWKU)/mg. Note: The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

EPA Reg. No. 84059-14
EPA Est. No. 84059-MI-001

KEEP OUT OF REACH OF CHILDREN
CAUTION

FIRST AID
IF IN EYES:
• Hold eye open and rinse slowly and gently with water for 15–20 minutes.
• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
• Call a poison control center or doctor for treatment advice.

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 1-800-222-1222 for emergency medical treatment information.

Manufactured by:
Marrone®
Bio Innovations
1540 Drew Ave., Davis, CA 95618 USA
1-877-664-4476
www.marronebioinnovations.com
info@marronebio.com

MAJ_EM0815_V1_1015
LOT #: PRINTED ON CONTAINER
PN61487

CAN BE USED IN ORGANIC PRODUCTION

EPA Est. No. 84059-MI-001

NET CONTENTS:

☐ 1 gallon
☐ 2.5 gallons
☐ 5 gallons

□ EPA Est. No. 84059-MI-001
PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear goggles or safety glasses. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE): Applicators and other handlers must wear: long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, and protective eyewear. Mixers / loaders and applicators must wear a dust / mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization. Follow manufacturer’s instructions for cleaning and maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS: When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for “applicators and other handlers” and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS: Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS: For terrestrial uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. See the Directions for Use section of this label for application instructions that minimize risk to bees and other beneficial insects, including those used in Integrated Pest Management (IPM) programs or organic agriculture.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation. 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.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

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

- Protective eyewear
- Coveralls
- Chemical resistant gloves (made from any waterproof material)
- Shoes plus socks

EXCEPTION: If the product is soil incorporated or soil injected, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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DO NOT

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In-Furrov (T-band) c acre rate acre, with a T-Band

In-furrow

Chemiga per acre
PRODUCT INFORMATION

MAJESTENE™ is a biological nematicide containing killed cells of *Burkholderia* spp. strain A396 and spent fermentation media, for use on agricultural crops against the pests listed in the Directions for Use section. MAJESTENE™ can be used in either the field or greenhouse for the control of any labeled pest.

Bees and beneficial insects:
- To minimize potential exposure to bees and other pollinating insects, do not apply while bees are foraging.
- Do not allow product to drift to blooming crops or weeds if bees are foraging.

Minimize spray drift away from the target area to reduce effects to other non-target insects.

MAJESTENE™ has been evaluated for toxicity to non-target insects in a variety of bioassays and on a variety of crops under various normal growing conditions. However, testing all beneficial insects, in all situations, mixtures and combinations, is not feasible. Prior to treating entire crop where the release of beneficial insects serve as part of an Integrated Pest Management (IPM) program, consult with an extension specialist, a pest control advisor (PCA) or with the product manufacturer.

Under heavy pest populations, use the higher label rates, shorten the spray interval, and/or apply in tank mixture with another product that has activity on the target pest.

MAJESTENE™ has been evaluated for phytotoxicity on a variety of crops under various normal growing conditions. However, testing all crop varieties, in all mixtures and combinations, is not feasible. Prior to treating entire crop, test a small portion of the crop for sensitivity.

DO NOT APPLY THIS PRODUCT BY AERIAL APPLICATION.

SOIL TREATMENT USE DIRECTIONS

MAJESTENE™ can be applied by soil drench, chemigation (drip, trickle, or sprinkler irrigation) and as an in-furrow spray, T-band or soil injection to protect against certain soil-borne nematodes.

In general, MAJESTENE™ can be applied by the following methods, unless specified differently in the SELECTED CROPS section:

**Soil Drench Applications:** Apply MAJESTENE™ at a rate of 4–8 quarts per acre in sufficient water to thoroughly soak the growing media and root zone. Nematode control treatments can occur prior to planting, and at or near planting or transplanting as soil drench applications.

