

# Combination insect growth regulator, synergist and adulticide

PROTECTS STORED GRAINS, SEEDS, GRAIN BINS AND WAREHOUSES (INDOOR AND PERIMETER\* TREATMENTS) AGAINST DAMAGE FROM INDIAN MEAL MOTH, SAWTOOTHED GRAIN BEETLE, RED FLOUR BEETLE, RICE WEEVIL, MAIZE WEEVIL, AND OTHER LISTED PESTS

- Three-way insect control
- For use on grains, empty bin and perimeter\* treatment
- Long residual control

- Kills listed adult insects and exposed larvae
- May be diluted with water or oil
- Miscible in dust-controlling oils

#### **ACTIVE INGREDIENTS:**

Deltamethrin	1.20%
Piperonyl butoxide	33.30%
S-Methoprene	
OTHER INGREDIENTS:	
	100 00%

Contains 0.1 lb deltamethrin per gallon. Contains 0.229 lb S-Methoprene per gallon. Contains 2.67 lb piperonyl butoxide per gallon \*Not for use in California

# WARNING WARNING

See additional Precautionary Statements

# PRECAUTIONARY STATEMENTS – HAZARDS TO HUMANS & DOMESTIC ANIMALS – WARNING

May be fatal if swallowed. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wear protective eyewear (goggles, face shield or safety glasses). Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

#### Personal Protective Equipment (PPE):

Mixers, loaders, applicators and other handlers must wear: Long-sleeved shirt, long pants,

Shoes and socks

Chemical-resistant gloves: barrier laminate, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, or Viton  $\geq 14$  mils

In addition to the above PPE, applicators using a high pressure handwand in an enclosed area must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any R or P filter; OR a NIOSH-approved powered air purifying respirator with HE filters.

SPECIMEN LABEL

EPA Reg. No. 89459-116

EPA Est. No. 2724-TX-1

**User Safety Requirements:** Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

**User Safety Recommendations:** Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should 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.

FIRST AID			
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>		
If on skin	• 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. • Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-248-7763 for emergency medical treatment information.

#### **ENVIRONMENTAL HAZARDS**

This product is extremely toxic to aquatic organisms, including fish and invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters, or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

This pesticide is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are foraging the treatment area.

#### PHYSICAL AND CHEMICAL HAZARDS

Do not use water-based sprays of **Gravista<sup>TM</sup>** Insecticide (**Gravista<sup>TM</sup>**) in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard.

## **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

#### RESISTANCE-MANAGEMENT

For resistance management, please note that **Gravista<sup>TM</sup>** contains a Group 3A insecticide. Any insect population may contain individuals naturally resistant to **Gravista<sup>TM</sup>** and other Group 3A insecticides.

The resistant individuals may dominate the insect population if these insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed. To delay insecticide/acaricide resistance, take the following steps:

 Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known crossresistance issues (for the targeted pests) between the individual components of a mixture.

In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):

 Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.

- Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management. When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
- Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
- The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Central Garden & Pet Company at 1-800-248-7763 or at www.bugfreegrains.com.

#### PRODUCT INFORMATION

**Gravista™** is an emulsifiable concentrate insecticide that contains an adulticide, synergist and insect growth regulator for use on stored grains and for treating empty bins and warehouses for stored product pest control. **Gravista™** provides effective knockdown and control of listed adults and larvae and prevents the buildup of listed pests with long residual control provided by the IGR. For both indoor and outdoor use.

#### **USE RESTRICTIONS**

Do not remain in treated area. Exit area immediately and remain outside the treated area until aerosols, vapors, and/or mists have dispersed.

Do not enter or allow others to enter until sprays have dried. Do not apply this product in a way that will contact workers or other persons, children or pets, either directly or through drift. Only protected handlers may be in the area during applications. Do not allow adults, children, or pets to enter the treated area until sprays have dried.

Do not allow adults, children, or pets to enter until vapors, mists and aerosols have dispersed and the treated area has been thoroughly ventilated.

Do not apply more than one time per day.

Remove or cover exposed food and drinking water before application.

Remove or cover dishes, utensils, food processing equipment and food preparation surfaces, or wash them before use.

