

### U.S. ENVIRONMENTAL PROTECTION **AGENCY**

Office of Pesticide Programs Registration Division (7505C) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460

EPA Reg. Number:

Date of Issuance:

10163-317

MAR 1 2 2010

Term of Issuance: Conditional

Name of Pesticide Product:

Scorpion Insecticide

NOTICE OF PESTICIDE:

x Registration Reregistration (under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

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

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) and (B) provided that you:

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

One year storage stability (830.6317) and corrosion characteristics (830.6320) studies. These studies can be run concurrently. It is recommended that the observation must be made at 0, 3, 6, 9, and 12 months period and the results must be submitted to the Agency on completion. These studies must be submitted within 15 months from today's date.

- 3. Make the following label changes before you release the product for shipment:
  - a. Add the phrase "EPA Registration Number 10163-317".

Signature of Approving Official:

Date:

MAR 1 2 2010

page 2 Notice of Registration EPA Reg. No. 10163-317

- b. Provide Net Contents on the front panel.
- c. On page 2, under RESISTANCE MANAGEMENT, first bullet, change "use" to "using".
- d. On page 10, under DIRECTIONS FOR USE ON POTATO, provide the maximum total in terms of fluid ounces of product, along with pounds of active ingredient per acre per season, in the statement, "Regardless of application method......".
- 4. The Confidential statement of formula (CSF) dated 7/14/2009 is acceptable.
- 5. The revised CSF dated 10/15/2009 that you sent via e-mail is not acceptable as the basic, because product chemistry data was generated on CSF dated 7/14/2009. Submit this revised CSF as an alternate formulation. Also, you must explain why you are adding three different colors to the same formulation.
- 6. Submit two (2) copies of the 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). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records. Copies of the product chemistry and acute toxicity studies are also enclosed. If you have any questions, please contact Rita Kumar at (703) 308-8291 or <a href="mailto:kumar.rita@epa.gov">kumar.rita@epa.gov</a>.

Sincerely,

Kable Bo Davis

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

Enclosures (2)



## **SCORPION**<sup>TM</sup>

Insecticide

MAR 1.2.2010
Under the Federal Insecticide, Fungicide and Rodenticide Act, As amended, for the pesticide Registered under EPA Reg. No:

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:	<u>65%</u>
To	tal 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> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
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 do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
lf in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, and after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
	HOT LINE NUMBER

## 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.

N	let	ററ	nte	nts	•
		$\sim$	,,,,	1110	



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

EPA Reg. No. 10163-317 EPA Est. No. 67545-AZ-001

#### **USER SAFETY RECOMMENDATIONS**

#### **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 use a foliar application of SCORPION or any insecticide in the neonicotinoid class following an in-furrow or in soil application of SCOPRION.
- 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 soil 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

contact State Extension Service specialist, 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 INSECTICDE 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.
- 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.
- 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.
- 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:

- 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.
- 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:

- 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 y 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 descried, the following specific practices will further reduce drift potential.

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

- 2. 3.
- Block off upward pointed nozzles when there is no overhanging canopy.

  Use only enough air volume to penetrate the canopy and provide good coverage. Use a minimum of 50 gallons finished spray per
- 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**

	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				
Bitter Melon	Cabbage Looper	ai/A	threshold levels per State and County Extension Service				
Butternut Squash	Cucumber Beetle spp		recommendations. Repeat as needed to maintain control, but not more				
Calabaza	Flea Beetle spp	OR	often than every 7 days. For best results, time application before a				
Cantaloupe	Grasshopper spp	,	damaging population becomes established.				
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	Leafhopper spp		The rate applied affects the length of control. Use high rate where				
Melon)	Leafminer spp		infestations occur later in crop development, or where pest pressure is				
Citron Melon	Southern Green		continuous.				
Crenshaw Melon	Stink Bug						
Crookneck Squash	Spotted Cucumber		SCORPION may be mixed and/or alternated with commonly used				
Cucumber	Beetle		insecticides to comply with local IPM and resistance management				
Edible Gourd	Squash Bug		programs.				
Gherkin	Stripped Cucumber						
Golden Pershaw Melon	Beetle						
Honey Balls	Thrips spp						
Honeydew Melon	Whitefly spp		ţ.				
Hubbard Squash	(including						
Mango Melon	Bandwinged						
Momordica spp.	Whitefly, Silverleaf						
Muskmelon	Whitefly, and	*					
Persian Melon	Sweetpotato						
Pineapple Melon	Whitefly)						
Pumpkin							
Santa Claus Melon	Note: Do not combine for	oliar applications with	soil application, or vice versa. Only use one application method.				
Scallop Squash	1		•				
Snake Mellon	Foliar Application						
Spaghetti Squash	<ul> <li>Apply with air or gr</li> </ul>	ound equipment in ad	dequate water for uniform coverage (Do not use less than 3 gallons/acre for				
Straightneck Squash	aerial application of	or 20 gallons/acre for	ground applications).				
Summer Squash		RPION within one (1)					
True Cantaloupe	Do not apply more	than a total of 10.5 If	oz/A of SCORPION (0.266 lb ai/A) per season.				
Vegetable Marrow	Soil Application						
Watermelon	See conversion ch	art on this label for lin	near application rates.				
Winter Squash	Apply with ground	equipment in adequa	te water for uniform coverage (10 to 100 gals/A).				
Zucchini	Do not apply SCOI	RPION within twenty-	one (21) days of harvest.				
			z/A of SCORPION (0.532 lb ai/A) per season.				
	Apply specified dosage	in sufficient carrier vo	lume to insure uniform application and incorporate into the soil using one of				
	the following methods:		,,				
	1. In a narrow ba	and centered on the pl	ant row in the bedding operation just prior to planting. For best results band				
	width must be	2" or less and placed	d 1 to 2" below the seed depth.				
	2. In-furrow spra	y at or below seed lev	rel or a narrow surface band above the seedline during planting. For surface				
•			a depth of 1-1/2" with sufficient irrigation within 24 hours to insure satisfactory				
	insect control		•				
	3. As a post-see	ding drench, transpla	ant drench or hill drench. Make applications with sufficient water to insure				
	incorporation	into the root zone.					
	4. As a sidedres	ss after plants are es	stablished. Make applications within 2 to 4" to the side of each row and				
	incorporated	1 or more inches dee	p. 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

