PEANUT - GRASSHOPPERS

General Information

DIRECTIONS FOR USE

PREVATHON insect control must be used only in accordance with the directions on this label, in separate EPA-approved labeling or exemptions under FIFRA (Supplemental Labels, Special Local Need Registrations, FIFRA Section 18 exemptions, FIFRA 2(ee) Bulletins), or as otherwise permitted by FIFRA. Always read the entire label, including the Limitation of Warranty and Liability.

PREVATHON may be used on crops on this label grown for seed production.

RESTRICTIONS
- Do not treat plants grown for transplanting. Not for use in nurseries, plant propagation houses, or greenhouses by commercial transplant producers on plants being grown for transplanting.
- This product is only for commercial use.
- Not for use on ornamental plants or plants being grown for ornamental purposes.
- Not for residential use.
- Do not apply PREVATHON through any irrigation system unless specified in this label or in supplemental labeling.

For New York State Only:

The following restrictions are required to permit use of PREVATHON® insect control in the State of New York:
- This product may not be applied within 100 feet of a water body (lake, pond, river, stream, wetland, or drainage ditch).
- Aerial application of this product is prohibited.
- Not for sale, sale into, distribution and/or use in Nassau, Suffolk, Kings, and Queens counties of New York State.

PREVATHON is a suspension concentrate that can be applied as a foliar application to control listed insects. PREVATHON is mixed with water for application.

PREVATHON is a member of the anthranilic diamide class of insecticides with a

novel mode of action acting on insect ryanodine receptors. Although PREVATHON has contact activity, it is most effective through ingestion of treated plant material. After exposure to PREVATHON, affected insects will rapidly stop feeding, become paralyzed, and typically die within 1 - 3 days. Time applications to the most susceptible insect pest stage, typically at egg lay to egg hatch and/or newly hatched larvae, before populations reach damaging levels.

INTEGRATED PEST MANAGEMENT

FMC supports the use of Integrated Pest Management (IPM) programs to control pests. This product may be used as part of an IPM program, which can include biological, cultural, and genetic practices, aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, rotation of insecticides with different modes-of-action, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop or site systems in your area.

SCOUTING

Monitor insect populations to determine whether or not there is a need for application of PREVATHON based on locally determined economic thresholds and pest management guidelines. More than one treatment of PREVATHON may be required to control a population of pests.

INSECT RESISTANCE MANAGEMENT

For resistance management, PREVATHON is a Group 28 Insecticide. Repeated and exclusive use of PREVATHON (chlorantraniliprole) or other Group 28 insecticide belonging to the anthranilic diamide class of chemistry may lead to the buildup of resistant strains of insects in some crops.

Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, this product may be used as part of a resistance management strategy established for the use area. These strategies may include incorporation of cultural and biological control practices, alternation of mode-of-action classes of insecticides on succeeding

generations, and targeting the most susceptible life stage. Consult your local or state agricultural authorities for details.

Unless directed otherwise in the specific crop/pest sections of this label, the best practices are to follow these instructions to delay the development of insecticide resistance:
- Avoid using the same mode of action (IRAC group number) on consecutive generations of insect pests.
- Apply PREVATHON or other Group 28 insecticides using a “treatment window” approach to avoid exposure of successive insect pest generations to the same mode of action.
- A “treatment window” is defined as the period of residual activity provided by single or sequential applications of products with the same mode of action. This “treatment window” should not exceed approximately the length of one generation of the target pest.
- Within the “Group 28 treatment window”, make no more than 2 applications of PREVATHON or other Group 28 insecticides within a single generation of the target pest on a crop or within a 30 day period to the same insect species on a crop.
- Following a “Group 28 treatment window”, rotate to a treatment window of effective products with a different mode of action. This “Non-Group 28 Window” should approximate the duration of one generation of the target pest.
- Target the most susceptible insect life stages, whenever possible.
- Avoid using less than the labeled rates of PREVATHON when applied alone or in tank mixtures.
- Monitor insect populations for product effectiveness.

If resistance to PREVATHON develops in your area, PREVATHON or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local FMC company representative or agricultural advisor for the best alternate method of control for your area. For additional information on insect resistance monitoring, visit the Insecticide Resistance Action Committee (IRAC) on the web at http://www.irac-online.org.

APPLICATION

Apply at the specified rates when insect populations reach locally determined economic thresholds. Consult the cooperative extension service, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.

Apply follow-up treatments of PREVATHON, as specified, to keep pest populations within threshold limits. Refer to the Insect Resistance Management section of this label for further guidance on follow-up treatments. See individual crop sections of this label for specific minimum spray intervals.