Do not use in aircraft cabins except in compliance with PR Notice 96-3.

When used in dairy barns or facilities, close milk bulk tank lids to prevent contamination from spray and from dead or falling insects. Remove or cover milking utensils before application. Wash teats of animals before milking.

Do not apply directly into sewers or drains or to any area like a gutter where drainage to storm sewers, water bodies, or aquatic habitat can occur.

Do not allow the product to enter any drain during or after application.

Not for use in outdoor residential misting systems.

All outdoor spray applications must be limited to spot or crackand-crevice treatments only, except for the following permitted uses

- 1. Application to pervious surfaces such as soil, lawn, turf, and other vegetation;
- 2. Perimeter band treatments of 7 feet wide or less from the base of a man-made structure to pervious surfaces (e.g., soil, mulch, or lawn);
- Applications to underside of eaves, soffits, doors, or windows permanently protected from rainfall by a covering, overhang, awning, or other structure;
- 4. Applications around potential exterior pest entry points into man-made structures such as doorways and windows, when limited to a band not to exceed one inch;
- 5. Applications to vertical surfaces (such as the side of a man-made structure) directly above impervious surfaces (e.g., driveways, sidewalks, etc.), up to 2 feet above ground level;
- Applications to vertical surfaces directly above pervious surfaces, such as soil, lawn, turf, mulch or other vegetation) only if the pervious surface does not drain into ditches, storm drains, gutters, or surface waters.

Spot treatments must not exceed two square feet in size (for example, 2 ft. by 1 ft. or 4 ft. by 0.5 ft.).

For soil or foliar applications, do not apply by ground within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds.

Do not spray the product into fish pools, ponds, streams, or lakes. Do not apply directly to sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.

Do not allow the product to enter any drain during or after application.

Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crackand-crevice treatment.

Treat surfaces to ensure thorough coverage but avoid runoff. To treat insects harbored in voids and cracks-and-crevices, applications must be made in such a manner to limit dripping and avoid runoff onto untreated structural surfaces and plants. Do not apply or irrigate to the point of runoff. Do not make applications during rain. Avoid making applications when rainfall is expected before the product has sufficient time to dry (minimum 4 hours).

Rainfall within 24 hours after application may cause unintended runoff of pesticide application.

#### **STORED GRAIN**

Use to control adults and accessible larval stages of listed insect pests including, lesser grain borers, larger grain borers, Angoumois grain moths, Indian meal moths, tobacco moths, Dermestids, and bean weevils; also, to control populations of granary weevils, rice weevils, maize weevils, sawtoothed grain beetles, red flour beetles, and confused flour beetles. Do not apply this product more than once every 30 days.

#### Tank-mixing

Gravista™ may be tank-mixed with other pesticide products such as Pyronyl™ Crop Spray. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and Directions for Use on all product labels involved in tank-mixing. Users must follow the most restrictive Directions for Use and Precautionary Statements of each product in the tank mixture.

#### **Directions for Treatment**

Dilute **Gravista™** with water or approved dust-controlling oils, mineral or soybean oils and apply to the moving grain stream as a coarse spray.

Final spray volume with water solutions is 3–5 gallons of liquid per 1,000 bushels of grain. For rough rice, use 10 gallons of water per 1,000 bushels. Maintain agitation before and during application.

Use a mixed dilution within 48 hours of preparing. Reagitation of spray dilution may be required if left overnight.

For final spray volumes with oil solutions, follow the oil manufacturer's rate recommendations.

For uniform application, treat the grain as it moves into storage. Apply **Gravista<sup>TM</sup>** in solution at the rate of 3–5 gallons of dilution per 1,000 bushels to achieve a 0.5 ppm concentration of deltamethrin and 1.2 ppm of S-methoprene on the commodity. Apply at rates as shown in the following tables.