**Shanked-In and Injected Applications:** MAJESTENE™ can be shanked-in or injected into the soil alone, or with most types of pesticides and nutrients prior to planting, and at planting. Use a jar test to confirm physical compatibility prior to application.

**In-Furrow and T-Band applications:** At planting, apply MAJESTENE™ as an in-furrow spray or as a 5–7 inch band (T-band) over an open seed furrow at the rate of 4–8 qt/acre. (7.3 – 19.6 fluid ounces per 1000 feet of row based on per acre rate and row spacing according to the chart below). Apply MAJESTENE™ in a minimum of 5 gallons of water per acre, with the spray directed over the seed furrow just before the seeds are covered by soil. MAJESTENE™ applied as a T-Band should be lightly incorporated into the top 1 inch of soil by drag chains or tires.

**In-furrow and T-band Application Rates**

<table>
<thead>
<tr>
<th>Rate</th>
<th>In-Furrow and T-band Application Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Product per 1000 ft. row.</td>
</tr>
<tr>
<td></td>
<td>30” Rows</td>
</tr>
<tr>
<td>4–8 quarts MAJESTENE™ per acre</td>
<td>7.3-14.7 fluid ounces</td>
</tr>
</tbody>
</table>

**Chemigation:** Prior to, at or shortly after planting or transplanting, and in season: apply MAJESTENE™ at 4 – 8 quarts per acre according to the directions in the CHEMIGATION USE DIRECTION section of this label.
CHEMIGATION USE DIRECTIONS

Spray preparation
First, prepare a suspension of MAJESTENE™ in a mix tank. Fill tank with ¾ of the amount of water for the area to be treated. Start mechanical or hydraulic agitation. Add the required amount of MAJESTENE™, and then the remaining volume of water. Then, set the sprinkler to deliver a minimum of 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly inject the suspension of MAJESTENE™ into the irrigation water line, delivering the desired rate of MAJESTENE™ per acre. Inject the suspension of MAJESTENE™ with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing. MAJESTENE™ is to be metered continuously for the duration of the water application. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not combine MAJESTENE™ with other pesticides, surfactants, adjuvants, or fertilizers for application through chemigation equipment unless prior experience has shown the combination to be physically compatible, effective and non-injurious under your conditions of use.

General Requirements -
1) Apply this product only through sprinkler or drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system.
2) Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
3) If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.
4) Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place.
5) A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Specific Requirements for Chemigation Systems Connected to Public Water Systems -
1) Public water system means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2) Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ), or the functional equivalent in the water supply line, upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank, of at least twice the inside diameter of the fill pipe.
3) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve, to prevent the flow of fluid back toward the injection pump.
4) The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve, located on the intake side of the injection pump and connected to the system interlock, to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides, and capable of being fitted with a system interlock.
7) Do not apply when wind speed favors drift beyond the area intended for treatment.

Specific Requirements for Chemigation Systems Connected to Public Water Systems -
1) The system must contain a functional, normally closed, solenoid-operated valve, located on the intake side of the injection pump and connected to the system interlock, to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
2) Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ), or the functional equivalent in the water supply line, upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank, of at least twice the inside diameter of the fill pipe.
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5) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides, and capable of being fitted with a system interlock.
7) Do not apply when wind speed favors drift beyond the area intended for treatment.

Application
1) Remove system. F
2) Determine the presence of fluid back toward the injection pump.
3) Prepare the mixture with a system interlock.
4) Prepare the mixture with a system interlock.
5) The irrigation system should be activated.
6) Systems effective with a system interlock.

SHAKE WE FOR USE (Meloidogyne (Bursaphle)}
Specific Requirements for Drip (Trickle) Chemigation -

1) The system must contain a functional check valve, vacuum relief valve, and low-pressure drain, appropriately located on the irrigation pipeline, to prevent water source contamination from backflow.

2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve, to prevent the flow of fluid back toward the injection pump.

3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve, located on the intake side of the injection pump and connected to the system interlock, to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

5) The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides, and capable of being fitted with a system interlock.

