

Basamid[®]G

SOIL FUMIGANT

For pre-planting control of most weeds in strawberries and tomatoes

For use in California only

ACTIVE INGREDIENT:

Tetrahydro-3,5,-dimethyl-2H-1,3,5-thiadiazine-2-thione99.0%

INERT INGREDIENTS1.0%

TOTAL100.0%

**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 this label, find someone to explain it to you in detail.)

See inside booklet for complete **Precautionary Statements, Directions For Use, Statement of Practical Treatment, and Warranty.**

Net Contents:

50-pound bag (22.68 kilograms)

EPA Reg. No. 70051-101

EPA Est. No. 7969-DEU-001

Lot Number:

Manufactured for
Certis USA, L.L.C.
9145 Guilford Road
Suite 175
Columbia, MD 21046



PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING. May be fatal if swallowed. Do not breathe vapor or dust. Do not get in eyes, on skin, or on clothing. Prolonged exposure may cause irritation to skin, eyes, and mucous membranes. The gases released during the degradation of this product in the soil are irritating to the skin, eyes, and mucous membranes.

FIRST AID

If inhaled:

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

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.

If swallowed:

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

HOT LINE NUMBER

Have the product container label with you when calling a poison control center or doctor or going for treatment. You may also contact Certis USA, L.L.C. for emergency medical treatment: 1-800-255-3924

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant footwear plus socks
- Chemical resistant gloves made of any waterproof material.

Wash thoroughly with soap and water after handling. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not re-use them. Follow the manufacturer's instructions for cleaning and 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 clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

This product is toxic to fish. 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 apply where runoff is likely to occur. Do not contaminate the water when disposing of equipment washwaters.

Endangered Species Concerns

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law.

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR 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 in this labeling about personal protective equipment, notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Entry Restrictions

Outdoors: Entry (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 WPS-defined handling task — is PROHIBITED from the start of application until **24 hours** after application. In addition, if tarps are used for the application, non-handler entry is prohibited while tarps are being removed.

NOTIFICATION: Notify workers of the application by warning them orally and by posting fumigant warning signs. The signs must bear the skull and cross bones symbol and state **(1) "DANGER/ PELIGRO," (2) "DO NOT ENTER/ NO ENTRE," (3) the date and time of fumigation, (4) "Basamid® G Fumigant in use," and (5) name, address, and telephone number of the applicator.** Post the fumigant warning sign instead of the WPS sign for this application, but follow all WPS requirements pertaining to location, legibility, size, and timing of posting and removal.

Post the fumigant warning signs at entrances to treated areas.

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 this labeling.

GENERAL INFORMATION

Basamid® G soil fumigant is intended for pre-planting control of most weeds in the following areas:

- Strawberries and Tomatoes – **For use in California only;**

For these uses the buffer zone shall be 500 ft. unless otherwise specified by the Department of Pesticide Regulation or the local county agricultural commissioner.

Weeds controlled: When properly applied, this product will eliminate many weeds such as crabgrass, henbit, pigweed, foxtail, purslane, mustard, witchweed, and many other plant and weed seeds.

Important Notes to User

Read the entire label carefully before use.

- This product is toxic to all growing plants.
- Do not apply within 3-4 feet of growing plants or closer than the drip line of trees and large shrubs. If slopes are treated

with this product, take precautions to prevent the chemical from washing downward to growing plants. Vapors from soil treated with this product may injure growing plants. Data are not complete on use in propagating beds composed of materials other than soil or soil and peat mixtures.

- Fumigation may slow the rate of nitrification (the conversion of nitrates from ammonia by bacterial action). Therefore, certain ammonia-sensitive plants may exhibit growth inhibition when planted in fumigated soils containing high amounts of ammonia nitrogen. To lessen this hazard, at least half, and preferably all, of the nitrogen fertilizer added immediately before or soon after fumigation should be in the form of nitrate nitrogen. This hazard may also be reduced by delaying planting until several months after fumigation, such as fall fumigation before a spring-planted crop. If a nitrate form of nitrogen such as sodium or calcium nitrate is not readily available, ammonium nitrate used sparingly will supply the nitrogen needed without risk. Phosphorus, potassium, and other plant nutrients should be used according to soil needs.

Mode of Action

When Basamid® G soil fumigant is correctly incorporated into moist soil, the active ingredient is transformed into substances that possess soil-sterilizing properties.

