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Systems Integration Group, Inc.

CORNGARD®**Emulsifiable Suspension Mycoinsecticide**

For preventing damage from European Corn Borer, Southwestern Corn Borer
and Lesser Cornstalk Borer in Corn and Grain Sorghum

NOT TO BE REGISTERED IN CALIFORNIA

Active Ingredient: *Beauveria bassiana* Strain GHA.....4.9%
Inert Ingredients.....95.1%*

*Contains petroleum distillates

CORNGARD contains 9.8×10^9 viable *Beauveria bassiana* spores per gram

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

PRECAUTIONARY STATEMENTS**Hazards to Humans and Domestic Animals**

Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse. Harmful if swallowed, inhaled, or absorbed through the skin. Minimize breathing mists or vapors. Use with adequate ventilation. Avoid contact with skin, eyes, or clothing. In case of contact, immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists.

STATEMENT OF PRACTICAL TREATMENT

If **Swallowed**: Do not induce vomiting; call a physician immediately.

If **Inhaled**: If irritation persists, contact physician.

If **On Skin**: Wash with soap and water.

If **In Eyes**: Flush with water.

USER SAFETY RECOMMENDATIONS: Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

NOTE TO PHYSICIAN

Product contains petroleum distillates; vomiting may cause aspiration pneumonia.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear: Coveralls over long-sleeved shirt and long pants. Shoes plus socks and dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95 or P-95. 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.

ENVIRONMENTAL HAZARDS

This product is potentially pathogenic to honey bees. Avoid applying to areas where honey bees are actively foraging or around bee hives. This product may be toxic to fish. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment wash waters.

Net Contents: _____

Lot Number: _____

Expiration Date: _____

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2/9

GENERAL INFORMATION

CornGard contains live spores of the fungus, *Beauveria bassiana*. This fungus is a naturally occurring disease organism of corn borers. Spores are alive and may be harmed by storage at high temperature or by contact with water for more than 24 hours. See storage instructions on this label.

MODE OF ACTION CornGard acts by contact. Spores attach to the insect, germinate and penetrate through the insect cuticle. The fungus then grows rapidly within the insect, causing mortality.

Beauveria bassiana occurs naturally in close association with corn plants where it infects corn borers. When CornGard is applied to corn early in the season, the fungus persists in association with corn plants providing season long reduction in corn borer damage.

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.. 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 unless wearing appropriate personal protective equipment.

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 over long-sleeved shirt and long pants
- Goggles, face shield or safety glasses
- Waterproof gloves
- Shoes plus socks
- Dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95 or P-95.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours unless wearing appropriate personal protective equipment.

Keep unprotected persons out of treated areas until sprays have dried.

For reducing damage from European Corn Borer, Southwestern Corn Borer and Lesser Cornstalk Borer in Corn and Grain Sorghum. May be ground applied or aerially applied or applied through sprinkler chemigation as noted on this label. Not suitable for use with ultra low-volume application equipment.

INSECTS FOR WHICH CORNGARD MAY BE USED

European Corn Borer

Southwestern Corn Borer

Lesser Cornstalk Borer

CROPS ON WHICH CORNGARD MAY BE USED

Corn (Field, Seed, Sweet, Silage, Popcorn and Corn grown for cornmeal or flour)

Grain Sorghum

PLANT SAFETY

CORNGARD has shown excellent plant safety but has not been tested on all plant varieties or in all tank mixes. Test CornGard on a small number of plants to check for potential damage before applying to larger number of plants. Follow specific label instructions on this label for use in chemigation systems.

TANK MIX COMPATABILITY CornGard is physically and biologically compatible with a wide range of insecticides and spray adjuvants. It is not compatible with fungicides in tank mixtures. Fungicides will kill the spores.

Adjuvants CornGard is designed for application without additional wetting agents and spreaders. If adjuvants are needed for some other reason, contact your dealer or Mycotech Corporation for specific recommendations. Some wetting agents and spreaders kill the spores, the active ingredient in CornGard, or contribute to poor mixing and spray problems.

Compatibility With Chemical Insecticides CornGard is compatible with most chemical insecticides. However, some insecticide formulations can kill the fungal spores, the active ingredient in CornGard. If you are going to use CornGard in combination with other pesticides, contact your dealer or Mycotech Corporation for specific information. In all cases, pesticides should be used in accordance with their labels.

Compatibility With Fungicides CornGard is not compatible in tank mix with fungicides. Contact Mycotech or your dealer for specific recommendations on using CornGard with fungicides.