## AMOUNT OF GRAVISTA™/1,000 BUSHELS OF GRAIN

Commodity	TREATMENT AT 0.5 ppm Deltamethrin/14 ppm PBO/ 1.2 ppm S-Methoprene		Gallons of Diluent	Liters of Diluent
	fl oz	mL	Gal	L
Barley	31	916	3 - 5	11.3 – 19
Corn	35.6	1,053	3 - 5	11.3 – 19
Oats	20.38	603	3 - 5	11.3 – 19
Popcorn	35.6	1,053	3 - 5	11.3 – 19
Rice	28.5	843	10	11.3 – 19
Rye	35.6	1,053	3 - 5	11.3 – 19
Sorghum (milo)	31.7	937	3 - 5	11.3 – 19
Wheat	38	1,124	3 - 5	11.3 – 19

#### AMOUNT OF GRAVISTA™/TON OF GRAIN

Commodity	TREATMENT AT 0.5 ppm Deltamethrin/14 ppm PBO/ 1.2 ppm S-Methoprene		Ounces of Diluent	Milliliters of Diluent
	fl oz	mL	fl oz	mL
Barley	1.3	38	13 – 21	384 – 630
Corn	1.3	38	13 – 21	384 – 630
Oats	1.3	38	13 – 21	384 – 630
Popcorn	1.3	38	13 – 21	384 – 630
Rice	1.3	38	13 – 21	384 – 630
Rye	1.3	38	13 – 21	384 – 630
Sorghum (milo)	1.3	38	13 – 21	384 – 630
Wheat	1.3	38	13 – 21	384 – 630

#### **SEED TREATMENT**

Apply **Gravista™** to protect stored grain seed against injury from listed insect pests. Clean and treat seed storage areas prior to storage. If seed is infested, fumigate\*\* to control existing populations and apply **Gravista™** for residual protection. **Gravista™** may also be used in conjunction with registered fungicides or other insecticide seed protectants, to protect barley, corn, oats, popcorn, rice, rye, sorghum and wheat seed during the seed treating process, and prior to bagging or placing in bulk seed storage. When treating seed with other pesticide products, properly tag the treated seed, indicating "Do not use seed for food, feed, or oil purposes." Seed treated with **Gravista™** alone is considered grain.

\*\*Fumigate with EPA-registered fumigants according to manufacturer's label recommendations.

#### **GRAIN BINS AND WAREHOUSES**

Dilute 1–6 fl oz of **Gravista**™ with water to make 1 gallon of solution. Before storing or handling grain, apply finished spray to equipment, wall and floor surfaces of grain bins and warehouses at the rate of 1 gallon per 1,000 sq ft but do not allow runoff to occur. Apply after equipment bins and buildings have been thoroughly cleaned. If infestations are severe or there are areas that are difficult to treat with a conventional spray, fumigation is recommended with an EPA-registered fumigant.

Use **Gravista™** as a perimeter\* treatment to prevent infestation of these structures. Apply to areas where listed pests are seen or may find entrance. Treat a band of soil or grass up to 6–7 feet wide around and adjacent to structures and treat the foundation to a height of 2 feet. Mix 1–6 fl oz of **Gravista™** with water to make 1 gallon of solution. Apply as a coarse spray at a rate of 1 gallon per 1,000 sq ft. Wet the barrier area thoroughly

and uniformly but do not allow runoff to occur. All outdoor\* applications to impervious surfaces are limited to spot and crack-and-crevice applications only.

\* Not for use in California

STORAGE AND DISPOSAL: Do not contaminate water, food, or feed by storage or disposal. PESTICIDE STORAGE - Mix as needed. Store in original container in a secured, dry storage area. Avoid extremes in temperatures. Prevent cross-contamination with other pesticides and fertilizers. If the container is leaking and/or material is spilled, on floor or paved surfaces, absorb on sawdust or other commercially available absorbing material, sweep up and remove to chemical waste area for your disposal. Concentrate is stable at normal storage temperatures. **PESTICIDE DISPOSAL** - Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility. **CONTAINER HANDLING** – Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

# IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The Directions for Use of this product are believed to be adequate and must be followed carefully. However, because of manner of use and other factors beyond Central Garden & Pet Company's control, it is impossible for Central Garden & Pet Company to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

DISCLAIMÉR OF WARRANTIES: To the extent consistent with applicable law, CENTRAL GARDEN & PET COMPANY MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OR MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Central Garden & Pet Company is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Central Garden & Pet Company disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

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