DANGER

KEEP OUT OF REACH OF CHILDREN
READ THE LABEL COMPLETELY BEFORE OPENING OR USING

Basamid® Granular

Soil fumigant for glasshouse, field and bulk soil use by commercial growers and home gardeners. For the control of: Nematodes, weeds, soil borne fungous diseases, and most soil inhabiting insects.

Contains 970 g/kg dazomet in the form of a pellet.

20 kg

Registered to: Mitsui & Co. (NZ) Limited. P.O. Box 6141, Auckland

Distributed by: BASF New Zealand Limited P.O. Box 407, Auckland 1140

Phone: 0800 932 273, Fax: 0800 940 000



HAZARD CLASSIFICATION

6.1C, 6.3B, 6.4A, 6.5B, 6.8B, 6.9A, 9.1A, 9.2C, 9.3B



DANGER

TOXIC. Toxic if swallowed. May cause skin and eye irritation. May cause sensitisation from prolonged skin contact. May cause reproductive/developmental damage from repeated oral exposure. May cause organ damage from repeated oral exposure at high doses.

VERY TOXIC TO AQUATIC LIFE. May cause long-term adverse effects in the aquatic environment. HARMFUL TO THE SOIL ENVIRONMENT. Soil fumigant. May have an adverse effect on certain soil organisms.

HARMFUL TO TERRESTRIAL VERTEBRATES.

PRECAUTIONS

APPROVED HANDLER: This product must be under the control of an approved handler or secured. TRACKING: Location and movement of this product must be recorded at each stage of its lifecycle. STORAGE: Store in original container, tightly closed, in a dry, well ventilated area away from food and animal feed, and under lock and key. Protect against moisture. Use up all contents of the bag at application. Do NOT store part bags.

Stores containing more than 100 kg of this product require emergency response plans and are subject to signage.

TRANSPORT: Do NOT carry this product on a passenger service vehicle.

SPLLAGE: Prevent further spillage and product from entering waterways. Wear overalls, gloves, footwear, dust mask and goggles. Sweep up spilled material and place in sealable container for disposal. Avoid dust formation. Dispose of the waste safely in suitable landfill.

PERSONAL PROTECTION: When handling and applying, wear cotton overalls buttoned to the neck and wrist, a washable hat, suitable gloves, and goggles.

GENERAL SAFETY AND HYGIENE MEASURES: Avoid contact with skin, eyes and clothing, and inhalation of dust or fumes. Wear gloves when handling. Do NOT eat, drink or smoke while using. In enclosed spaces gases can cause irritation of eyes, mucous membranes and skin; so ensure adequate ventilation. Remove protective clothing and wash hands and exposed skin thoroughly with soap and water before meals and after work. Wash protective clothing immediately after use. Store work clothing separately.

USE AND ENVIRONMENTAL PROTECTION: Remove domestic animals from the operating area. Apply with well-maintained and accurately calibrated equipment. Take precautions to prevent animals from coming into contact with the granules. Do NOT allow spread of the granules outside the target area to occur. Clean out application equipment thoroughly after use. Do NOT contaminate water when disposing of equipment wash waters.

NOTE: Storage, application and record keeping must be as described in the current version of the New Zealand Standard for the Management of Agrichemicals NZS8409.

DISPOSAL: Packaging: Ensure bag is completely empty. Crush and bury in suitable landfill. Product: Dispose of this product only by using according to the label or at an approved landfill. Do NOT burn. Do NOT contaminate water with chemical or empty container.

FIRST AID

IF SWALLOWED: Do NOT induce vomiting. For advice contact the National Poisons Centre 0800 POISONS (0800 764 766) or a doctor immediately. IF ON SKIN: Remove contaminated clothing and wash thoroughly with plenty of soap and water. Do NOT scrub the skin. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

GENERAL INFORMATION

BASAMID GRANULAR is a general purpose soil fumigant suitable for preparing seed beds to grow vegetables, tobacco, ornamental and forest tree seeds (e.g., to prevent clubroot in brassica seedbeds) or as a soil disinfectant before planting out tomatoes, brassica, lettuces, cut flowers, strawberries or before replanting fruit trees or laying down areas of turf (e.g. golf greens). BASAMID GRANULAR can also be used to disinfect bulk soil. It can be used in glasshouses, cold frames or out-of-doors, and by the home gardener as well as the commercial grower.