4/9

MIXING AND APPLICATION INSTRUCTIONS

APPLICATION TIMING AND FREQUENCY

Apply CornGard to corn when plants are 12-16 inches high (at V4-V8 stage). A single application is sufficient to establish *Beauveria bassiana* association with corn plants. A second application prior to second generation corn borer flight may further reduce damage from corn borers. Apply with sufficient water to obtain uniform and complete coverage of foliage. CornGard may be applied using ground spray equipment, aerial application or by chemigation through overhead sprinkler irrigation.

APPLICATION RATE FOR CORN

Apply CornGard at 8 fluid ounces per acre (2 ½ gallons per 40 acres).

MIXING AND APPLICATION - GROUND AND AERIAL APPLICATION

SHAKE WELL BEFORE USING. CornGard contains emulsifiers and mixes readily in water. To mix, fill spray tank half full with water and start agitation. Shake CornGard to suspend spores, then, with agitation running, slowly add desired quantity of CornGard to spray tank. Fill remainder of tank with water. Continue sufficient agitation to maintain a uniform emulsion during loading and spraying. Triple rinse empty CornGard containers and add rinse water to spray tank. Do not mix more CornGard than needed for that day. Do not prepare CornGard ES the day before application. The spores will die if left overnight or longer in the spray tank.

GROUND APPLICATION

Apply with sufficient water to provide thorough coverage. Direct spray over row to obtain optimal coverage in whorl and leaf axils. The amount of water will depend on spray equipment, crop size and local conditions. Generally, 10-gallon spray volume per acre is the minimum necessary to obtain adequate coverage.

CHEMIGATION

Apply CornGard by chemigation only through the following types of overhead sprinkler systems: center pivot, lateral move, end tow, side (wheel) roll, trailer, big gun solid set or hand move systems. Do not apply this product through any other type of irrigation system.

Do not apply when wind speed favors spray drift beyond the area intended for treatment..

Apply 8 fluid ounces CornGard per acre. CornGard may be applied undiluted (neat) or diluted as appropriate for injection flow rate and irrigation volume. A ratio of 1 part water to 1 part CornGard is recommended for best results. If CornGard is diluted, supply tank must be agitated to thoroughly mix CornGard in water. Add water to supply tank, start agitation, then add CornGard. Continue supply tank agitation during chemigation cycle to maintain uniform emulsion. Supply tank agitation is not necessary if CornGard is used without dilution. Shake well to resuspend spores before adding CornGard to supply tank. Use contents of supply tank within one day.

For best results, time CornGard chemigation at the end of irrigation water application. Excessive overhead irrigation during and after chemigation will wash active ingredient off foliage reducing effectiveness.

With center pivot or other continuous move equipment, apply CornGard in 1/4 to 1/2 inches of water per acre.

With stationary sets, wheel lines, solid sets or hand move sprinklers, apply CornGard during the last 20 to 30 minutes of the set.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable about the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

SPRINKLER CHEMIGATION

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment

Chemigation Systems Connected to Public Water Systems

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Spray Drift For Aerial Application

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- 1 The distance of the outer most nozzles on the boom must not exceed $\frac{3}{4}$ the length of the wingspan or rotor.
- 2 Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

INFORMATION ON DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

- 3 **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rates flows produce larger droplets.

Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Number of Nozzles - Use the minimum number of nozzles that provide uniform coverage.

Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angels produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

BOOM LENGTH

For some use patterns, reducing the effective boom length to less than $\frac{3}{4}$ of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

WIND

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can

influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable direction due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SENSITIVE AREAS

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

STORAGE AND DISPOSAL

STORAGE

- Do not contaminate water, food, or feed by storage or disposal.
- Store in a cool, dry place. Avoid storage below freezing temperatures (32°F) or above 85°F. CORNGARD stability decreases with time at elevated temperatures above 85°F. Tightly reclose the container of unused product. Do not contaminate unused product with water.

PESTICIDE DISPOSAL

- Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL

- Do not reuse as a container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

989

CONDITIONS OF SALE

CORNGARD conforms to the description set forth on this label and is reasonably fit for the purposes described herein when used according to the label directions and specified conditions. The manufacturer disclaims any and all other express or implied warranties of merchantability and fitness for particular purpose. Buyers and users shall assume all risk and responsibility for potential loss or damage if this product is used, stored, handled or applied in a manner inconsistent with this labeling. To the extent permitted by law, manufacturer shall not be liable for more than the purchase price for the quantity involved including incidental, consequential or special damages.