

10163-317

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460



OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

APR 14 2010

Ms. Krystal Hengl
Gowan Company
P.O. Box 5569
Yuma, AZ 85366-5569

Dear Ms. Hengl:

Subject: Label amendment
Scorpion
EPA Registration Number 10163-317
Submission dated 3/24/2009

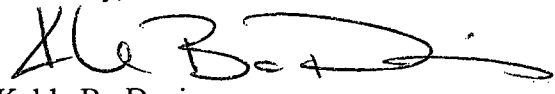
The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments listed below:

1. Under Comments for all crops, the word "recommended" must be changed to "specified" in the statement about higher rates.
2. Under Comments for all crops, a subheading of Restriction must be added before the statement "Do not apply to vegetables grown for seed".
3. On page 10, use on potato, delete the statement "Regardless of application method do not apply more than a total of" Reinststate: "Do not combine foliar applications with soil applications, or vice versa. Only use one application method."
4. Under the warranty statement, third paragraph, add: "To the extent consistent with applicable law" to the beginning of the second sentence.

Submit two (2) 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 section 6(a).

A stamped copy of the label is enclosed for your records. If you have any questions, please do not hesitate to contact Rita Kumar at (703) 308-8291 or kumar.rita@epa.gov.

Sincerely,



Kable Bo Davis
Acting Product Manager 7
Insecticide Rodenticide Branch
Registration Division (7505P)

Enclosure

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SCORPION™

Insecticide

For control of listed sucking and chewing insect pests in listed crops; for agricultural use only.

ACTIVE INGREDIENT:

Dinotefuran*, N-methyl-N'-nitro-N'-[(tetrahydro-3-furanyl) methyl]guanidine..... 35%

OTHER INGREDIENTS:..... 65%

Total 100.0%

Contains 3.24 pounds active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

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.)

FIRST AID	
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for further treatment advice.
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, and after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-888-478-0798 for emergency medical treatment information.	

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION**

Harmful if absorbed through skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wear long-sleeved shirt, long pants, socks, shoes and gloves. Wear protective eyewear.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical resistance category chart.

Applicators and other handlers must wear:

- Long-sleeved shirts and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl
- Shoes plus socks

USER SAFETY REQUIREMENTS

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

Net Contents: 1/2 Gallon or 2.5 Gallons

ACCEPTED
With COMMENTS
In EPA Letter Dated:

APR 14 2010



EPA Reg. No. 10163-317
EPA Est. No. 67545-A

Under the Federal Insecticide, Fungicide
and Rodenticide Act, As amended, for the
pesticide Registered under EPA Reg. No:

10163-317

Produced For:
Gowan Company
P. O. Box 5569
Yuma, AZ 85366-5569

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USER SAFETY RECOMMENDATION

Users must:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.
- Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to shrimp. 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 apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas. Do not dispose of equipment washwaters or rinsate into a natural drain or water body. Do not contaminate water when disposing of equipment washwaters or rinsate.

This compound is highly toxic to honey bees. The persistence of residues and potential residual toxicity of Dinotefuran in nectar and pollen suggests the possibility of chronic toxic risk to honey bee larvae and the eventual instability of the hive.

This product is toxic to bees exposed to treatment for more than 38 hours following treatment. Do not apply this product to blooming, pollen-shedding or nectar-producing parts of plants if bees may forage on the plants during this time period, unless the application is made in response to a public health emergency declared by appropriate state or federal authorities.

Dinotefuran and its degradate, MNG have the properties and characteristics associated with chemicals detected in ground water. The high water solubility of Dinotefuran, and its degradate, MNG, coupled with their very high mobility, and resistance to biodegradation indicates that these compounds have a strong potential to leach to the subsurface under certain conditions as a result of label use. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

PHYSICAL OR CHEMICAL HAZARDS

Do not use, pour, spill, or store near heat or open flame.

SPRAY DRIFT ADVISORY

Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crop thereof rendered for sale, use or consumption.

DIRECTIONS FOR USE

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PERCAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

Do not apply this product in a way that will contact workers or other person, 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 Workers Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, 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.

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, chemical-resistant gloves made of any waterproof material such as polyethylene and polyvinyl chloride and shoes plus socks.