BASAMID GRANULAR is easy to apply by hand (using rubber gloves) or through suitable applicators as it is formulated as a small granule or prill. Gas release occurs several hours after incorporation and contact with

moisture, preventing discomfort to the operator. BASAMID GRANULAR controls, by fumigant action, nematodes, soil inhabiting insects, soil fungi, many annual weeds and germinating weed seeds, and affords moderate control of Oxalis spp. BASAMID GRANULAR has no long-term toxic effect and planting may normally resume 3 – 4 weeks after treatment. After gas release the soil can be checked for suitability for planting by means of a simple germination test (cress test).

It is an offence for users of this product to cause residues exceeding the relevant MRL in the Food Notice: Maximum Residue Levels for Agricultural Compounds.

DIRECTIONS FOR USE

Restraints

Avoid application of BASAMID GRANULAR when soil temperatures are high (over 32° C) or below 7 °C. Pest control may be impaired under such conditions. BASAMID GRANULAR is toxic to all growing plants. Do not apply within 60 cm – 1 metre of plants or of the drip line of trees and large shrubs. If slopes are treated, take precautions to prevent the chemicals from washing down to growing plants. Vapour from soil treated with BASAMID GRANULAR in greenhouses or cold frames may injure growing plants. Store BASAMID GRANULAR in a dry, cool place.

Soil

The soil to be treated with BASAMID GRANULAR should be well prepared and be:

- (a) in seed bed condition with a finely structured surface;
- (b) completely free of undecomposed roots and of plant residues;
- (c) in a moist state (field capacity) at least 7 days prior to treatment (watering is absolutely necessary when the soil is low in moisture content);
- (d) the soil should not be saturated at the time of incorporation;
- (e) optimum soil temperatures are between 10 °C and 32 °C.

Application Rates

The rates are based on:

(a) Glasshouse and Outdoors application to 20 – 23 cm in soil depth.

For the control of free-living nematodes, most root disease causing fungi, soil insects and insect larvae, weeds and weed seeds:

On light soils 400 – 440 kg/hectare (400 g/10 square metres)

On loamy soils and soil rich in organic matter 500 - 550 kg/hectare (500 g/10 square metres)

For the control of cyst forming nematodes (Heterodera spp.) as well as *Verticillium albo atrum* and *Fusarium oxysporum var. cubense* infested soils:

On light soils 550 kg/hectare

On loamy soils and soils rich in organic matter 660 kg/hectare

Soils infested with wilt disease agents (*Verticillium albo atrum*, *Fusarium oxysporum*) should be fumigated to a depth of 30 cm. If mainly weed control is desired BASAMID GRANULAR should be incorporated 10 –15 cm deep. Then a rate of 280 kg/hectare (280 g/10 square metres) is adequate provided annual weeds are to be controlled and perennial weeds and rhizomes are not present. The treated area can be sprinkler-irrigated to increase the effectiveness in some soils to prevent soil surface from drying out.

(b) **Bulk soils for Nursery Use:** BASAMID GRANULAR can be used to treat large or small quantities of bulk soils. With large quantities BASAMID GRANULAR should be spread at 60 g/square metre over every 25 cm thick layer of soils as the heap is made up and thoroughly incorporated into this layer. This is repeated every 25 cm until the heap is completed, then cover with polythene and leave for 3 weeks. Alternatively use 200 g per cubic metre of soil, i.e. 0.2 g/litre (cubic decimetre). For small quantities BASAMID GRANULAR can be incorporated and mixed by adding the required amount of granules to the soil and mixing with a soil shredder, placing the soil in polythene sacks, sealing and leaving for at least 3 weeks away from house and plant life before opening.

BASAMID GRANULAR can also be worked into the soil with a spade or a hoe. The effectiveness decreases however when the fumigant is not mixed thoroughly with the soil. Higher doses should therefore be used to compensate for poorer soil incorporation when a hoe or spade is used.