Application Instructions for All Types of Chemigation -

1) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues, may cause product to lose effectiveness or strength.

2) Determine the treatment rates as indicated in the directions for use, and make proper dilutions.

3) Prepare a solution in the chemical tank by filling the tank with the required water and then adding product as required. Utilize agitation to keep solution in suspension.

Application Instructions for Drip Chemigation

1) Check to be sure that the system provides a uniform waterflow.

2) Irrigate crop with sufficient water to wet the root zone. Then, begin flow of the solution containing product solution from the chemical tank for a period to uniformly distribute the material. Discontinue flow of the MAJESTENE™ mixture and let the system continue to run only as necessary to purge the line with fresh water. Let the MAJESTENE™ solution remain in the root zone of the crop.

SHAKE WELL BEFORE USE

FOR USE ON THE FOLLOWING CROPS FOR CONTROL OF THE FOLLOWING NEMATODES: Root-knot (Meloidogyne spp.), lesion (Pratylenchus spp.), sting (Belonolaimus spp.), stunt (Tylenchorhynchus spp.), ring (Bursaphelenchus spp.) and reniform (Rotylenchulus spp.) nematodes
Pre-harvest Interval (PHI) = 0 days

<table>
<thead>
<tr>
<th>Crop</th>
<th>Application Method</th>
<th>Product Use Rate per Application</th>
<th>Application Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Corn</strong></td>
<td>In-Furrow and T-band</td>
<td>7.3 – 19.6 fluid ounces MAJESTENE™ per 1000 foot row</td>
<td>For control of low to medium infestation levels of nematodes, apply MAJESTENE™ at planting as an in-furrow or T-band spray in a minimum of 5 gallons of water per acre according to the SOIL TREATMENT USE DIRECTIONS</td>
</tr>
<tr>
<td><strong>Cotton</strong></td>
<td>In-Furrow and T-band</td>
<td>7.3 – 19.6 fluid ounces MAJESTENE™ per 1000 foot row</td>
<td>For control of low to medium infestation levels of nematodes, apply MAJESTENE™ at planting as an in-furrow or T-band spray in a minimum of 5 gallons of water per acre according to the SOIL TREATMENT USE DIRECTIONS</td>
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<tr>
<td><strong>Cucurbit Vegetables</strong></td>
<td>Soil Drench</td>
<td>4 – 8 quarts per acre</td>
<td>Apply MAJESTENE™ in sufficient water to thoroughly soak the growing media and root zone. Apply MAJESTENE™ prior to planting, at planting or shortly thereafter, at transplant or shortly thereafter, and in-season</td>
</tr>
<tr>
<td>Cucumber, Edible Gourds, Muskmelon, Cantaloupe, Pumpkin, Watermelon, Winter and Summer Squash, and Zucchini</td>
<td>Chemigation</td>
<td>4 – 8 quarts per acre</td>
<td>Apply MAJESTENE™ prior to, at, or shortly after planting or transplanting, and in season</td>
</tr>
<tr>
<td><strong>Fruiting Vegetables</strong></td>
<td>Soil Drench</td>
<td>4 – 8 quarts per acre</td>
<td>Apply MAJESTENE™ in sufficient water to thoroughly soak the growing media and root zone. Apply MAJESTENE™ prior to planting, at planting or shortly thereafter, at transplant or shortly thereafter, and in-season</td>
</tr>
<tr>
<td>Tomato, Tomatillo, Pepper, Groundcherry, Pepino, Okra and Eggplant</td>
<td>Chemigation</td>
<td>4 – 8 quarts per acre</td>
<td>Apply MAJESTENE™ prior to, at, or shortly after planting or transplanting, and in season</td>
</tr>
<tr>
<td><strong>Soybean</strong></td>
<td>In-Furrow and T-band</td>
<td>7.3 – 19.6 fluid ounces MAJESTENE™ per 1000 foot row</td>
<td>For control of low to medium infestation levels of nematodes, apply MAJESTENE™ at planting as an in-furrow or T-band spray in a minimum of 5 gallons of water per acre according to the SOIL TREATMENT USE DIRECTIONS</td>
</tr>
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<td><strong>Strawberry</strong></td>
<td>Soil Drench</td>
<td>4 – 8 quarts per acre</td>
<td>Apply in sufficient water to thoroughly soak the growing media and root zone. Apply MAJESTENE™ prior to planting, at planting or shortly thereafter, at transplant or shortly thereafter, and in-season</td>
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<tr>
<td></td>
<td>Chemigation</td>
<td>4 – 8 quarts per acre</td>
<td>Apply prior to, at, or shortly after planting or transplanting, and in season</td>
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(continued)
Crop Application Method Product Use Rate per Application Application Instructions

