

66330-58

10/11/2007

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

EPA Reg. Number:

66330-58

Date of Issuance:

OCT 11 2007

## NOTICE OF PESTICIDE:

Registration  
 Reregistration  
 (under FIFRA, as amended)

Term of Issuance:

10/11/2008

Name of Pesticide Product:

MIDAS™ EC Bronze

## Name and Address of Registrant (include ZIP Code):

Arysta LifeScience North America Corporation  
 15401 Weston Parkway, Suite 150  
 Cary, NC 27513

**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/reregistered 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 Sec. 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit such data.
2. Make the following label change: Add the phrase "EPA Registration Number 66330-58".
3. Satisfy any additional data requirements and add any additional risk mitigation as required by the Agency once the Agency makes a decision for the soil fumigant group.
4. Submit a label amendment within the same timeframe imposed on other soil fumigant registrants for similar label amendments.
5. Submit one copy of the final printed label before the product is released for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA Sec. 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.

Signature of Approving Official:

Mary L. Waller, Product Manager (21)  
 Fungicide Branch, Registration Division (7505P)

Date:

10/11/2007

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**RESTRICTED USE PESTICIDE  
DUE TO ACUTE TOXICITY**

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.

## MIDAS® EC BRONZE

**Only For Pre-Plant Fumigations of Fields Intended for Commercial Production of Listed Crops and Field-Grown Ornamentals, for the Control of Soil-Borne Pests Including Weed Seeds, Nematodes, Insects, and Diseases.**

**ACTIVE INGREDIENTS:**

Iodomethane ..... 49.90%  
 Chloropicrin ..... 44.78%  
 OTHER INGREDIENTS: ..... 5.32%  
**TOTAL:** ..... 100.00%

One gallon weighs 15.9 pounds (7.93 pounds Iodomethane and 7.12 pounds Chloropicrin).

### KEEP OUT OF REACH OF CHILDREN DANGER / PELIGRO

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).

FIRST AID	
<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, and then continue rinsing.</li> <li>• Call a 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 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, and then give artificial respiration, preferably mouth-to-mouth if possible.</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 a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything to an unconscious person.</li> </ul>
<p><b>HOT LINE NUMBERS</b></p> <p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p> <p><b>FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL:</b> 1-866-303-6952 or 1-651-532-8946</p>	
<p><b>NOTE TO PHYSICIAN</b></p> <p>Probable mucosal damage may contraindicate the use of gastric lavage. Symptoms of overexposure may include irritation to eyes, skin, and respiratory system, shortness of breath, nausea, vomiting, dizziness, ataxia, slurred speech, drowsiness, blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Treatment is symptomatic.</p>	

**ACCEPTED  
with COMMENTS  
In EPA Letter Dated:**

10/11/2007

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under EPA Reg. No. 66330-5

EPA Reg. No. 66330-  
EPA Est. No.

For Product Information Call: 1-866-761-9397

Net Contents:

Manufactured for  
Arysta LifeScience North America Corporation  
15401 Weston Parkway, Suite 150  
Cary, NC 27513

## PRECAUTIONARY STATEMENTS

### HAZARD TO HUMANS AND DOMESTIC ANIMALS

**Danger. Corrosive.** Causes irreversible eye damage. Corrosive to skin. Causes skin burns. May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

**SPECIAL NOTE:** This product contains chloropicrin, a poisonous liquid or vapor. Inhalation of vapors may be fatal. Chloropicrin is readily identified by smell. Exposure to very low concentrations of vapor will cause irritation of eyes, nose and throat. Continued exposure after irritation is evident or higher concentrations may cause painful irritation to the eyes or temporary blindness. Liquid will cause chemical burns to skin or eyes. Do not get on skin, in eyes, or on clothing. Chloropicrin fumigant has the capacity to cause marked irritation to the upper respiratory tract and is a strong lachrymator (tear producing eye irritant). Low concentrations, below those necessary to cause serious systemic intoxication, are capable of causing severely painful eye irritation, hence will not be voluntarily tolerated. However, the effect may be so powerful that a person may become temporarily blinded and panic-stricken and that in turn may lead to accidents.

