

GREENHOUSES AND HOOP HOUSES - CONTROL OF SOIL BORNE PATHOGENS

General Information

Entry Restricted Period and Notification

Entry Restrictions

Entry (including early entry that would otherwise be permitted under the WPS) by any person - other than a correctly trained and PPE-equipped handler who is performing a handling task listed on the labeling - is PROHIBITED - from the start of the application until:

- 5 days (120 hours) after the application is complete for untarped applications, or
- 5 days (120 hours) after the application is complete if tarps are not perforated and removed for at least 14 days after the application is complete, or
- 48 hours after tarp perforation is complete if tarps will be perforated within 14 days after the application is complete and will not be removed for at least 14 days after the application is complete, or
- tarp removal is completed if tarps are both perforated and removed less than 14 days after application is complete.

NOTES:

- See Tarp Perforation and/or Removal section on the labeling for requirements about when tarps are allowed to be perforated.
- If early tarp removal occurs for a broadcast application the entry restricted period is a minimum of 5 days after the application is complete.
- When listing application information for soil fumigant applications to comply with part 170.122 of the WPS, list the entry restricted period time frame in place of the REI.

NOTIFICATION: Notify workers of the application by warning them orally and by

posting Fumigant Treated Area signs. The signs must bear the skull and cross bones symbol and state:

(1) \"DANGER/ PELIGRO,\"

(2) \"Area under fumigation, DO NOT ENTER/ NO ENTRE,\"

(3) \"Dazomet Fumigant in USE,\"

(4) the date and time of fumigation

(5) the date and time the entry restricted period is over,

(6) \"Basamid G\", and

(7) Name, address, and telephone number of the certified applicator in charge of fumigation.

Post the Fumigant Treated Area sign instead of the WPS sign for this application but follow all WPS requirements pertaining to location, legibility, text size, and sign size (40 CFR § 170.120).

Post the Fumigant Treated Area signs at all entrances to the application block no sooner than 24 hours prior to application.

Fumigant Treated Area signs must remain posted for no less than the duration of the entry restricted period.

Fumigant Treated Area signs must be removed within 3 days after the end of the entry restricted period.

PPE FOR ENTRY DURING THE ENTRY-RESTRICTED PERIOD: PPE for handler entry that is permitted by the WPS is listed in the Hazards to Humans and Domestic Animals section of the labeling.

Tarp Perforation and/or Removal

IMPORTANT: Persons perforating, repairing, removing, and/or monitoring tarps are defined, within certain time limitations, as handlers (see Handlers section) and must be provided the PPE and other protections for handlers as required on the labeling and in the Worker Protection Standard for Agricultural Pesticides.

- Tarps must not be perforated until a minimum of 5 days (120 hours) have elapsed after the application is complete, unless a weather condition exists which necessitates early perforation or removal (see Early Tarp Removal for Broadcast Applications Only and Early Tarp Perforation during Flood Prevention Activities for Bedded Applications Only requirements).
- If tarps are perforated within 14 days after the application is complete, tarp removal must not begin until at least 2 hours after tarp perforation is complete.
- If tarps are perforated but not removed within 14 days after the application is complete, planting or transplanting must not begin until at least 48 hours after the tarp perforation is complete.
- If tarps are not perforated or removed within 14 days after the application is complete, planting or transplanting may take place while the tarps are being perforated.
- Each tarp panel used for broadcast fumigation must be perforated.
- Tarps may be perforated manually ONLY for the following situations:
 - At the beginning of each row when a coulter blade (or other device which performs similarly) is used on a motorized vehicle such as an ATV.
 - In fields that are 1 acre or less.
 - During flood prevention activities.
- In all other instances tarps must be perforated (cut, punched, poked, or sliced) only by mechanical methods.
- Tarp perforation for broadcast fumigations must be completed before noon.
- For broadcast fumigations tarps must not be perforated if rainfall is expected within 12 hours.
- Early Tarp Removal for Broadcast Applications Only:
 - Tarps may be removed before the required 5 days (120 hours) if adverse weather conditions have compromised the integrity of the tarp, provided that the compromised tarp poses a safety hazard. Adverse weather includes high wind, hail,

or storms that blow tarps off the field and create a hazard, e.g., tarps blowing into power lines and onto roads. A compromised tarp is a tarp that due to an adverse weather condition is no longer performing its intended function and is creating a hazard.

- Early Tarp Perforation during Flood Prevention Activities for Bedded Applications Only:

-Tarp perforation is allowed before the 5 days (120 hours) have elapsed.

