

Basamid® Granular

Registration No. 93-E-5-2

NET CONTENTS
20 kg



**DANGEROUS POISON
AVOID BREATHING VAPOUR**

Composition mass/mass
dazomet 980 g/kg
insert ingredients 20 g/kg
Chemical group : Fumigant

A granular soil fumigant for the control of germinating weeds, nematodes, pathogenic fungi and soil insects in tobacco and flowers

Registered by : Pivotal Agro-Services. P.O. Box WGT 450 Westgate. Tel: 309800

Manufactured by : Kanesho Soil Treatment BVBA

Batch No. :

Date of Manufacture :

Expiry date : 2 years after date of manufacture if stored in a cool, dry place

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TO CAUSE A HAZARD IN THE USE, STORAGE OR DISPOSAL OF THIS SUBSTANCE IS AN OFFENCE

PRECAUTIONS

1. Handle with care; avoid splashing/contact, poisonous by swallowing and inhalation.
2. WEAR FULL PROTECTIVE CLOTHING; i.e. rubber gloves, rubber boots, overalls, hood and respirator.
3. Do not breathe vapours or dust.
4. Do not eat, drink or smoke while applying this product.
5. Remove protective clothing on completion of work and wash hands and face thoroughly with soap and water.
6. KEEP OUT OF REACH OF CHILDREN.
7. KEEP APART FROM FOOD AND FOOD STUFFS.
8. DANGEROUS TO LIVESTOCK AND DOMESTIC PETS.
9. DANGEROUS TO GAME, WILD BIRDS, FISH AND OTHER ANIMALS.
10. DO NOT CONTAMINATE DRINKING POOLS, DAMS RIVERS AND WATERWAYS.
11. Store in the original container and KEEP UNDER LOCK AND KEY.
12. Destroy empty containers - do NOT use for any other purpose.
13. Clean applicator thoroughly after use.
14. Dispose of wash water in a safe manner.

SYMPTOMS OF POISONING

The symptoms are indefinite. The gas released by the product in contact with the humidity in the soil is irritating to the eyes, skin and mucous membranes.

FIRST AID

General advice: Remove contaminated clothing.

If inhaled: Keep patient calm, remove to fresh air. Summon medical help.

On skin contact: Wash thoroughly with soap and water.

On contact with eyes: Wash affected eyes for at least 15 minutes under running water with eyelids held open. Consult an eye specialist.

If swallowed: Immediately rinse mouth and then drink plenty of water. Summon physician.

NOTE TO PHYSICIAN

Treat according to symptoms (decontamination, vital functions), no known specific antinode.

If swallowed, induce vomiting. Avoid giving substances stimulating re-absorption like fats (milk, castor oil) or alcohol etc. Administer activated charcoal (medical charcoal) if needed.

In case of fainting, place person in a stable lateral position; apply artificial respiration if breathing stops.

WARRANTY

This product is warranted to consist of the ingredients on this label, but all other conditions of warranties, statutory or otherwise, as to the fitness of this product, for any other particular purpose, excluded and no responsibility will be accepted for any injury to persons, or damage, or loss of property, resulting from the handling, use or storage of this product.

DIRECTIONS FOR USE:

TOBACCO SEEDBEDS: TRB CERT. No : 14-17-E-61

	DOSAGE	APPLICATION
Use in conjunction with root-knot resistant tobacco	60 grams per square meter (60 g/m ²)	Keep seedbed well watered to germinate and activate weed seeds, nematodes, fungi and soil insects. Stop watering 3 days before application of Basamid Gr. Spread Basamid GR evenly over the seedbed area and mix thoroughly with a hoe to 150-200 mm depth. Irrigate to 60% field capacity immediately after application. Cover beds with 125 gauge polythene sheets for seven days. After 7 days remove sheets and aerate soil by making a fine tilth using a hoe. Sowing can be done 28 days after product application.

FLOWERS

SOIL TYPE	DOSAGE	APPLICATION
Light sandy to sandy loam soils (up to 25% clay)	50-70 grams per square meter (50-70 g/m ²)	Pre plant seedbed fumigation for the control of weeds including yellow and purple nutsedge, nematodes, pathogenic fungi and soil insects in flowers and strawberry nursery production. Use higher rate where nematode infestation is high.
Soil mixture with high organic matter.	50-70 grams per square meter, soil layer should be 250-300mm deep.	Bulk treatment of potting soil for the control of weeds, nematodes, soil insects and pathogenic fungi.