### AIR CONCENTRATION LEVEL

Air concentrations of chloropicrin are measured with direct reading colorimetric detector devices, such as Kitagawa tubes, certified for chloropicrin at 0.1 to 16 ppm. Persons involved in the application of MIDAS® EC BRONZE or in reentry into treated fields must wear an air-purifying respirator when required by the restrictions given in the AGRICULTURAL USE REQUIREMENTS section below. In case of spills or leaks, additional respiratory protection must be worn as detailed under Spill and Leak Procedures.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Applicators and other handlers** (to include tarp monitors and drip applicators) **must wear:**

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection is required. DO NOT wear goggles.
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).

**Other handlers** (to include drip line tenders, planters, hole punchers, tarp cutters, tarp removers, and tarp remover drivers) **must wear:**

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.

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- Full face shield or safety glasses with brow, temple and side protection is required. DO NOT wear goggles.

#### **ENGINEERING CONTROL REQUIREMENTS**

MIDAS EC BRONZE must be transferred through connecting hoses, pipes, and/or couplings sufficiently tight to prevent workers or other persons from coming in contact with the liquid.

- All hoses, piping, and tanks used in connection with this product shall be of a type appropriate for use under the pressure and vacuum conditions to be encountered.
- External sight gauges, if applicable, shall be equipped with valves so that pipes to sight gauge can be shut off in case of breakage or leakage.
- The mechanical transfer system must be adequate to make necessary measurements of the pesticide being used.
- Shut-off devices must be installed on the exit end of all cylinder connections and at all disconnect points to prevent leakage of product when the transfer is stopped and hose is removed or disconnected. A dry coupler that will minimize pesticide leakage must be installed at the disconnect point.
- The pressure in hoses used to move the product must not exceed the manufacturer's maximum pressure specifications.
- Check equipment to ensure good condition and integrity prior to each use.

#### **User Safety Requirements**

- Do not wear jewelry, gloves, goggles, tight clothing or any rubber protective clothing/boots that can trap iodomethane or chloropicrin vapors against your skin. Iodomethane and chloropicrin vapors can be trapped inside clothing and cause skin injury.
- Remove all clothing that comes in contact with liquid material at once.
- Aerate all affected clothing thoroughly prior to washing with hot water and detergent.
- Discard any clothing or absorbent materials (e.g. leather), that have been drenched or heavily contaminated with this product. Do not reuse them.
- Respirator Requirements: When a respirator is required for use with this product, the following criteria must be met consistent with the Worker Protection Standard: (a) Cartridges or canisters must be replaced daily or when odor or irritation from this product becomes apparent, whichever is sooner; (b) Respirators must be fit-tested and fit-checked using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134); (c) Respirator users must be trained using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134); (d) Respirator users must be examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn.
- Follow PPE manufacturer's instructions for cleaning / maintaining protective eyewear and respirators.

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### USER SAFETY RECOMMENDATIONS

User should:

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

### ENVIRONMENTAL HAZARDS

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 cleaning equipment or disposing of equipment wash waters.

### PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat, open flames, or sparking electrical equipment. Do not use application devices containing natural rubber, aluminum, magnesium or their alloys.

### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only Certified Applicators (certified by both the state and Arysta) trained in the proper handling, worker protection, and application of MIDAS EC BRONZE soil fumigant and workers under their direct supervision may be present in the treatment area during application. An Arysta and state Certified Applicator must be on site and within the line of sight to observe handlers during the application. Handling tasks to be performed under the direct supervision of a Certified Applicator include, but are not limited to the co-applicator or any other person directly involved with the injection or monitoring of MIDAS EC BRONZE through chemigation. All such handlers must have appropriate protective equipment, as described in the PERSONAL PROTECTIVE EQUIPMENT section. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

### Buffer Zone

The area adjacent to the treated area is referred to as the buffer zone. The buffer zone shall extend from the edge of the treated area in all directions, See Buffer Zone Table. The minimum buffer zone distance shall be 25 feet.