TANK MIXES

NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor.

Read and follow the entire label of each product to be used in tank mix with this product.

RESISTANCE MANAGEMENT

SCORPION contains a Group 4A insecticide. Insect biotypes with acquired resistance to Group 4A insecticides may eventually dominate the insect population if Group 4A insecticides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by SCORPION or other Group 4A insecticides.

To delay insecticide resistance consider:

- NOT using a foliar application of SCORPION or any insecticide in the neonicotinoid class following an in-furrow or in soil application of SCORPION.
- To optimize resistance management practices, no more than three (3) applications of SCORPION per growing season are allowed.
- Avoiding the consecutive use of SCORPION or other Group 4A insecticides that have a similar target site of action, on the same insect species.
- Using tank mixes or premixes with insecticides from a different target site of action Group as long as the involved products are registered for the same use and have different sites of action.
- Basing insecticide use on a comprehensive Integrated Pest Management (IPM) program.
- Monitoring treated insect populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors and/or manufacturers for resistance management program and/or IPM recommendations for the specific site and resistant pest problems.

- Using another registered pesticide that is not in the neonicotinoid class or nitroguanidine subclass of chemistry, if the maximum season limit of SCORPION has been applied and pest populations require additional treatments.
- For further information contact Gowan Company at the following toll free number: 1-800-883-1844

APPLICATION INFORMATION

Failure to follow directions and precautions on this label may result in crop injury, poor insect control and /or illegal residues.

For best performance, always follow these directions:

- SCORPION must be applied when insect pest populations begin to build, but before populations reach economically damaging levels. Economic thresholds for pests controlled by SCORPION may be available from your State and County Extension Service.
- SCORPION is a selective insecticide that has minimal impact on beneficial arthropods and its use is compatible with Integrated Pest Management (IPM) programs. However, SCORPION is toxic to bees exposed to direct treatment or to residues on blooming crops and weeds. Do not apply SCORPION or allow it to drift onto blooming plants if bees are actively foraging in the treated area.
- SCORPION is taken up into foliage after application. However, thorough spray coverage is essential for optimal performance. Apply SCORPION in sufficient water to ensure good coverage.
- SCORPION may aid in the suppression of some pests. Suppression can mean either inconsistent control (good to poor), or consistent control at a level below that is generally considered acceptable for commercial control.
- If the maximum season limit of SCORPION Insecticide, as defined under crop use directions, has been applied and pest populations require additional treatments, use another registered pesticide that is not in the neonicotinoid class or nitroguanidine subclass of chemistry.

Rotational Crops:

For all crops other than cucurbits, fruiting vegetables, grapes, head & stem brassica, leafy vegetables and potato, a 120 day plant back interval must be observed.

Mixing Instructions:

Add 1/2 of the required amount of water to the mix tank. With the agitator running, add the desired amount of SCORPION to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after SCORPION has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

SCORPION plus Tank Mixtures

Add 1/2 of the required amount of water to the mix tank. Start the agitator before adding any tank mix partners. In general, tank mix partners may be added in this order: products packaged in water soluble packaging, wettable powders, wettable granules (dry flowables), liquid flowables, liquids, emulsifiable concentrates, surfactants and adjuvants. Always allow each tank mix partner to become fully dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all the mixture has been applied.

When using SCORPION in tank mixtures, all products in water soluble packaging must be added to the tank before any other tank mix partner, including SCORPION. Allow the water soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank.

If using SCORPION in a tank mixture, observe all directions for use, crops/sites, use rates, dilution ratios, precautions and limitations which appear on the tank mix product label. No label dosage rate may be exceeded, and the most restrictive label precautions and limitations must be followed. This product must not be mixed with any product which prohibits such mixing. Tank mixtures or other applications of products referenced on this label are permitted only in those states which the referenced products are registered.

Compatibility:

IMPORTANT: The crop safety of all potential tank mixes on all crops has not been tested. Before applying any tank mixture not specifically recommended on this label, the safety to the target crop must be confirmed.