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<tr>
<td>Tropical Fruits</td>
<td>Soil Drench</td>
<td>4 – 8 quarts per acre</td>
<td>Apply in sufficient water to thoroughly soak the growing media and root zone.</td>
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<td></td>
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<td>Apply MAJESTENE™ prior to planting, at planting or shortly thereafter, at transplant or</td>
</tr>
<tr>
<td>Bananas, Plantains</td>
<td></td>
<td></td>
<td>shortly thereafter, and in-season</td>
</tr>
<tr>
<td>Chemigation</td>
<td>4 – 8 quarts per acre</td>
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<td>Apply MAJESTENE™ prior to, at, or shortly after planting or transplanting, and in season</td>
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**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal. Use up product within 6 months of purchase.

**Pesticide Storage:** Store in a cool dry place. Avoid freezing.

**Pesticide Disposal:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments, or by industry).

**Container Handling:** Non-refillable 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. Do not burn unless allowed by state and local ordinances.

Marrone Bio Innovations is a member of the Ag Container Recycling Council. Visit [http://www.acrecycle.org/contact](http://www.acrecycle.org/contact) for information on how to arrange pick-up of this empty pesticide container.

**Marrone Bio Innovations WARRANTY**

To the extent permitted by applicable law, the seller makes no warranty, expressed or implied, of merchantability, fitness or otherwise concerning use of this product. The user assumes all risks of use, storage or handling that are not in strict accordance with the accompanying directions.

Label date: September 29, 2015
Patent(s) pending
MAJESTENE™ is a registered trademark of Marrone Bio Innovations, Inc.
Marrone Bio Innovations name and logo are registered trademarks of Marrone Bio Innovations, Inc.

© Marrone Bio Innovations, Inc.
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HOT LINE NUMBER
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CAN BE USED IN ORGANIC PRODUCTION

MAJ_EM0815_V1_1015 LOT #: PRINTED ON CONTAINER PN61487
PROOF
THIS PROOF IS TO BE CHECKED FOR ACCURACY

Please review and approve Text, Spelling, Copy Placement, Size, Shape, Colors and Dieline. Authorized signature accepts responsibility for accuracy of all copy, color break and artwork. Cimarron Label is not liable for any discrepancies subsequently identified.

PLEASE NOTE: Due to color variance between printers/monitors, the colors represented by this proof cannot be deemed accurate. Please refer to a color matching system such as the Pantone Matching System for a truer representation of spot colors.

THIS PROOF IS NOT ACCURATE FOR COLOR-MATCH. Dieline does not print.

Cimarron Label
Experts in Extended Text Labeling
4201 North Westport Ave. • Sioux Falls, SD 57107
Phone: (605) 978-0451 • Fax: (605) 978-0463

Form: CS 006L - 11/8/2011

☐ ARTWORK IS APPROVED ☐ REVISED PROOF NEEDED

WE CANNOT PROCESS THIS ORDER WITHOUT AN AUTHORIZED SIGNATURE

Signed __________________________ Date ____________