The Certified Applicator supervising the soil fumigation is responsible for the following:

1. Calculating the appropriate size of the buffer zone that must be maintained during the first 48 hours following the end of the application;
2. Establishing and maintaining the buffer zone during the 48 hours following the end of the application; and
3. Ensuring that unprotected workers and bystanders do not enter the buffer zone during the 48 hours following the end of the application. **Exception:** Unprotected workers and bystanders may travel through (but not engage in any activity in) the buffer zone during the 48-hour period, provided their total exposure time in any 24-hour period is 15 minutes or less. However, travel by unprotected workers or bystanders through the fumigated area itself is prohibited during the entire 5-day Entry-Restricted period. Handlers protected with Personal Protective Equipment (PPE) required for early entry into a treated area may work in buffer zones.
4. Ensuring application site has a distinctive buffer zone. The buffer zone of the field to be treated cannot overlap the buffer zone of another field treated within the last 48 hours.
5. The Certified Applicator supervising the soil fumigation must document how the buffer zone was determined, the location of sensitive sites, and how persons in occupied structures located within

the buffer zone were protected. These records must be maintained by the Certified Applicator and by the owner/operator of the fumigated site for at least two years following the fumigation and must be made available, upon request to Federal, State, Tribal, and local enforcement personnel.

**Determining Buffer Zone Distance**

- Determine the size of the buffer zone using the following Buffer Zone Table.
- The size of the buffer zone will be dependant on the following three factors:
  - The number of field acres that are being treated with MIDAS EC Bronze.
  - The pounds of MIDAS EC Bronze that are being applied per treated acre.
  - Buffer zone reduction credits

### Buffer Zone Table

MIDAS EC Bronze Application Rate (Lbs per Treated Acre) <sup>4</sup>	SIZE OF FIELD IN ACRES (Buffer zone distance in feet) <sup>1, 2</sup>							
	Up to 5 Acres	6 – 10 Acres	11-15 Acres	16- 20 Acres	21-25 Acres	26-30 Acres	31-35 Acres	36-40 <sup>3</sup> Acres
50	25	25	35	45	55	60	70	75
60	25	25	40	55	65	75	85	90
75	25	25	45	65	80	90	100	110
90	25	30	55	80	95	105	120	130
100	25	30	60	90	105	120	135	145
125	25	40	75	110	130	145	165	180
150	25	45	90	130	155	175	195	215
175	25	50	100	150	175	200	225	250
200	30	60	120	175	205	235	265	290
210	30	60	120	180	210	240	270	300
240	35	70	140	210	245	280	315	345
300	45	90	175	260	305	345	390	430
350	50	100	200	300	350	400	450	500

1. For rates not listed on this table, use the buffer zone for the next highest rate, or use the following calculation to determine the exact buffer zone distance:

$$\text{Buffer Zone for Application Rate Not Listed} = \frac{\text{Known Buffer Zone on Table X Application Rate Not Listed}}{\text{Rate of Application for Known Buffer Zone}}$$

**2. Buffer Zone Reduction Credits:**

Reduce buffer zone by 10% for each factor listed below as applicable

- Use of High Barrier films. High Barrier films for which credit can be applied must be on an Arysta approved list. Examples of Arysta approved films are Canslit Brand Metalized 1.3 ml, Pliant Blockade® VIF 1.25 ml, and Pliant Metalized 1.0-1.25.
- Application to soils having >3% organic matter. Refer to the USDA or USGS Soil Survey Maps for the treated area that identify the range of organic matter and / or a documented soil survey report that lists range of % organic matter for the treated area. Collection of samples for analysis of soil in the treated area should follow procedures as per USDA's Natural Resource Conservation Services methods. Information on soil sampling can be found at [www.soil.usda.gov](http://www.soil.usda.gov).