SCORPION is compatible with most commonly used pesticides. However, since it is not possible to test all possible mixtures, the user must pretest to assure the physical compatibility and lack of phytotoxic effect of any proposed mixtures with SCORPION. To determine the physical compatibility of SCORPION with other products, use a jar test, as described below:

Using a quart jar, add the proportionate amounts of the products to 1 qt of water. Add wettable powders and water dispersible granular products first, then liquid flowables and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for additional required ingredients to the spray tank.

APPLICATION PROCEDURES

Ground Application

Spray nozzles must be selected which will provide accurate and uniform spray deposition. Use spray nozzles which provide medium sized droplets and reduce drifts. To help insure accuracy, calibrate sprayer before each use. For information on spray equipment and calibration, consult nozzle manufacturers and/or State and County Extension Service.

Apply SCORPION using sufficient water volume to provide thorough and uniform coverage. In situations where a dense canopy exists and/or pest pressure is high, use greater water volumes. The use of a spray adjuvant may improve spray coverage. Avoid making applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Aerial Application

Apply SCORPION in water, using the minimum spray volume indicated in the Special Instructions of each crop, but not less than 3 gallons per acre. Increase spray volume where practical to improve coverage. Avoid making application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Application Through Irrigation Systems (Chemigation):

SCORPION may be applied through low pressure irrigation, such as micro-sprinkler, drip or trickle irrigation where so noted in the application of each crop, but should NOT be applied through center-pivot, solid set, or any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should

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contact State Extension Service special 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 of 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.

DO NOT APPLY SCORPION INSECTICIDE THROUGH ANY IRRIGATION SYSTEM PHYSICALLY CONNECTED TO A PUBLIC WATER SYSTEM.

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 per year. SCORPION may be applied through irrigation systems which may be supplied by a public water system only if the water from the public water system is 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 to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

Drip or trickle chemigation requirements:

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 back flow.
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 pump 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 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.

Calibration and Application Instructions

SCORPION must be applied under the schedule specified in the specific crop use recommendations, not according to the irrigation schedule, unless the events coincide. In general, set the equipment to apply the minimum amount of water per acre. Run the system at 86 to 90% of the manufacturer's maximum rated travel speed.

The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler irrigation equipment. Users must check with state and local agencies for potential use restrictions before applying any agricultural chemical through sprinkler irrigation equipment.

Drip or Trickle Irrigation Equipment:

1. Determine the acreage covered by the irrigation equipment.
2. Fill injector solution tank with plain water and calibrate the flow rate of the system to deliver the contents of the tank over a 20 to 40 minute time interval.
3. Determine the amount of SCORPION required to treat the area covered by the irrigation system.
4. Add the required amount of SCORPION, and any other tank mix partners, into the same quantity of water used to calibrate the injection period. (See "Mixing Instructions" section of this label).
5. Operate the system at the same pressure and time interval established during the calibration.
6. Inject specified amount of SCORPION per acre for either a 20 to 40 minute period at the end of a regular irrigation set, or as a 20 to 40 minute injection as a separate application not associated with a regular irrigation to maximize retention of the insecticide by the foliage.
7. Stop injection equipment after treatment is completed. Continue to operate the system until the SCORPION solution has cleared the last sprinkler head. To ensure lines are flushed and free from remaining pesticides, a dye indicator may be injected into the line to mark the end of the application period.

RECOMMENDATIONS TO AVOID SPRAY DRIFT

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 is responsible for considering all of these factors when making decisions. Where states have more stringent regulations, they must be observed. Follow these recommendations to avoid spray drift:

1. Make applications when wind velocity factors on target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 10 mph. Avoid applications when wind gusts approach 10 mph.
2. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.
3. Do not cultivate or plant crops within 25 feet of the aquatic area to allow growth of a vegetative filter strip.
4. Do not make applications during temperature inversions. Inversions are characterized by stable air and increasing temperatures with increased height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.
5. Use the largest droplet size consistent with good pest control. Small droplets are more prone to spray drift and can be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.
6. Apply as close to target plants as practical to obtain a good spray pattern for adequate coverage. Applications more than 10 feet above the crop canopy must be avoided.
7. For aerial applications, the spray boom may be mounted on the aircraft so to minimize drift caused by wing tip vortices. The minimum practical boom length must be used and must not exceed 75% of wing span or rotor diameter.