Method for Application:

1. PREPARATION PHASE

Work seedbed into a fine tilth, free of large lumps 14 days before the start of fumigation. During this phase, the seedbed should be well watered (to about 80% of field capacity). Stop watering 2 days before BASAMID GRANULAR application so that soil moisture is at about 60% of field capacity on the day of treatment. **(Duration approx. 2 weeks)**

2. TREATMENT PHASE

- a. BASAMID GRANULAR must be spread evenly over the area to be treated. If no application equipment is available, this can be done by hand with a container (glass or plastic) with a perforated lid. The lid should have about 10 holes each about 1 to 2 mm wide.
- b. Immediately after application BASAMID GRANULAR must be thoroughly mixed with the soil to a minimum depth of 150 mm and a maximum depth of 200 mm. This operation is best done with a rotavator or offset disc harrow. On smaller areas or where these implements are not available, the working in operation can be with a badza (hoe). Use a NEW badza with a blade length of 200 mm. In event of the latter or an offset harrow being used, the operation should be done twice. Level the area with a rake or spike tooth harrow. Water the area to 60% of field capacity.
- c. Cover the treated area immediately with a tarpaulin or plastic sheet. The cover does not have to be completely air tight. On smaller areas, overlapping plastic fertilizer bags may also be used. **(Duration - a few hours)**

3. FUMIGATION PHASE

Leave treated areas under cover for at least 7 days including the day of treatment for high temperatures. **(Duration - 7-10 days).** Keep covers in position for 10 days under low temperatures.

4. SOIL AERATION

Remove covers. Cultivate the area to a depth of 150 mm to facilitate the escape of the the gasses with one of the implements recommended in paragraph 2.b. Do not cultivate too deep as this might mix untreated soil into the profile. Leave the seedbeds open for one week and repeat the cultivation. Leave the area open for another week. Note: Under very hot and dry conditions, the areas treated may dry out rapidly and should be given additional irrigation to keep at 60% of field capacity. **(Duration 2 weeks)**

5. SAFETY TEST

- a. Take 6 random representative samples of the treated area at the same depth that incorporation took place.
- b. Bulk these, take a representative sample and fill a jar ³/₄ full.
- c. Dip a piece of moist cotton wool in lettuce or radish seeds and place into the jar on top of the soil sample.
- d. Close the lid and place in a warm room.
- e. Prepare a similar test with untreated soil.
- f. If no gas residues are present, germination of the radish sed should occur after 48 hours and lettuce seed after 3 to 4 days.
- g. Healthy germination in both jars indicate the absence of gasses in the soil. The occurrence of healthy germination of the seeds in the jar containing untreated soil clearly indicates the presence of traces of gas residue in the treated area and a second gas release cultivation should be carried out.

THE TREATMENT OF POTTING SOIL

Incorporate the required quantity of BASAMID GRANULAR into moist bulk potting mixture by turning at least twice. Soil layer should be 200 - 250 mm deep. Cover the mixture with polythene film, seal and leave for 3 weeks. Before the soil is used it should be spread onto a clean surface away from plants and turned to allow gas to escape. Apply the safety test in paragraph 5.

WARNINGS

1. The fumes released from the soil with BASAMID GRANULAR are highly injurious to plant life. The waiting period must be adhered to.
2. It is very important that all fumes are removed from the soil before crops are sown. Follow "Directions for use" closely and ensure that results from the "safety test" is satisfactory before commencing with planting.
3. Do not use on soils containing more than 25% clay.
4. Weed seeds and nutgrass bulbs, which are dormant at the time of application, are enclosed in hard clods of soil or are placed below the treated area will not be fully controlled.
5. Do not use if the soil temperature at 15cm depth is below 12°C.
6. The efficacy of BASAMID GRANULAR is completely dependant upon adequate mixing with the soil.
7. Do not use soils where the proper mixing procedure cannot be carried out.
8. Do not irrigate during the aeration period.

Certis U.S.A., LLC
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Columbia, Maryland 21046

EMERGENCY TELEPHONE NUMBER

CHEM•TEL (800) 255-3924
Outside North America Call Collect (813) 248-0585

PRODUCT INFORMATION

Trade name: Basamid® Granular Soil Fumigant
Synonyms: Dazomet
Description: Dazomet, 99% pure
Active ingredient: Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione
Empirical formula: C₅H₁₀N₂S₂
Molecular mass: 162.3 g mol⁻¹
Chemical family: Thiadiazine
Inert ingredients: NA
SARA Title III Section 313: Listed

CAS #:	533-74-4	PEL:	Not established
DOT Shipping Name:	None	TLV:	Not established
DOT Hazard Class:	None	Bill of lading descriptions:	
DOT labels required:	None	By land:	Compounds, Tree or Weed Killing, (Herbicides), NOIBN
DOT placards required:	None	Bulk by water:	Environmentally Hazardous Substance, Solid, NOS (contains Dazomet), 9, UN 3077, PG III, ERG 171, Marine Pollutant
UN Code:	UN 3077		

PHYSICAL DATA

Boiling point:	104°C	Bulk density	0.6 – 0.8 kg L ⁻¹
Vapor pressure _{20°C} :	5.8 × 10 ⁻⁹ bar	pH	Not determined
Water solubility:	insoluble	Appearance:	White-yellow solid