For example, if the Buffer Zone is 50 feet and the application qualifies for a buffer zone reduction credit such as use of high barrier film, then the buffer zone can be reduced by 10%, i.e. reduced by 5 feet based on the following calculation: 50 ft – (50 ft X 10%) = 45 feet.

If the application qualifies for two buffer zone reduction credits such as use of a high barrier film and soil with >3% organic matter, then the buffer zone can be reduced by 20%, i.e. reduced by 10 feet based on the following calculation: 50 ft – (50 ft X 20%) = 40 feet.

3. Applications are limited to 40 contiguous acres or less per day on a single site.

4. For raised bed applications, the treated acre is the raised bed, not the untreated furrows. As an example, if a raised bed field is 50% raised bed (treated) and 50% furrow (untreated), and 350 lbs of MIDAS EC BRONZE is applied to the field, then the effective application rate to the treated raised bed is 350 lbs per treated acre; and that is the rate that would determine the buffer zone.

**Note: Minimum allowable buffer zone is 25 feet regardless of buffer zone reduction credits.**

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### **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), restricted entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

#### **Entry Restrictions**

Entry into the treated area (including early entry that would otherwise be permitted under the WPS) by any person, other than a correctly trained and equipped handler who is performing a task that is permitted by this labeling, is PROHIBITED from the start of the application until 5 days after application and the air concentration of chloropicrin is measured to be less than 0.1 ppm. Early entry under the WPS is limited to tarp inspection and repair. Non-handler entry is prohibited while tarps are being removed.

See the Buffer Zone section of the label for additional Entry Restrictions.

#### **Notification at Entrances to Treated Areas**

Notify all workers of the fumigation verbally and by posting warning signs at all likely entrances to the treated area for no less than 5 days of application. The signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Iodomethane and Chloropicrin Fumigants In Use
- (4) Date and time of fumigation
- (5) Name of this product
- (6) Name, address, and telephone number of the Certified Applicator in charge of the application.

Post these fumigant warning signs for treated areas instead of the WPS signs for these applications but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal.

#### **PPE for Reentry during the Entry-Restricted Period**

The PPE required for reentry during the entry-restricted period are:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).



## GENERAL INFORMATION AND INSTRUCTIONS

This fumigant is a highly hazardous material. All uses of this fumigant are covered under the Worker Protection Standard, and must be conducted in accordance with all of the requirements of the Worker Protection Standard (40 CFR Part 170). It is a restricted use pesticide that must only be used by or under the direct supervision of individuals trained and certified in its proper use. Before using, read the entire label and follow all use directions and precautions. All persons working with this fumigant must be knowledgeable about the hazards and trained in the use of required air-purifying respirator equipment and detector devices, emergency procedures and proper use of the fumigant.