Vine Sprayers (Grapes and Potatoes Only)

Vine sprayers carry droplets in the canopy of vines via a radially or laterally directed air stream. In addition to the general drift management principles already described, the following specific practices will further reduce drift potential.

1. Adjust deflectors and aiming devices so that spray is only directed into the canopy.

2. Block off upward pointing nozzles when there is no overhanging canopy.
3. Use only enough air volume to penetrate the canopy and provide good coverage. Use a minimum of 50 gallons finished spray per acre.
4. Do not allow spray to go beyond the edge of the cultivated area. Spray the outside row only from outside the planting.

DIRECTIONS FOR USE ON CUCURBITS

CROP	PEST	RATE	COMMENTS
Acorn Squash	Brown Marmorated	Foliar:	Higher water volumes provide improved insect control.
Balsam Apple	Stink Bug	2 to 7 fl oz/A	
Balsam Pear	Brown Stink Bug	0.05 to 0.18 lbs	Begin application when pest activity is first noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established.
Bitter Melon	Cabbage Looper	ai/A	
Butternut Squash	Cucumber Beetle spp		
Calabaza	Flea Beetle spp	OR	
Cantaloupe	Grasshopper spp		
Casaba	Green Peach	Soil:	
Chayote	Aphid	9 to 10.5 fl oz/A	Under severe pest pressure, use higher recommended rates.
Chinese Cucumber	Green Stink Bug	0.23 to 0.27 lbs	
Chinese Okra	Harlequin Bug	ai/A	Do not apply to vegetables grown for seed.
Chinese Waxgourd	Melon Aphid		
(Chinese Preserving Melon)	Leafhopper spp		The rate applied affects the length of control. Use high rate where infestations occur later in crop development, or where pest pressure is continuous.
Citron Melon	Leafminer spp		
Crenshaw Melon	Southern Green		
Crookneck Squash	Stink Bug		SCORPION may be mixed and/or alternated with commonly used insecticides to comply with local IPM and resistance management programs.
Cucumber	Spotted Cucumber Beetle		
Edible Gourd	Squash Bug		
Gherkin	Striped Cucumber Beetle		
Golden Pershaw Melon	Thrips spp		
Honey Balls	Whitefly spp		
Honeydew Melon	(including		
Hubbard Squash	Bandwinged		
Mango Melon	Whitefly, Silverleaf		
Momordica spp.	Whitefly, and		
Muskmelon	Sweetpotato		
Persian Melon	Whitefly)		
Pineapple Melon			
Pumpkin			
Santa Claus Melon			
Scallop Squash			
Snake Melon			
Spaghetti Squash			
Straightneck Squash			
Summer Squash			
True Cantaloupe			
Vegetable Marrow			
Watermelon			
Winter Squash			
Zucchini			

Note: Do not combine foliar applications with soil application, or vice versa. Only use one application method.

Foliar Application

- Apply with air or ground equipment in adequate water for uniform coverage (Do not use less than 3 gallons/acre for aerial application or 20 gallons/acre for ground applications).
- Do not apply SCORPION within one (1) day of harvest.
- Do not apply more than a total of 10.5 fl oz/A of SCORPION (0.266 lb ai/A) per season.

Soil Application

- See conversion chart on this label for linear application rates.
- Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals/A).
- Do not apply SCORPION within twenty-one (21) days of harvest.
- Do not apply more than a total of 21 fl oz/A of SCORPION (0.532 lb ai/A) per season.

Apply specified dosage in sufficient carrier volume to insure uniform application and incorporate into the soil using one of the following methods:

1. In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results band width must be 2" or less and placed 1 to 2" below the seed depth.
2. In-furrow spray at or below seed level or a narrow surface band above the seedline during planting. For surface banded applications incorporate to a depth of 1-1/2" with sufficient irrigation within 24 hours to insure satisfactory insect control.
3. As a post-seeding drench, transplant drench or hill drench. Make applications with sufficient water to insure incorporation into the root zone.
4. As a sidedress after plants are established. Make applications within 2 to 4" to the side of each row and incorporated 1 or more inches deep. Applications must be made to each row if there are two rows per bed.
5. In drip or trickle irrigation water.