The gas that is formed diffuses upward through spaces in the soil, killing the living organisms it contacts. As with other sterilizing materials, the effectiveness of Basamid® G depends primarily on the concentration used, the length of time that it takes effect, and the physiological state of the organisms to be controlled. Freshly-germinating weed seeds are most likely to be controlled. Dormant weed seeds will not be controlled. Therefore, all plant residues should be removed from the area to be treated. Also, the soil to be treated must be moist before, during, and after application.

Crop Tolerance

All crops listed on the label are tolerant to areas that have been treated with Basamid® G following dissipation of the gases. The aim of soil sterilization is to ensure or increase crop yield. Data have shown that certain subsequent crops are positively influenced by a Basamid® G treatment, because weeds will not have time to multiply and compete with the crop for nutrients. However, the presence of Basamid® G is toxic to all growing plants.

Cleaning Equipment

Clean application equipment thoroughly using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions before and after applying this product.

Application Instructions

Preparation

- The area intended for treatment should be in seedbed condition with a fine tilth, free of clods. Do not apply Basamid® G to dry or improperly tilled soil. Repeated cultivation before treating will improve control of perennial weeds. Ditching around the site will prevent weed seeds from washing into the treated area and contaminating it.
- For optimal effect, the soil to be fumigated must have sufficient moisture for good plant growth (at least 50% field capacity) for 5-14 days (depending on temperature) before the treatment. The weed seeds in such an optimally moist soil become ready to germinate, and are most reliably controlled in this condition. Heavy soils may need to be irrigated twice to achieve a uniform moisture in the treated zone. Weed seeds must be mechanically

hoed or plowed into the soil 1-2 weeks before fumigating so that the emerging weeds are subject to fumigation.

- Do not apply farmyard manure, peat, other organic fertilizers, burnt lime, or lime nitrogen just before, along with, or just after this product. (see also **Important notes to user**).
- Converting the active ingredient into the gaseous phase depends primarily on soil temperature and moisture. The soil temperature must be above 43° F (6° C) and remain at least this high during the entire fumigation period. The best conditions prevail at soil temperatures of 54-64° F (12-18° C) (e.g., in late summer and autumn). Do not apply Basamid® G if the ambient air temperature exceeds 103° F (39° C). If the soil temperature falls below 43° F (6° C), the gas may sink into deeper soil layers when there is danger of frost which can cause crop injury later if the soil is not aerated deeply enough. If the soil temperature is too high, the gases escape too rapidly from the soil and cannot develop their full activity. Soil moisture should be kept at 50% field capacity (60-80% for sand; 30-40% for clay).

Application Rates

The application rates in **Table 1** are based on an incorporation depth of 8". When the infestation extends to greater depths, an additional 5-6.5 ounces of Basamid® G per 100 square feet are needed per 4" of soil depth.

Table 1. Basamid® G Application Rates

Weeds	Rate per 100 square feet	Rate per 1000 square feet	Rate per Acre – At 8" incorporated depth
To control germinating weed seed	13 ounces	8 pounds	350 pounds

Method of Application

- Wear the required personal protective equipment (refer to **Precautionary Statements**)
- Pour the contents of the bag into a drop-type fertilizer or granular product spreader.
- Apply Basamid® G evenly over the soil. Do not store this product in an open spreader overnight.
- For soil incorporation – Immediately after spreading, incorporate the granules into the soil as uniformly as possible to the desired depth. Following this, roll the soil surface to impede fumigant escape. Tarp with polyethylene sheeting and irrigate, thoroughly wetting the soil for at least 72 hours.
- For water incorporation - Immediately after spreading, apply overhead irrigation at the rate of 0.75 inch of water on Day 1 and 0.25 inch of water on Days 2 and 3.

Planting

Before seeding, planting, or transplanting, all the gaseous residues must be gone from the soil. If the soil temperature rises above 65° F. (18° C), a waiting period of 2-3 days is usually sufficient time for the gases to escape from the soil. Cooler conditions require a longer waiting period (See Tables 2 and 3). At temperatures below 50° F (10° C), fumigation should not be terminated for 2-4 weeks. Do not use Basamid® G soil fumigant when soil temperatures are below 43° F (6° C). Do not plant

any crop until all fumigant odors have dissipated from the soil and can no longer be detected. As an added precaution, conduct a lettuce seed germination test (Safety Germination Test) as follows:

Plant a few lettuce or cress seeds in the treated soil (at a minimum of 5 days after treatment, or 5 days before the waiting period ends). These seeds should germinate in about 3 days. For comparison, plant a few seeds in an untreated area. If the plants from the treated area are normal, it is safe to plant the crop.