### GENERAL USE PRECAUTIONS

- Follow all local government instructions for posting of treated areas and post all treated areas with warning signs:
- Comply with all local ordinances and regulations.
- Do not apply within ¼ mile of any occupied sensitive site such as schools, day care facilities, nursing homes, hospitals, prisons, and playgrounds.
- Applications are limited to 40 contiguous acres or less per day on a single site.
- Do not apply this product in the presence of ground fog, inversion layers or when the potential for an inversion layer is likely to occur as this may result in product drift outside the treated area. A smoke generator can be used to indicate the presence of an inversion layer if the smoke column does not rise in a vertical pattern. In addition, consult the local weather forecast in the surrounding region for reports of expected inversion layers the day of application and within the 24 hour period following applications of MIDAS EC BRONZE.
- Never fumigate alone. A minimum of two trained employees must be present during handling and application of soil fumigants.
- Certified Applicators are responsible for providing information to all workers involved with the fumigation about precautions and procedures in the safe handling, worker protection and application of MIDAS EC BRONZE for soil fumigation.
- Additional instructions must be made available to workers in the mechanical operation of the tractor and how to safely work with the operator while fumigating.
- Always handle this product in the open, with all workers positioned "upwind" from the container and/or where there is adequate ventilation.
- Check the fumigation system for leaks or worn out equipment prior to soil injection.
- When fumigating from a tractor, it is required that 5 gallons of water be carried on the tractor and readily available for rinsing and cleaning purposes. An additional 5 gallons of water must be available in the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking.
- For raised bed drip applications, keep all pets, livestock and other domestic animals out of the treated areas for 5 days and until the air concentration for chloropicrin is less than 0.1 ppm at the edge of the treated area. Most raised bed applications will not result in tarp removal.
- Tarp removal requires a minimum of two trained employees to be present during the operation. Non-handler personnel are prohibited from being present during tarp removal.
- See AGRICULTURAL USE REQUIREMENTS box for details regarding posting and placement of warning signs.
- Do not allow entry by unprotected persons into the fumigated area until the re-entry signs are removed. Such signs must only be removed when the air concentration of chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 5 days following application. Signs must remain legible during entire posting period. Also, do not cut tarps for planting until these conditions have been met.

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- To determine whether aeration is complete, each fumigated site must be tested and shown to contain less than 0.1 ppm chloropicrin in the air space around the treated site as determined by 3 consecutive measurements taken at the down wind edge of the treated site at least 15 minutes apart.

### **SPILL AND LEAK PROCEDURES**

- Cease all operations if any leak develops in the fumigation system.
- Evacuate everyone from the immediate areas of the spill or leak.
- Approach the area from the upwind side. Work upwind to repair leak(s), if possible.
- For entry into the area to correct the problem, trained personnel must wear loose fitting or well ventilated long-sleeved shirt and long pants, shoes plus socks and either (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) or (b) a self-contained breathing apparatus (SCBA)(MSHA/NIOSH approval number prefix TC-13F).
- Only correctly trained and PPE-equipped handlers are permitted to enter. Do not permit entry into the spill or leak area by any other person until the concentration of chloropicrin is measured to be less than 0.1 ppm as specified in section above.
- Allow spilled fumigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility.
- Contaminated soil, water and other cleanup debris may be hazardous waste. Report any spill that exceeds 200 lbs (12.6 gallons of product) to the National Response Center at 1-800-424-8802.

### **PROCEDURES PRIOR TO, DURING AND AFTER DRIP APPLICATION**

**CONTROL OF SOIL BORNE PESTS:** MIDAS EC BRONZE controls soil-borne pests including nematodes, insects, weed seeds, and diseases.

Midas EC BRONZE will control the following pests when present in soil at the time of treatment:

Weed Seeds, including broadleaf weeds such as nutsedge, pigweed, broomrape and lambsquarters, and grasses such as bermudagrass, and annual bluegrass. Effectiveness against hard seed weeds, such as mallow, dodder, morning glory, and certain leguminous weeds may be variable.

Plant-parasitic Nematodes, such as root-knot, root lesion (meadow), cyst, citrus, burrowing, false root-knot, lance, spiral, ring, sting, stubby root, dagger, awl, sheath and stung (stylet) nematodes.

Soil-borne Insects, such as wireworms, cutworms, grubs, rootworms, ants and garden symphylans.

Soil-borne Diseases, such as *Verticillium*, *Pythium*, *Rhizoctonia*, *Phytophthora*, and *Fusarium*.

MIDAS EC BRONZE is not to be used as a preventative treatment for pests that may be introduced after the fumigant has been applied and/or tarps removed. To reduce the potential for the re-introduction of pests (nematodes, weed seed and disease); avoid the use of irrigation water, transplants or equipment that could carry pests into the planting area. Avoid moving infested soil back into the treated area through cultivation or other means.