DIRECTIONS FOR USE ON FRUITING VEGETABLES

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CROP	PEST	RATE	COMMENTS
Bell Pepper Chili Pepper Cooking Pepper Eggplant Ground Cherry Pepino Pimento Sweet Pepper Tomatillo Tomato (Do not apply to varieties of tomatoes which are less than 2 inches in size, such as cherry or grape tomatoes)	Brown Marmorated Stink Bug Brown Stink Bug Cabbage Looper Colorado Potato Beetle Consperse Stink Bug Cucumber Beetle spp Flea Beetle spp Grasshopper spp Green Peach Aphid Green Stink Bug Harlequin Bug Leafhopper spp Leafminer spp Pepper Weevil Psyllid spp. (including Potato Psyllid) Potato Aphid Southern Green Stink Bug Squash Bug Thrips spp (including Eastern Flower Thrips, Onion Thrips, Tobacco Thrips, and Western Flower Thrips) Whitefly spp (including Bandwinged Whitefly, Silverleaf Whitefly, and Sweetpotato Whitefly)	Foliar: 2 to 7 fl oz/A 0.05 to 0.18 lbs ai/A OR Soil: 9 to 10.5 fl oz/A 0.23 to 0.27 lbs ai/A	Higher water volumes provide improved insect control. Begin application when pest activity is first noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established. Under severe pest pressure, use higher recommended rates. Do not apply to vegetables grown for seed. The rate applied affects the length of control. Use high rate where infestations occur later in crop development, or where pest pressure is continuous. SCORPION may be mixed and/or alternated with commonly used insecticides to comply with local IPM and resistance management programs.
<p>Note: Do not combine foliar applications with soil application, or vice versa. Only use one application method.</p> <p>Foliar Application</p> <ul style="list-style-type: none"> • Apply with air or ground equipment in adequate water for uniform coverage (Do not use less than 3 gallons/acre for aerial application or 20 gallons/acre for ground applications). • Do not apply SCORPION within one (1) day of harvest. • Do not apply more than a total of 10.5 fl oz/A of SCORPION (0.266 lb ai/A) per season. <p>Soil Application</p> <ul style="list-style-type: none"> • See conversion chart on this label for linear application rates. • Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals/A). • Do not apply SCORPION within twenty-one (21) days of harvest. • Do not apply more than a total of 21 fl oz/A of SCORPION (0.532 lb ai/A) per season. <p>Apply specified dosage in sufficient carrier volume to insure uniform application and incorporate into the soil using one of the following methods:</p> <ol style="list-style-type: none"> 1. In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results band width must be 2" or less and placed 1 to 2" below the seed depth. 2. In-furrow spray at or below seed level or a narrow surface band above the seedline during planting. For surface banded applications incorporate to a depth of 1-1/2" with sufficient irrigation within 24 hours to insure satisfactory insect control. 3. As a post-seeding drench, transplant drench or hill drench. Make applications with sufficient water to insure incorporation into the root zone. 4. As a sidedress after plants are established. Applications must be placed within 2 to 4" to the side of each row and incorporated 1 or more inches deep. Applications must be made to each row if there are two rows per bed. 5. In drip or trickle irrigation water. 			