Fall soil treatment is recommended if early spring planting is necessary. The waiting period can be shortened by repeated hoeing, digging, or other tillage of the soil. The waiting period is longer when this product is used on soils with high concentrations of organic matter.

Transplants and seeds can be planted directly into a previously treated bed.

The plastic sheeting used to tarp a treated area can also function as a mulch and be left in place in the field.

Table 2. Replanting: Soil Temperature and Waiting Period

Soil temperature at 4 inch depth	Recommended waiting period between treatment and replanting
Above 94° F (34° C)	10 days
Above 65° F (18° C)	10 - 12 days
59 - 65° F (15 - 18° C)	12 - 18 days
54 - 59° F (12 - 15° C)	15 - 20 days
47 - 54° F (8 - 12° C)	22 - 27 days
43 - 47° F (6 - 8° C)	above 30 days

Table 3. Replanting With Plastic Row Cover: Soil Temperature and Waiting Period

Soil Temperature at 4 inch depth	Recommended waiting period between treatment and replanting
Above 75° F (24° C)	14 days
65-75° F (18-24° C)	21 days
55-65° F (13-18° C)	30 days

GENERAL MIXING INFORMATION

Certis USA, L.L.C. does not recommend using product combinations other than those listed on Certis USA, L.L.C. labeling. Your local Certis USA, L.L.C. representative or local agricultural authorities may be a source of information when using other than Certis USA, L.L.C. recommended product combinations.

GENERAL RESTRICTIONS AND LIMITATIONS

- **Maximum seasonal use rate:** Refer to Table 1 for maximum rates of Basamid® G soil fumigant per acre, per season.
- **Preharvest Interval (PHI):** Refer to **Planting**.
- **Restricted Entry Interval (REI):** Refer to **Agricultural Use Requirements**.
- **Crop Rotation Restriction:** If all label procedures are followed correctly and all gases have escaped, no crop rotation restrictions apply.
- This product cannot be used to **formulate** or reformulate any other pesticide product.
- Do not apply Basamid® G to growing crops - it is for use as a soil treatment only.
- Do not use Basamid® G when soil temperatures 2" deep are below 43° F (6° C) or above 90° F (32° C).
- Do not plant any crop until all fumigant gases have dissipated from the soil and can no longer be detected by a seed germination test.
- Do not apply within 3-4 feet of growing plants or closer than the drip line of trees and large shrubs.
- Do not apply Basamid® G to dry or improperly tilled soil.
- Do not apply Basamid® G if the ambient air temperature exceeds 103° F (39° C).
- Do not store this product in an open spreader overnight.
- Do not apply Basamid® G when wind may cause granules to drift from target area.
- Do not re-use clothing and other absorbent material that have been heavily contaminated with this product.

SITE-SPECIFIC INFORMATION

Seed Beds

Apply the recommended rate (see **Table 1. Application Rate Table**) to a prepared soil surface. Apply 15 gallons of water per 100 square feet immediately after incorporation. Apply water only as fast as it can be absorbed without runoff to seal the soil and contain the gases. After 5-7 days, rake the soil lightly, not deeper than 2". The soil should be raked at least 5 days before seeding to release any trapped gasses.

For Interplanting:

For soil treatment prior to interplanting in existing berry fields, and similar areas, thoroughly till a spot large enough to accommodate the root system of the plant. Root systems of nearby existing plants should be completely severed to avoid contact with the treated soil. Soil may be treated in place based on the area and depth tilled, or removed and treated in a pile. The soil surface should be tarped for best results.

Pests listed in this label: (all sites)