**Soil Preparation:** The soil should be worked to the depth that is desirable for the fumigant to penetrate. Plant refuse should be worked into the soil and allowed enough time to decompose prior to treatment. Little or no plant refuse should be present on soil surface. Prior to application, the soil must be sufficiently moistened to allow seeds to swell (imbibe) in preparation for germination.

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**Prior to Application:**

- Ensure that application equipment does not contain components made of natural rubber, aluminum, magnesium or their alloys.
- Soil in the treatment area should be reasonably free of trash and in good tilth prior to soil treatment.
- Do not apply to wet or cold soils (<55°F at a depth of 8 inches).
- Cover the treated areas with a plastic tarpaulin.

**During Application:**

- Do not change cylinders when the fumigant system is under pressure. Change cylinders with all cylinder valves in the off position.

**Following Application:**

- To minimize the potential for crop injury, allow the fumigant to dissipate before planting a crop. Seeds may be used as a bioassay to determine if MIDAS EC BRONZE is present in the soil at concentrations sufficient to cause plant injury. DO NOT PLANT if the odor of the chloropicrin is detectable. See fumigation table for planting requirements.

**MIDAS EC BRONZE PRE-PLANT FIELD FUMIGATION METHODS**

Fumigations with MIDAS EC BRONZE shall only be performed in accordance with the following application technique.

**RAISED BED DRIP APPLICATION**

Rates in the table below are given in pounds of MIDAS EC BRONZE per broadcast acre. The amount of product applied will be proportionate to the row spacing and width of the raised bed. To calculate the amount of product to be applied, multiply the application rate in lbs MIDAS EC Bronze/broadcast acre by the appropriate modifier from the Field Rate Modifier Table below.

<b>RAISED BED DRIP APPLICATION TABLE</b>		
<b>Crop</b>	<b>MIDAS EC BRONZE Per Broadcast Acre<sup>1</sup></b>	<b>Time Between Application and Planting<sup>2</sup></b>
Field-Grown Ornamentals Peppers Strawberries Tomatoes	200 - 350 lbs/Broadcast Acre (12.6 – 22.0 gal/Broadcast Acre)	10 – 14 days
	Use with Highly Retentive Films 150- 200 lbs / Broadcast Acre (9.4 – 12.6 gal / Broadcast Acre)	14 – 21 days <sup>3,4</sup>

**NOTE:**

- <sup>1</sup> For fields infested with Nutsedge and Malva, apply a minimum of 300 lbs/acre (18.9 gal/acre) of MIDAS EC BRONZE be applied.
- <sup>2</sup> Use the longer planting restriction period under conditions of high soil moisture, heavy soils, rain or persistence of chloropicrin odor in the soil.
- <sup>3</sup> Use of highly retentive films (e.g. VIF and approved Metallic) will require a rate reduction of up to 40-50% of the maximum use rate. Contact your Arysta LifeScience representative for rate reduction recommendations and approved films.
- <sup>4</sup> If highly retentive films are not removed, plant a minimum of 14 days after application, which includes the minimum 24 hours of aeration once the tarps have been cut. If the tarpaulins are not cut or aerated, prior to planting, the odor of chloropicrin must not be detectable. If odor of chloropicrin is detectable, wait a minimum of 21 days before

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RAISED BED DRIP APPLICATION TABLE		
Crop	MIDAS EC BRONZE Per Broadcast Acre <sup>1</sup>	Time Between Application and Planting <sup>2</sup>
planting to avoid possible plant injury.		