DIRECTIONS FOR USE ON GRAPE

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CROP	PEST	RATES	COMMENTS
Grapes	Brown Marmorated Stink Bug Flea Beetle spp Glassy-Winged Sharpshooter Grape Berry Moth Japanese Beetle Leafhopper spp Mealybug spp (including Citrus Mealybug, Grape Mealybug, Longtailed Mealybug, Obscure Mealybug, and Vine Mealybug) Multicolored Asian Ladybeetle Thrips spp Whitefly spp (including Bandwinged Whitefly, Silverleaf Whitefly, and Sweetpotato Whitefly)	Foliar: 2 to 5 fl oz/A 0.05 to 0.13 lbs ai/A	Higher water volumes provide improved insect control. Begin application when pest activity is first noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established. Under severe pest pressure, use higher recommended rates. The rate applied affects the length of control. Use high rate where infestations occur later in crop development, or where pest pressure is continuous. SCORPION may be mixed and/or alternated with commonly used insecticides to comply with local IPM and resistance management programs.
	Brown Marmorated Stink Bug Flea Beetle spp Glassy-Winged Sharpshooter Leafhopper spp Mealybug spp (including Citrus Mealybug, Grape Mealybug, Longtailed Mealybug, Obscure Mealybug, and Vine Mealybug) Phylloxera spp. Thrips spp Whitefly spp (including Bandwinged Whitefly, Silverleaf Whitefly, and Sweetpotato Whitefly)	Soil: 9 to 10.5 fl oz/A 0.23 to 0.27 lbs ai/A	
<p>Note: Do not combine foliar applications with soil application, or vice versa. Only use one application method. Note: Regardless of application method, do not apply more than a total of 20.9 fl oz/A of SCORPION (0.529 lb ai/A) per season.</p> <p>Foliar Application</p> <ul style="list-style-type: none"> • Apply with air or ground equipment in adequate water for uniform coverage (Do not use less than 5 gallons/acre for aerial applications or 10 gallons/acre for ground applications). • Do not apply SCORPION within one (1) day of harvest. • Do not apply more than a total of 10.25 fl oz/A of SCORPION (0.259 lb ai/A) per season. <p>Soil Application</p> <ul style="list-style-type: none"> • Make only one (1) soil application per season. • Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals/A). • Do not apply SCORPION within twenty-eight (28) days of harvest. • Do not apply more than a total of 10.5 fl oz/A of SCORPION (0.266 lb ai/A) per season. • For drip application, prior to injection, mix specified dosage in sufficient carrier volume (minimum of 2 gals of water per 1 lb of product) to ensure uniform application and incorporation into the soil using drip or trickle irrigation water. Apply towards the end of the irrigation run to ensure the product does not leach past the root zone. 			

DIRECTIONS FOR USE ON HEAD AND STEM BRASSICA

CROP	PEST	RATE	COMMENTS
Broccoli Brussels Sprouts Cabbage Cauliflower Cavalo Broccolo Chinese Cabbage Chinese Mustard Cabbage Kohlrabi	Brown Stink Bug Cabbage Aphid Cabbage Looper Cucumber Beetle spp Flea Beetle spp Grasshopper spp Green Peach Aphid Green Stink Bug Harlequin Bug Leafminer spp Southern Green Stink Bug Squash Bug Thrips spp (including Onion Thrips) Whitefly spp (including Bandwinged Whitefly, Silverleaf Whitefly, and Sweetpotato Whitefly)	Foliar: 2 to 7 fl oz/A 0.05 to 0.18 lbs ai/A OR Soil: 9 to 10.5 fl oz/A 0.23 to 0.27 lbs ai/A	Higher water volumes provide improved insect control. Begin application when pest activity is first noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established. Under severe pest pressure, use higher recommended rates. Do not apply to vegetables grown for seed. The rate applied affects the length of control. Use high rate where infestations occur later in crop development, or where pest pressure is continuous. SCORPION may be mixed and/or alternated with commonly used insecticides to comply with local IPM and resistance management programs.
<p>Note: Do not combine foliar applications with soil application, or vice versa. Only use one application method.</p> <p>Foliar Application</p> <ul style="list-style-type: none"> Apply with air or ground equipment in adequate water for uniform coverage (Do not use less than 3 gallons/acre for aerial application or 20 gallons/acre for ground applications). Do not apply SCORPION within one (1) day of harvest. Do not apply more than a total of 10.5 fl oz/A of SCORPION (0.266 lb ai/A) per season. <p>Soil Application</p> <ul style="list-style-type: none"> See conversion chart on this label for linear application rates. Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals/A). Do not apply SCORPION within twenty-one (21) days of harvest. Do not apply more than a total of 21 fl oz/A of SCORPION (0.532 lb ai/A) per season. <p>Apply specified dosage in sufficient carrier volume to insure uniform application and incorporate into the soil using one of the following methods:</p> <ol style="list-style-type: none"> In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results band width must be 2" or less and placed 1 to 2" below the seed depth. In-furrow spray at or below seed level or a narrow surface band above the seedline during planting. For surface banded applications incorporate to a depth of 1-1/2" with sufficient irrigation within 24 hours to insure satisfactory insect control. As a post-seeding drench, transplant drench or hill drench. Make applications with sufficient water to insure incorporation into the root zone. As a sidedress after plants are established. Applications must be placed within 2 to 4" to the side of each row and incorporated 1 or more inches deep. Applications must be made to each row if there are two rows per bed. In drip or trickle irrigation water. 			