Distribution and Incorporation

BASAMID GRANULAR must be evenly distributed on the soil surface. This can be done by hand (with rubber gloves) or by a fertiliser spreader. Immediately after spreading. BASAMID GRANULAR must be thoroughly worked into the upper 15 – 23 cm of the soil. Best results are obtained when a rotary cultivator with L-shaped tines is used. The rotor speed should be high and the tractor should be driven in low gear. With both methods the soil must be at field capacity at the time of treatment for adequate activity. If soil is dry before treatment wet with 5 –10 litres of water per square metre seven days before treatment.

Sealing of the Soil Surface

To prevent the toxic gases from escaping from the soil, the surface must be sealed.

- 1. Polythene sheets are the most efficient means of sealing.
- 2. Rolling use a heavy flat roller and the seal formed must be maintained by rainfall or irrigation.
- 3. Water sufficient water must be applied to compact the soil and form a surface crust.

It is essential that the soil surface be maintained in a moist condition until gas release is complete and the granules have completely disappeared.

Aeration of the Soil

This can be done by a rotovator, by a disc plough or by hand tools (double digging). The soil should be worked no further than depth of incorporation of BASAMID GRANULAR. With cool temperatures (below 10 °C) the soil should not be worked for at least three weeks. With moderate temperatures, open no earlier than 10 days. Best results can be expected when the soil surface is kept sealed for several months and aeration is delayed until the ground is required for planting.

Note: Only clean disinfected tools should be used. Disinfect tools and machines by washing with a formaldehyde solution. Also wash boots before entering fumigated soil.

Planting

All traces of toxic gases must have disappeared from the soil before sowing or planting is possible. With soil temperatures of 10 $^{\circ}$ C 3 – 6 weeks are necessary, with soil temperatures above 20 $^{\circ}$ C 14 – 21 days are often sufficient for the gases to disappear after aeration. The readiness of the soil for planting can be verified with the following germination test (Cress test):

- 1. Take soil samples from both treated and untreated soils at a depth of 10 –15 cm by scraping the surface soil aside and quickly filling a jam jar with a screw top to the three-quarters mark and immediately closing the jar.
- 2. Place moist cotton wool pads, with cress (lettuce) seeds in the jars, opening them for as short a time as possible.
- 3. Place the jars in a room at about 22 °C.
- 4. Check 48 hours later whether seeds have germinated. If the seeds have germinated in the jar with the untreated soil, but not in the jar with the treated soil, the toxic gases have not yet escaped from the treated soil and the soil should be worked again to aerate it.

Note: Transplants to be planted on fumigated soil should be raised on clean, disinfected soil. Otherwise there is danger of carrying nematodes and disease agents on the fumigated soil, which may spread rapidly and nullify the effects of fumigation. Read the specific leaflet on BASAMID GRANULAR for detailed information.

Fertilise

Chemical sterilisation releases nitrogen and the fertiliser programme should be adjusted accordingly.

CONDITIONS OF SUPPLY

Read conditions of supply before buying and using. If these conditions are unacceptable, return at once unopened. All goods supplied by the Company are of a high grade and conform to the chemical description of the label. However, to the extent permitted by law, neither the Company nor any of its Distributors accept any liability or responsibility whatsoever for any loss, damage or injury whether direct, indirect or consequential howsoever arising in connection with the supply of those goods including without limitation their storage, application, handling or use. The Company nor any of its Distributors, make no warranties of any kind, express or implied, with respect to fitness for purpose (including crop injury, ineffectiveness or any other unintended consequence), merchantable quality or any other matter with respect to these goods. When you are a consumer as defined in the Consumer Guarantees Act 1993 (the "Act") these conditions will be subject to the provisions of the Act. However the Act will not apply to goods supplied to you for business purposes.

Approved pursuant to the HSNO Act 1996, Code HSR000790. See www.epa.govt.nz for approval conditions.

Registered pursuant to the ACVM Act 1997, No. P1446. See www.foodsafety.govt.nz for registration conditions.

Date of Manufacture: Batch Number:

EMERGENCY PHONELINK 24 Hour Advice in an Emergency Only 0800 944 955

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