-Tarps must be immediately retucked and packed after soil removal.

Summary of Uses

Basamid G soil fumigant is for the pre-planting control of listed weeds, nematodes, and soil diseases of the following sites:

- Ornamental Sites – Flowers, bulbs, bedding plants, ground cover, seed and propagating beds

- Field Nurseries –Forest, nonbearing and ornamental trees, shrubs, and Christmas tree seedlings

- Turf Sites - Establishment or renovation of existing golf courses (fairways, tees, greens), athletic fields, sod farms, and lawns

- Greenhouses and Hoop Houses

- Soil Media - Potting soil, soil heaps, and compost piles

- Nonbearing Crops.

Weeds controlled

When properly applied, this product will eliminate listed weeds: crabgrass, henbit, pigweed, foxtail, purslane, mustard, witchweed, annual bluegrass, bermudagrass and many other plants and weed seeds. For a complete list see Table 5 – Germinating Seeds of Annual and Perennial Weeds, Table 6 – Root Propagated Weeds, and Table 7 – Parasitic weeds.

Nematodes controlled

This product will control root knot, stubby root, reinform, ectoparasitic root, (i.e., *Meloidogyne* sp., *Pratylenchus* sp., *Hoplolaimus* sp., *Tylenchorrhynchus* sp., *Rotylenchulus* sp., *Paratylenchus* sp., *Xiphinema* sp., *Tylenchus* sp.) and listed nematodes. For a complete list see Table 8 – Plant-parasitic nematodes.

Diseases controlled

This product will control root rots, damping off, and wilt diseases caused by *Aphanomyces* sp., *Fusarium* sp., *Phytophthora cactorum*, *Pythium* sp., *Rhizoctonia* sp., *Thielaviopsis basicola*, *Verticillium albo-atrum*, and soilborne *Stromatinia gladioli* and corm rot of gladiolus caused by *Fusarium* sp. For a complete list see Table 9 – Soil-borne Fungi and Table 10 – Soil-borne Bacteria.

APPLICATION INSTRUCTIONS

Preparation Prior to Application

1) Basamid G can be applied to tilled and non-tilled sites:

a. Tilled Sites: The area intended for treatment should be in seedbed condition with a fine tilth, free of clods.

Repeated cultivation before treating will improve control of perennial weeds.

b. Non-Tilled Sites: Remove existing vegetation with a mower or other suitable equipment. The vegetation must be cut to the lowest height possible, 1/8-inch or less. Aerate and/or verticut to improve water penetration and remove surface debris.

2) In tilled sites, weed seeds or plant material bearing nematodes must be mechanically hoed or plowed into the soil 1-2 weeks before fumigating so that the emerging weeds and nematodes are subject to fumigation.

3) If root-knot nematodes must be controlled, delay application at least 2-3 weeks, until the root-knot infested root residues have begun to decompose and the remaining plant refuse has been tilled into the soil.

4) Do not apply farmyard manure, peat, other organic fertilizers, burnt lime, or lime nitrogen just before, along with, or just after this product.

5) Converting the active ingredient into the gaseous phase depends primarily on

soil moisture and temperature (see Application Restrictions and Water Requirements in the GAPs section of the label).

Methods of Application

Apply Basamid G soil fumigant to properly prepared soils using shanks, drop-type fertilizer spreaders, or other suitable non-handheld equipment for all applications except interplanting (tree replant holes). Handheld equipment (scoops and shakers) is allowed for tree replant hole applications only. To prevent Basamid G from sticking to the tires of the application equipment, the surface of the soil must be dry to the touch at the time of application. Either incorporate the material physically into the soil to the desired depth, or incorporate the material into the soil with water. If physically incorporated, the soil surface must be sealed as described in the Preparation Prior to Application section.

USE RESTRICTIONS

Do not store Basamid G overnight in an uncovered container.

Do not apply Basamid G when wind may cause granules to drift from target area.

Do not make more than 245 tree replant hole applications per day.

Physical/Mechanical Incorporation for Combined Disease, Nematode, and Weed Control

1) Apply Basamid G to the soil.

2) After applying, incorporate the granules into the soil as uniformly as possible to the desired depth. This is best accomplished with an L-shaped tine rototiller or spading machine.

3) Following incorporation, seal the soil surface by smoothing or rolling to impede fumigant escape.