DIRECTIONS FOR USE ON LEAFY VEGETABLES

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(Except Brassica Vegetables)

CROP	PEST	RATE	COMMENTS
Amaranth (Chinese Spinach) Arugula (Rocket) Cardoon Celery Celtuce Chervil Chinese Celery Chrysanthemum Edible-leaved Garland Corn Salad Cress Garden Upland Dandelion Dock (Sorrel) Endive (Escarole) Florence Fennel Lettuce Head Leaf Orach Parsley Purslane Garden Winter	Brown Stink Bug Cabbage Looper Cucumber Beetle Flea Beetle spp Grasshopper spp Green Peach Aphid Green Stink Bug Harlequin Bug Leafhopper spp Leafminer Leafminer spp Potato Aphid Southern Green Stink Bug Bug Squash Bug Thrips spp (including Western Flower Thrips) Whitefly spp (including Bandwinged Whitefly, Silverleaf Whitefly, and Sweetpotato Whitefly)	Foliar: 2 to 5.25 fl oz/A 0.05 to 0.13 lbs ai/A OR Soil: 9 to 10.5 fl oz/A 0.23 to 0.27 lbs ai/A	Higher water volumes provide improved insect control. Begin application when pest activity is first noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established. Under severe pest pressure, use higher recommended rates. Do not apply to vegetables grown for seed. The rate applied affects the length of control. Use high rate where infestations occur later in crop development, or where pest pressure is continuous. SCORPION may be mixed and/or alternated with commonly used insecticides to comply with local IPM and resistance management programs.
Radicchio (Red Chicory) Rhubarb Spinach Spinach, New Zealand Spinach, Vine Swiss Chard			<p>Note: Do not combine foliar applications with soil application, or vice versa. Only use one application method.</p> <p>Foliar Application</p> <ul style="list-style-type: none"> Apply with air or ground equipment in adequate water for uniform coverage (Do not use less than 3 gallons/acre for aerial applications or 20 gallons/acre for ground applications). Do not apply SCORPION within one (1) day of harvest. Do not apply more than a total of 10.5 fl oz/A of SCORPION (0.266 lb ai/A) per season. <p>Soil Application</p> <ul style="list-style-type: none"> See conversion chart on this label for linear application rates. Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals/A). Do not apply SCORPION within twenty-one (21) days of harvest. Do not apply more than a total of 21 fl oz/A of SCORPION (0.532 lb ai/A) per season. <p>Apply specified dosage in sufficient carrier volume to insure uniform application and incorporate into the soil using one of the following methods:</p> <ol style="list-style-type: none"> In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results band width must be 2" or less and placed 1 to 2" below the seed depth. In-furrow spray at or below seed level or a narrow surface band above the seedline during planting. For surface banded applications incorporate to a depth of 1-1/2" with sufficient irrigation within 24 hours to insure satisfactory insect control. As a post-seeding drench, transplant drench or hill drench. Make applications with sufficient water to insure incorporation into the root zone. As a sidedress after plants are established. Applications must be placed within 2 to 4" to the side of each row and incorporated 1 or more inches deep. Applications must be made to each row if there are two rows per bed. In drip or trickle irrigation water.