Use sufficient water to obtain thorough, uniform coverage. Because PREVATHON is most effective through ingestion of treated plant material, thorough spray coverage is essential for optimum control of targeted pest insects. Using increased water volumes will typically result in better spray coverage, especially under adverse conditions such as dry, hot weather or dense plant foliage.

PREVATHON can be applied by ground or aerial application equipment. PREVATHON can be applied via overhead sprinkler chemigation systems, except on Tree Nuts. See "CHEMIGATION USING OVERHEAD SPRINKLER SYSTEMS" section for instructions on overhead sprinkler chemigation. For aerial application use the following directions unless otherwise specified in specific crop/pest sections of this label or EPA-approved supplemental labeling: use a minimum of 2 gallons per acre (gpa) of water. For all other application methods use the following directions, unless otherwise specified in specific crop/pest sections of this label or EPA-approved supplemental labeling: use a minimum of 10 gal per acre (GPA) of water for all crops.

Use of Adjuvants - In some situations where coverage is difficult to achieve such as closed canopy, dense foliage, plants with waxy leaf surfaces, or less than optimum application equipment, an adjuvant may improve performance. Use only adjuvant products that are labeled for agricultural use and follow the directions on the manufacturer's label. Always conduct a premix test for compatibility. Use a proven adjuvant that does not affect foliage and/or fruit finish. Refer to specific crop sections of this label for additional adjuvant guidance.

CHEMIGATION USING OVERHEAD SPRINKLER SYSTEMS

Types of Chemigation Systems: PREVATHON can be applied through overhead

sprinkler irrigation systems, including the following; center pivot, end tow, hand move, lateral move, side roll, solid set and wheel line. The irrigation system used must provide uniform water distribution.

Directions for Chemigation:

Preparation
A pesticide tank is recommended for the application of PREVATHON in chemigation systems. Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. With the mix tank 1/4 to 1/2 full with water and the agitator running, measure the required amount of PREVATHON and add it to the tank. Then add additional water to bring your total pesticide mixture up to the desired volume for your application. Note: Always add the PREVATHON to water, never put PREVATHON into a dry tank or other mixing equipment without first adding water. See "Tank Mixing Sequence" section of the container label for tank mixing sequence. Continue to agitate the mixture throughout the application process. Use mechanical or hydraulic agitation, do not use air agitation.

Injection Into Chemigation Systems

Inject the proper amount of PREVATHON into the irrigation water flow using a positive displacement injection pump or a Venturi injector. Injection should occur at a point in the main irrigation water flow to ensure thorough mixing with the irrigation water. For continuously moving systems, inject the solution containing PREVATHON into the irrigation water line continually and uniformly throughout the irrigation cycle.

Apply in no more than 0.2 inches of water per acre. For overhead sprinkler systems that are stationary, add the solution containing PREVATHON to the irrigation water line and apply no more than 0.2 inches of water per acre.

Uniform Water Distribution

The irrigation system used for application of PREVATHON must provide for uniform distribution of PREVATHON treated water. Non-uniform distribution can result in crop injury, lack of effectiveness or illegal pesticide residues in or on the crop being treated. Ensure the irrigation system is calibrated to uniformly distribute the chemigation application to the crop. Contact the equipment manufacturer, the local

University Extension agent or other experts if you have questions about achieving uniform distribution of the application.

Equipment Calibration

Calibrate the irrigation system and injector before applying PREVATHON. Calibrate the injection pump while the system is running using the expected irrigation rate. If you have questions about calibration, you should contact your state extension service specialists, equipment manufacturer or other experts.

Monitoring of Chemigation Applications

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of a responsible person, shall shut the system down and make necessary adjustments should the need arise. Wear the personal protective equipment as defined in the PPE section of the label for applicators and other handlers when making adjustments or repairs on the chemigation system when PREVATHON is in the irrigation water.

Operation

Start the water pump and sprinkler, and let the system achieve the desired pressure and speed before starting the injector. Start the injector and calibrate the injection system according to the directions above. This procedure is necessary to deliver the desired rate per acre in a uniform manner. When the application is finished, allow the entire irrigation and injector system to be thoroughly flushed clean before stopping the system.

- End guns must be turned off during the application, if they irrigate nontarget areas or if they do not provide uniform application and coverage.
- It is recommended that nozzles in the immediate area of wells, control panels, chemical supply tanks and system safety devices be plugged to prevent contamination of these areas.
- Do not apply when wind speed favors drift beyond the area intended for treatment.
- Do not apply when system connections or fittings leak or when nozzles do not provide uniform distribution.
- Do not allow irrigation water to collect or run-off during chemigation.