4) The treatment is more successful if the incorporation and sealing is followed by thoroughly wetting the soil, keeping it moist (but not waterlogged) for 72 hours. This can be accomplished either with overhead or drip irrigation. Alternatively, the soil can be covered with a tarp (e.g. barrier film) (such as polyethylene sheeting or other material) to retain fumigant vapors. Drip irrigation is needed to apply water

needed to activate the granules that are immediately covered with a tarp after application and incorporation (see section immediately below).

Water Incorporation with Drip Irrigation for Disease and Weed Control

- 1) Drip irrigation tape or tubing can be applied prior to, or following, the Basamid G application.
- 2) Apply Basamid G to the soil.
- 3) After applying, cover with tarp (e.g., plastic mulch).
- 4) Activate the Basamid G using drip irrigation, wetting entirely to the margins of the treated area (such as bed shoulders).
- 5) The soil must be kept moist (but not waterlogged) for 72 hours.

Water Incorporation with Overhead Irrigation for Disease and Weed Control

- 1) Apply Basamid G to the soil.
- 2) After spreading, apply overhead irrigation to activate the Basamid G and seal the soil surface.
 - a. Day 1: Irrigate sufficiently to move the water front 4 to 6 inches into the soil profile. Depending on soil type, structure, and weather conditions, approximately 0.75 to 1 inch of water. Repeat the application, as necessary, to ensure the soil profile is thoroughly wetted and all granules are activated. This liquid phase will ensure contact of the soil particles with Basamid G throughout the incorporated profile. Contact with the soil particles is a critical factor to the success of Basamid G.
 - b. Day 2: Continue irrigations to ensure that the surface area remains sealed, but not waterlogged. Typically, half the amount of water applied on Day 1 should be sufficient. Make multiple applications, depending on local conditions, to ensure that no gases escape as they move up through the soil.
 - c. Day 3: Continue irrigations to ensure that the surface area does not dry out and no cracks appear in the treated area. Typically, half the amount of water applied on Day 2. Multiple applications, depending on local conditions, may be necessary to reduce gas escape from the soil.

d. Day 4: Irrigate with a minimal amount of water to keep the surface sealed and free of cracks. Typically, half the amount of water applied on Day 3. Make multiple applications, depending on local conditions

PRODUCT RESTRICTIONS AND LIMITATIONS

Maximum seasonal use rate: Refer to Table 1 – Basamid G Application Rates for maximum rates of Basamid G soil fumigant per acre, per season.

- 1) Preharvest Interval (PHI): Refer to Preparation Prior to Planting.
- 2) Entry Restricted Period: Refer to Agricultural Use Requirements.
- 3) Crop Rotation Restriction: If all label procedures are followed correctly and all gases have escaped, no crop rotation restrictions apply.
- 4) This product cannot be used to formulate or reformulate any other pesticide product.
- 5) DO NOT use Basamid G when soil temperatures 4" deep are below 43° F (6° C) or above 90° F (32° C).
- 6) DO NOT plant any crop until all fumigant gases have dissipated from the soil. A Safety Germination Test is recommended.

Limitations, Restrictions, and Exceptions

Greenhouses and Hoop Houses

Basamid G can be used for fumigation in greenhouses and hoop houses. Observe all Personal Protective Equipment (PPE) requirements for use in greenhouses and other enclosed areas. During the application keep all doors, vents, and windows to the outside open, and keep all fans or mechanical ventilation systems running within the greenhouse. Before applying Basamid G soil fumigant in greenhouses, nursery boxes, etc., all plants and living plant materials must be removed. Leaks through which gases could penetrate into adjacent rooms or greenhouses filled with plants must be sealed. Various ornamentals (e.g., *Ficus* sp., *Hydrangea macrophylla*, *Asparagus plumosus*) are very sensitive to trace amounts of MITC. Follow instructions in Preparation Prior to Application. Select the appropriate application rate (see Table 1 – Basamid G Application Rates) and methodology as outlined in

Methods of Application. Following fumigation, and before turning off the heat in a greenhouse closing for the winter, a germination test must be performed to ensure that MITC has completely degraded. Failing to eliminate all the gases from the soil may delay spring planting or cause plant loss. Prior to seeding or transplanting follow the instructions in Preparation Prior to Planting.

Requirements for Pre-Plant Greenhouse and Hoop House Soil Fumigations: The maximum application block size that can be treated is 50,000 square feet.

Method

[Surface](#)

[Soil incorporation](#)

[Fumigation](#)

Rates

[field_rates 0](#)

[field_rates 1](#)

[field_rates 2](#)

[field_rates 3](#)

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Timings

[N.A.](#)