DIRECTIONS FOR USE ON POTATO

CROP	PEST	RATE	COMMENTS
Potato	Colorado Potato Beetle Flea Beetle spp Green Peach Aphid Potato Aphid Potato Leafhopper Psyllid spp (including Potato Psyllid)	Foliar: 2 to 2.75 fl oz/A 0.05 to 0.07 lbs ai/A OR Soil: 11 to 13 fl oz/A 0.28 to 0.33 lbs ai/A	Higher water volumes provide improved insect control. Begin application when pest activity is first noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 14 days. For best results, time application before a damaging population becomes established. Under severe pest pressure, use higher recommended rates. The rate applied affects the length of control. Use high rate where infestations occur later in crop development, or where pest pressure is continuous. SCORPION may be mixed and/or alternated with commonly used insecticides to comply with local IPM and resistance management programs.
<p>Regardless of application method, do not apply more than a total of 20.86 fl oz /A of SCORPION (0.5298 lbs pounds ai/A) per season.</p> <p>Foliar Application</p> <ul style="list-style-type: none"> Apply with air or ground equipment in adequate water for uniform coverage (Do not use less than 3 gallons/acre for aerial applications or 10 gallons/acre for ground applications). Do not apply SCORPION within seven (7) day of harvest. Do not apply more than a total of 7.75 fl oz/A of SCORPION (0.196 lb ai/A) per season. <p>Soil Application</p> <ul style="list-style-type: none"> See conversion chart on this label for linear application rates. Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals/A). Apply once at preplant, preemergence or at ground crack as directed below. Do not apply more than a total of 13 fl oz/A of SCORPION (0.33 lb ai/A) per season. <p>Apply specified dosage in sufficient carrier volume to insure uniform application and incorporate into the soil using one of the following methods:</p> <ol style="list-style-type: none"> In a narrow band centered on the plant row in the bedding operation just prior to planting. In-furrow at planting. Direct spray in the furrow on the seed pieces or potatoes. As a sidedress to both sides of the row or as a spray at ground crack directly over the row during hilling. Cover immediately with soil. 			

CONVERSION CHART FOR LINEAR APPLICATION

Rate/A of Product (Fl oz)	Fluid Ounces Product/1000 Row Ft.							
	20	24	28	30	32	34	36	40
9	0.34	0.41	0.48	0.52	0.55	0.59	0.62	0.69
9.5	0.36	0.44	0.51	0.55	0.58	0.62	0.65	0.73
10	0.38	0.46	0.54	0.57	0.61	0.65	0.69	0.77
10.5	0.40	0.48	0.56	0.60	0.64	0.68	0.72	0.80
11	0.42	0.51	0.59	0.63	0.67	0.72	0.76	0.84
11.5	0.44	0.53	0.62	0.66	0.70	0.75	0.79	0.88
12	0.46	0.55	0.64	0.69	0.73	0.78	0.83	0.92
12.5	0.48	0.57	0.67	0.72	0.77	0.81	0.86	0.96
13	0.50	0.60	0.70	0.75	0.80	0.85	0.90	0.99

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STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Store in a cool, dry place. Do not store diluted spray. For help with any spill, leak fire or exposure involving this material, call day or night 1-800-424-9300.

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

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. After cleaning, if recycling is not available, puncture and dispose of in a sanitary landfill or by incineration or if allowed by State and local authorities by burning. If burned, stay out of smoke.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL CHEMTREC® (800) 424-9300.

For other product information, contact Gowan Company L.L.C. or see Material Safety Data Sheet.

NOTICE OF CONDITIONS OF SALE AND WARRANTY AND LIABILITY LIMITATIONS

Important: Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product. If terms are not acceptable return the unopened container for a full refund.

Our directions for use of this product are based on tests believed to be reliable. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury, inadequate performance, or other unintended consequences may result due to soil or weather conditions, off target movement, presence of other materials, method of use or application, and other factors, all of which are beyond the control of Gowan Company. To the extent consistent with applicable law, all such risks are assumed by the Buyer and User.

Gowan Company warrants that this product conforms to the specifications on the label when used in strict conformance with Direction for Use, subject to the above stated risk limitations. GOWAN COMPANY MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY

TO THE FULLEST EXTENT PERMITTED BY LAW, GOWAN COMPANY'S EXCLUSIVE LIABILITY FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, OR ANY OTHER LEGAL THEORY IS STRICTLY LIMITED TO THE PURCHASE PRICE PAID OR REPLACEMENT OF PRODUCT, AT GOWAN COMPANY'S SOLE DISCRETION.

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EPA Text Pending: Scorpion Insecticide (to EPA 3-24-10)