Germinating seeds of annual weeds

Common Name	Scientific Name
Barnyardgrass*	<i>Echinochloa crus-galli</i>
Blackgrass*	<i>Alopecurus myosuroides</i>
Bristlegrass*	<i>Setaria</i> spp.
Buckwheat, Wild*	<i>Polygonum convolvulus</i>
Callalily, Brazil*	<i>Richardia brasiliensis</i>
Chamomile, Wild*	<i>Matricaria chamomilla</i>
Chickweed*	<i>Galium aparine</i>
Cleavers*	<i>Centaurea cyanus</i>
Corn flower*	<i>Digitaria</i> spp.
Crabgrass	<i>Stellaria media</i>
	<i>Apera spica-venti</i>
Fescuegrass*	<i>Festuca myuros</i>
Foxtail, Short-awned	<i>Alopecurus aequalis</i>
Fumitory, Common*	<i>Fumaria officinalis</i>
Galinsoga, Small-flowered*	<i>Galinsoga parviflora</i>
Groundsel*	<i>Senecio vulgam</i>
Hempnettle*	<i>Galeopsis tetrahit</i>
Henbit	<i>Lamium amplexicaule</i>
Itchgrass*	<i>Rottboellia exaltata</i>
Jimsonweed*	<i>Datura stramonium</i>
Knotgrass*	<i>Polygonum aviculare</i>
Ladysthumb*	<i>Polygonum persicaria</i>
Lambsquarters*	<i>Chenopodium album</i>
Marigold, Dwarf*	<i>Schkuhria pinnata</i>
, Corn*	<i>Chrysanthemum segetum</i>
Meadowgrass, Annual*	<i>Poa annua</i>
Mustard, Wild	<i>Sinapis arvensis</i>
Nettle, Small*	<i>Urtica urens</i>
Nightshade, Black*	<i>Solanum nigrum</i>
Oats, Wild*	<i>Avena fatua</i>
Pennycress, Field*	<i>Thlaspi arvense</i>
Pigweed	<i>Amaranthus</i> spp.
Purslane, Common	<i>Portulaca oleracea</i>
Radish, Wild*	<i>Raphanus raphanistrum</i>
Rapeseed*	<i>Brassica</i> spp.
Shepherdspurse*	<i>Capsella bursa-pastoris</i>
Smartweed, Pale*	<i>Polygonum lapatifolium</i>
Spurge, Sun*	<i>Euphorbia helioscopia</i>
Vetch, Tufted*	<i>Vicia cracca</i>
Witchweed	<i>Striga asiatica</i>
Yellowrocket*	<i>Barbarea vulgaris</i>

*Not approved for use in California

To reduce the infestation of root-propagated weeds

Common Name	Scientific Name
Bermudagrass	<i>Cynodon dactylon</i> *
Bindweed, Field	<i>Convolvulus arvensis</i> *
Clover	<i>Trifolium</i> spp.*
Cress, Hoary	<i>Agropyron repens</i> *
Quackgrass	<i>Cardaria draba</i> *
Rough cinquetoil	<i>Potentilla norvegica</i> *
Sedges	<i>Cyperus</i> spp.*
Stinging nettle	<i>Urtica dioica</i> *

Parasitic weeds

Common Name	Scientific Name
Broomrape	<i>Orobanche</i> spp.*
Dodder	<i>Cuscuta</i> spp.*
Witchweed	<i>Striga</i> spp.*

*Not approved for use in California

Perennial seed-propagated weeds

Common Name	Scientific Name
Birdweed*	<i>Convolvulus arvensis</i>
Cinquefoil*	<i>Potentilla norvegica</i>
Clover*	<i>Trifolium</i> spp.
Cocksfoot*	<i>Dactylus glomerata</i>
Cress, Hoary*	<i>Cardaria draba</i>
Dock, Broadleaved*	<i>Rumex obtusifolius</i>
Medic*	<i>Medicago</i> spp.
Nettle, Stinging*	<i>Urtica dioica</i>
Quackgrass*	<i>Agropyron repens</i>
Sedges*	<i>Cyperus</i> spp.

*Not approved for use in California

Storage and Disposal

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

Pesticide Storage: Store this product in a dry, cool place below 95° F (35° C) — it will decompose at higher temperatures. This material reacts nonviolently with moisture, releasing fumigant vapors. Keep the container tightly sealed when not in use. Do not re-use the empty container. Keep this product and its vapors away from desirable plants, seeds, fertilizers, insecticides, and other agricultural chemicals as plant injury or loss may result from contamination.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or an approved waste disposal facility.

Container Disposal: Dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

In Case of Emergency

In case of large-scale spillage regarding this product, call: CHEMTEL 800-424-9300 • 800-255-3924
Certis USA, L.L.C. 800-250-5024

In case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment.
- Your local poison control center (hospital).
- Certis USA, L.L.C. 800-250-5024

Steps to be taken in case material is released: Keep the spill out of all sewers and open bodies of water. Remove contaminated clothing, and wash affected skin areas with soap and water. Wash clothing before re-use

WARRANTY

Certis USA, L.L.C. warrants that the material contained herein conforms to the description on the label and is reasonably fit for the purposes referred to in the directions for use. Timing and method of application, weather, watering practices, nature of soil, the insect problem, condition of the crop, incompatibility with other chemicals not specifically recommended, and other influencing factors in the use of this product are beyond the control of the seller. Buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given herein. NO OTHER EXPRESS OR IMPLIED WARRANTY OF THE FITNESS OR MERCHANTABILITY IS MADE.