Field Rate Modifier Table for Raised Bed Applications

Row Spacing (inches)	Bed Width (inches)	Field Rate Modifier
72	40	0.55
72	36	0.50
72	32	0.44
72	30	0.42
72	28	0.39
66	32	0.48
66	30	0.45
66	28	0.42
66	24	0.36
60	30	0.50
60	28	0.47
48	28	0.58

**GENERAL INSTRUCTIONS FOR DRIP IRRIGATION (CHEMIGATION)**

- Apply this product only through buried drip tape. Do not use product through any other type of irrigation system.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- Do not connect an irrigation system used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.
- 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.
- 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 regulatory serves an average of at least 25 individuals daily at least 60 days out of the year.
- 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 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.
- 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 back flow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must contain a functional, normally closed, automatic valve located on the intake side of the injection pump or inert gas pressurized cylinder 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.

- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 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.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) or an inert gas pressurized cylinder effectively designed and constructed of materials that are compatible with MIDAS EC BRONZE and capable of being fitted with a system interlock.

#### **MIDAS EC BRONZE APPLICATION INSTRUCTIONS FOR RAISED BED DRIP FUMIGATION**

- MIDAS EC BRONZE may be applied through drip tape buried 2-4 inches beneath the soil surface. Use of a tarp seal is required for all applications of this product.
- The dilution rate for drip-line fumigation is 1400 - 2000 ppm. One gallon of MIDAS EC BRONZE in 2650 gallons of water is equivalent to 1000 ppm. MIDAS EC BRONZE must be metered into the water.
- Use drip irrigation components made of brass, stainless steel, copper, nickel, polypropylene, polyethylene, Teflon, viton, rigid PVC, and EPDM. Rigid PVC must not be exposed to undiluted MIDAS EC BRONZE or more than 2000 ppm of MIDAS EC BRONZE in the diluted form. Do not use aluminum, vinyl, plastic (other than polypropylene or polyethylene), zinc or alloys.
- In very sandy soils, apply MIDAS EC BRONZE when soil moisture conditions throughout the treatment zone are near field capacity. When necessary, apply a pre-treatment amount of water to wet the bed and enhance even movement of the material through the soil profile at time of treatment.
- MIDAS EC BRONZE must be monitored as it enters the irrigation system and must pass through a static mixer, coarse filter, or fine strainer or equivalent devices to insure proper mixing before it is distributed through the irrigation system. Do not allow treatment solution to accumulate on the soil surface. Do not allow treatment solution to pond, puddle or run-off. If run-off occurs, discontinue the application immediately and cover the contaminated soil area with clean soil to absorb the material.
- The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent back flow contamination of the water source.
- Following application, continue to apply irrigation water to rinse the irrigation system of any MIDAS EC BRONZE. Make sure any rigid dead end or low spots are drained or flushed completely. **DO NOT ALLOW MIDAS EC BRONZE TO REMAIN IN THE IRRIGATION SYSTEM.** Leave the soil undisturbed for at least 10 days after fumigation, and then proceed with normal agricultural practices for crop management activities.

#### **FOOD CROP ROTATION RESTRICTIONS**

Food crops other than strawberry, tomatoes and peppers require a 4 month plant back rotation restriction from the date of fumigant application. Crop rotation to non-food crops or non-bearing fruit or nut trees is not restricted.

### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store in a dry, cool, well-ventilated area under lock and key. When appropriate to prevent tipping, store cylinders upright, secured to a rack or wall. Post as a pesticide storage area.

**Handling:** Product cylinders shall not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is not in use, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace protection bonnet.

**Pesticide Disposal:** Pesticide wastes are acutely hazardous. 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.

**Return of Containers:** This pesticide container, whether full or partially used, is the property of the manufacturer or distributor where it was purchased and must be returned to the distributor of origin. Do not ship containers without safety caps or valve protection bonnets. Containers shall never be refilled by the consumer or used for any other product or purpose.

**FOR 24-HOUR CHEMICAL EMERGENCY (spill, leak, fire or accident) ASSISTANCE:**  
Call CHEMTREC at 1-800-424-9300

### Warranty and Disclaimer Statement

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America Corporation ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

Arysta 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 described above, when used in accordance with the Directions for Use under normal conditions.

This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.**

**TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.**