HEALTH HAZARDS / EFFECTS

Hazards to humans and domestic animals

Hazard Statements: WARNING / AVISO Keep Out of Reach of Children



Effects of overexposure:

WARNING: May be fatal if swallowed. Do not breathe vapor or mist. Do not get in eyes, on skin, or on clothing. Prolonged exposure may cause irritation to skin, eyes, and mucous membranes. The gasses released during the degradation of this product in soil are irritating to the skin, eyes, and mucous membranes. Do not drink alcoholic beverages before, during, or after working with this product. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Existing medical conditions aggravated by exposure:

No information found for this mixture

Animals fed 40 ppm Basamid for two years exhibited liver effects. Rats fed 10 ppm for two years exhibited kidney necrosis.

TOXICOLOGICAL TEST DATA

Rat, Oral LD ₅₀	519 mg kg ⁻¹
Rat, Dermal LD ₅₀	>2,000 mg kg ⁻¹
Rat, Inhalation LC ₅₀ (4hr)	8.4 mg L ⁻¹
Rabbit, Oral LD ₅₀	120 mg kg ⁻¹
Rabbit, Dermal LD ₅₀	7,000 mg kg ⁻¹
Rabbit, Eye Irritation	Not irritation
Rabbit, Skin Irritation	Not irritation

Basamid Granular is not a sensitizer; however, the hydrolysis product, Methyl isocyanate, has been shown to be sensitizing in animal tests.

EMERGENCY AND FIRST AID PROCEDURES

Skin:	Immediately flush affected areas with large amounts of soap and water. Obtain medical attention for irritation.
Eye:	Immediately flush eyes with large amounts of water and get medical attention.
Inhalation:	Assist respiration as needed. Obtain medical attention for irritation. Call a physician or poison control center. Induce vomiting by giving two glasses of warm water and touching back of throat. Do not induce vomiting or give anything by mouth to an unconscious person.
Ingestion:	Do not drink alcoholic beverages before, during, or after working with this product.
WARNING:	Do not drink alcoholic beverages before, during, or after working with this product.
Note to physician:	Treat symptomatically – no known specific antidote.

HEALTH PROTECTION MEASURES

Respiratory Protection:	Supplied air respirators should be worn if large quantities of dust are generated or prolonged exposure is possible.
Ventilation:	Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.
Protective Clothing:	Gloves, long-sleeved shirt, and slacks.



Eye Protection:

Chemical goggles when respirator does not provide eye protection.

FIRE AND EXPLOSION HAZARD DATA

Flash Point:	199°F	Auto-ignition Temperature:	518°F
Flammable Limits:	Not determined	Flammability limits in air:	Not determined
Extinguishing Media:	Water spray, foam, or dry chemical	NFPA 704 Hazard Codes:	Health 2, Flammable 3*, Reactivity 1*
Special firefighting procedures:	Firefighters should be equipped with self-contained breathing apparatus and turnout gear.		

Unusual fire explosion hazards:

*Can form flammable dust/air mixtures at 30 g / m³ air. CO₂ unsuitable for extinguishing media due to dust explosion hazard. The following can be given off in a fire: toxic gases, sulfur dioxides, nitrogen dioxides.

REACTIVITY DATA

Hazardous decomposition:	Decomposes into Methyl isocyanate when in contact with water.	Stability:	Unstable in water
Hazardous Polymerization:	Dos not occur	Conditions to Avoid:	Do not store above 104°F

ENVIRONMENTAL TOXICITY DATA

This product is toxic to algae and fish. Apply this product a specified on the label.

Rainbow Trout, 96 hr LC ₅₀	0.16 mg L ⁻¹
Bluegill Sunfish, 96 hr LC ₅₀	0.16 mg L ⁻¹
Daphnia Magna, 486 hr LC ₅₀	0.3 mg L ⁻¹
Mallard Duck, LC ₅₀	415 mg kg ⁻¹
Bacterial Toxicity, 17 hr EC ₁₀	1.8 mg L ⁻¹

SPILL, DISPOSAL, AND STORAGE PROCEDURES

Spill and leak procedures:	Avoid contact with spilled material. Isolate area and confine spill. KEEP DRY, wet material may release Methyl isocyanate. Cover dry material to prevent dispersal. Place spilled material and damaged package in a labeled container.
Waste Disposal Method:	Bury in a licensed facility. Do not discharge into waterways or sewer systems without proper authority. Consult federal, state, and local authorities for approved alternative procedures.
Container disposal	Empty the package completely into application equipment. The empty package should be disposed of in an approved landfill or by incineration.



Reason for Issue:

Periodic review

Approval Date:

February 25, 2009

Supersedes Date:

December 2, 2005

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