Cleaning the System

Thoroughly clean the injection system and tank of any fertilizer or chemical residues

using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. Consult your owner’s manual or your local equipment dealer for cleanout procedures for your injection system.

REQUIRED SYSTEM SAFETY DEVICES FOR ALL CHEMIGATION SYSTEMS

1. 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.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. 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.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. 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.
6. Systems must use a metering device, such as a positive displacement pump or a Venturi injector, that provides uniform injection of the product, is effectively designed and constructed of materials compatible with the product, and is capable of being fitted with a system interlock.
7. 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.

CROP ROTATION

Crops on this label and the following crops or crop groups may be planted immediately following harvest: Artichoke, globe; Asparagus; Banana/Plantain;

Brassica (Cole) Leafy Vegetables (Crop Group 5); Bulb Vegetables (Crop Group 3-07); Bushberry subgroup (Crop subgroup 13-07B); Cacao; Caneberry subgroup (Berry and Small Fruit Crop Group subgroup 13- 07A); Cereal Grains (Crop Group 15); Forage, Fodder, and Straw of Cereal Grains (Crop Group 16); Citrus (Crop Group 10- 10); Coffee; Corn (field, pop, seed, and sweet); Cotton; Cucurbit Vegetables (Crop Group 9); Figs; Fruiting Vegetables (Crop Group 8-10); Grass Forage, Fodder, and Hay Group (Crop Group 17); Herbs subgroup (Crop Group subgroup 19A); Grape; Hops; Large Shrub/Tree Berry subgroup (Crop subgroup 13-07C); Leafy Vegetables (nonbrassica, Crop Group 4); Legume Vegetables (Crop Group 6); Foliage of Legume Vegetables (Crop Group 7); Low Growing Berry subgroup (Crop subgroup 13- 07G); Nongrass Animal Feeds (Forage, Fodder, Straw,and Hay Crop Group 18); Okra; Oilseed Group (Crop Group 20); Olives; Peanut: Persimmons; Pome Fruits (Crop Group 11-10); Pineapple; Pomegranates; Prickly Pear Cactus; Rice; Root and Tuber Vegetables (Crop Group 1); Leaves of Root and Tuber Vegetables (Crop Group 2); Small Fruit Vine Climbing subgroup, except fuzzy kiwifruit (Berry and Small Fruit Crop Group subgroup 13-07F); Soybean; Spice subgroup (Crop Group subgroup 19B); Spearmint and Peppermint; Stone Fruits (Crop Group 12-12); Sugarcane: Tea; Tree Nuts and Pistachio (Crop Group 14); Tobacco; and Tropical Fruits (acerola, atemoya, avocado, biriba, black sapote, canistel, cherimoya, custard apple, ilama, feijoa, guava, jaboticaba, longan, lychee, mamey sapote, mango, papaya, passionfruit, pulasan, rambutan, sapodilla, soursop, Spanish lime, star apple, starfruit, sugar apple, wax jambu, and White sapote (Casimiroa), and and/or hybrids of these).

All other crops cannot be planted until 12 months after the last application of PREVATHON.

Limitations, Restrictions, and Exceptions

USE RESTRICTIONS

Apply higher rates within the listed range for heavier infestations, larger/denser crops or extreme environmental conditions such as rainy weather and high temperatures.

Make no more than 4 applications per acre per calendar year.

Minimum interval between treatments is 5 days.

Do not apply more than 60 fl oz PREVATHON or 0.2 lb a.i. of chlorantraniliprole containing products per acre per calendar year.

Grasshopper - With foliar sprays, performance is improved with the addition of a Methylated Seed Oil (MSO) adjuvant at 1 gallon per 100 gallons of spray volume (1% v/v). Apply when grasshopper populations reach local established thresholds to prevent crop damage. Correct timing of spray applications to nymphal stages and thorough coverage is critical to achieve optimum control. Applications should be made when eggs have hatched and the majority of the grasshopper population is 2nd – 3rd instar nymphs. Once grasshoppers contact and/or ingest PREVATHON® there will be rapid feeding cessation; insect mortality may not occur until a week later or longer. Do not make more than two sequential applications of PREVATHON® before rotating to another registered insecticide having a different mode-of-action.

Method
Broadcast/Foliar Ground
Restricted Entry Interval

4 hours

Timings
When eggs have hatched and the majority of the grasshopper population is 2nd – 3rd instar nymphs.
When grasshopper populations reach local established thresholds to prevent crop damage.