

AUG 9 1994

Mr. Dennis L. McFadden  
Gustafson, Inc.  
P.O. Box 660065  
Dallas, Texas 75266-0065

Dear Mr. McFadden:

Subject: Kodiak HB Biological Fungicide  
EPA Reg. No. 7501-146  
Your Submission of May 5, 1994

The amendment referred to above, submitted in connection with registration under FIFRA sec. 3(c)(7)(A), is acceptable provided that you:

1. Submit and/or cite all data required for registration or reregistration of your product under FIFRA sec. 3(c)(5) and sec. 4 when the Agency requires all registrants of similar products to submit such data.

2. Make the following labeling change before you release the product for shipment bearing the amended labeling:

In the ingredients statement, you must include the strain designation "GB03" following the name of the active ingredient.

3. Submit five (5) copies of your final printed labeling before you release the product 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.

Sincerely yours,  
*Carl Grable for*  
Steve Robbins  
Acting Product Manager (21)  
Fungicide-Herbicide Branch  
Registration Division (7505C)

Enclosure

7505C:C.Grable:cg:8/9/94

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

AUG 9 1994

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

7501-146

# KODIAK™ HB

## Biological Fungicide

For Use As A Seed Treatment

**ACTIVE INGREDIENT:**

*Bacillus subtilis* (nominal concentration of  
6.0 X 10<sup>9</sup> viable spores per gram).....0.3%  
**INERT INGREDIENTS:**.....99.7%

EPA Reg. No. 7501-146      EPA Est.

Net Contents:      Ounces

is present or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Cover or incorporate spilled seed or seed on soil surface.

**STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage or disposal. Do not contaminate water by cleaning of equipment or disposal of wastes.

**STORAGE:** Store in a dry place.

**PRODUCT DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Completely empty package by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into mixing equipment. Then dispose of package in a sanitary landfill or by incineration if allowed by State and local authorities. Dispose of box in the same manner. Do not reuse package or box.

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

Harmful if inhaled. Avoid contact with eyes, skin or clothing. In case of contact, flush affected area with plenty of water. Repeated or prolonged excessive exposure may lead to respiratory sensitization in susceptible individuals.

**PERSONAL PROTECTIVE EQUIPMENT:**

Applicators and other handlers must wear: Long-sleeved shirt and long pants, waterproof gloves, shoes plus socks and dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C).

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**USER SAFETY RECOMMENDATIONS:**

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

**STATEMENT OF PRACTICAL TREATMENT**

If on skin, wash with soap and water. Get medical attention if irritation develops.

If in eyes, flush with water. Get medical attention if irritation develops.

**ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or to areas where surface water

**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 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), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

**BEST AVAILABLE COPY**

**Gustafson** 

Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, waterproof gloves, and shoes plus socks.

KODIAK HB contains bacteria which colonize the developing root system, suppressing disease organisms such as *Fusarium*, *Rhizoctonia*, *Alternaria* and *Aspergillus* that attack root systems. When used with a chemical seed treatment, the combination of chemicals and KODIAK provides protection to the root for a much longer time than with chemicals alone. As the root system develops, the bacteria grow with the roots extending the protection throughout the growing season. As a result of this biological protection, a vigorous root system is established by the plant, which often results in more uniform stands and greater yields. In addition, KODIAK has been shown to increase the amount of nodulation by nitrogen-fixing bacteria when used on many legumes. This improvement in nodulation is a result of a healthier root system allowing more sites for nodules to form from naturally-occurring soilborne nitrogen-fixing bacteria.

**INSTRUCTIONS FOR USE (HOPPER BOX)**

Fill hopper half full of seed, pour approximately half of the desired amount of KODIAK HB on the seed and stir. The amount of KODIAK HB held by the one pound container lid is 1.8 oz. (level) to 2.0 oz. (heaping) or use as many 2.0 oz. packets as necessary. Finish filling hopper to desired level and pour on remainder of KODIAK HB to balance of seed and stir. Movement of planter across the field will help mix the KODIAK HB with the seed.

**FOR USE AS A SEED TREATMENT**

**COTTON:** For suppression of *Rhizoctonia* and *Fusarium* seedling diseases and *Fusarium* wilt, apply 4.0 to 8.0 ounces per 100 lbs. of seed.

**SEED AND POD VEGETABLES** (such as) green beans, snap beans, lima beans, kidney beans, navy beans, pinto beans, wax beans, pole beans, garden peas, peas and field beans: For suppression of root diseases caused by *Rhizoctonia* and *Fusarium*, apply 3.0 to 6.0 ounces per 100 lbs. of seed. For improvement of nodulation by *Rhizobium* in fields where appropriate strains are detectable, apply 1.5 to 3.0 ounces per 100 lbs. of seed.

**PEANUTS:** For suppression of root diseases caused by *Rhizoctonia*, *Fusarium* and *Aspergillus* and for improvement of nodulation by *Rhizobium*, apply 2.0 to 4.0 ounces per 100 lbs. of seed.

**CORN:** For suppression of root diseases caused by *Fusarium* and *Pythium*, apply at 4.0 ounces per 100 lbs. of seed.

**ALL OTHER SEEDS (AGRICULTURAL, VEGETABLE, FLOWER, ORNAMENTAL):** For suppression of root diseases caused by *Fusarium*, *Rhizoctonium* and *Pythium*, apply 4.0 to 8.0 ounces per 100 lbs. of seed. Adjust rate accordingly to provide good coverage. Larger seed, because of reduced surface area, require less product per 100 lbs. than smaller seed.

**NOTICE - READ CAREFULLY  
CONDITIONS OF SALE AND LIMITED WARRANTY  
STATEMENT**

Treatment of highly mechanically damaged seed, or seed of known low vigor and poor quality, may result in reduced germination and/or reduction of seed and seedling vigor. Treat and conduct germination tests on a small portion of seed before committing the total seed lot to a selected chemical treatment. Due to seed quality conditions beyond the control of Gustafson, Inc., no claims are made to guarantee germination of carry-over seed.

As its sole express warranty, Gustafson, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for purposes stated on the label only when used in accordance with directions and instructions specified on the label, subject to the inherent risks set forth above. ONLY AS PERMITTED BY APPLICABLE LAW, IN THE EVENT OF A BREACH OF THIS LIMITED WARRANTY, GUSTAFSON, INC. SHALL NOT BE LIABLE FOR CONSEQUENTIAL DAMAGES. SUBJECT TO APPLICABLE LAW, GUSTAFSON, INC. NEITHER MAKES NOR AUTHORIZES ANY OF ITS AGENTS OR REPRESENTATIVES TO MAKE ANY WARRANTY OF FITNESS OR MERCHANTABILITY, GUARANTY OR REPRESENTATION, EXPRESS OR IMPLIED, CONCERNING THIS MATERIAL. Buyer assumes the responsibility to handle, use and store this product in accordance with the safety instructions and use directions contained on the label.

Buyer/User purchases this product subject to the foregoing Conditions of Sale and Limited Warranty, which, subject to applicable law, may be varied only by a written agreement signed by a duly authorized representative of Gustafson, Inc. If these terms are not acceptable, return all products to the place of purchase, unopened for a full refund.

A quality product from:  
Gustafson, Inc.  
1400 Preston Road, Suite 400  
Plano, TX 75093  
(214)985-8877

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