CROP	PEST	RATE	COMMENTS
Bell Pepper	Brown Marmorated	Foliar:	Higher water volumes provide improved insect control.
Chili Pepper	Stink Bug	2 to 7 fl oz/A	
Cooking	Brown Stink Bug	0.05 to 0.18 lbs	Begin application when pest activity is first noticed or when insects reach
Pepper	Cabbage Looper	ai/A	threshold levels per State and County Extension Service
Eggplant	Colorado Potato	<b>4</b> / (	recommendations. Repeat as needed to maintain control, but not more
Ground Cherry	Beetle	· OR	often than every 7 days. For best results, time application before a
Pepino	Consperse Stink Bug		damaging population becomes established.
Pimento	Cucumber Beetle spp	Soil:	darraging population becomes established.
Sweet Pepper	Flea Beetle spp	9 to 10.5 fl oz/A	Under severe pest pressure, use higher recommended rates.
Tomatillo	Grasshopper spp	0.23 to 0.27 lbs	Order severe pest pressure, and riigher resormmended rates.
Tomato (Do not	Green Peach Aphid	ai/A	Do not apply to vegetables grown for seed.
apply to varieties	Green Stink Bug	QII/1	Bo not apply to regulables grown for seed.
of tomatoes	Harlequin Bug		The rate applied affects the length of control. Use high rate where
which are less	Leafhopper spp		infestations occur later in crop development, or where pest pressure is
than 2 inches in	Leafminer spp		continuous.
	Pepper Weevil		Continuous.
size, such as	Psyllid spp. (including		SCORPION may be mixed and/or alternated with commonly used
cherry or grape			insecticides to comply with local IPM and resistance management
tomatoes)	Potato Psyllid)		, , ,
	Potato Aphid	·	programs.
	Southern Green Stink		
	Bug		
	Squash Bug		
	Thrips spp (including		
<u> </u>	Eastern Flower		
	Thrips, Onion		
	Thrips, Tobacco		
	Thrips, and Western		
	Flower Thrips)		
	Whitefly spp		
	(including		·
	Bandwinged		
	Whitefly, Silverleaf		
	Whitefly, and		,
	Sweetpotato		
1	Whitefly)		·
1	h	P	
1	Note: Do not combine to	pliar applications with	soil application, or vice versa. Only use one application method.
	Foliar Application		
			equate water for uniform coverage (Do not use less than 3 gallons/acre for
ĺ		r 20 gallons/acre for	
· ·	<ul> <li>Do not apply SCO</li> </ul>	RPION within one (1)	day of harvest.
	<ul> <li>Do not apply more</li> </ul>	than a total of 10.5 fl	oz/A of SCORPION (0.266 lb ai/A) per season.
	Soil Application		
·		art on this label for lin	ear application rates.
			te water for uniform coverage (10 to 100 gals/A).
			one (21) days of harvest.
			z/A of SCORPION (0.532 lb ai/A) per season.
			lume to insure uniform application and incorporate into the soil using one of
İ	the following methods:	Julijordik damidi VO	and to mean animom approacion and moorporate into the soil using one of
		and centered on the ni	ant row in the bedding operation just prior to planting. For best results band
			d 1 to 2" below the seed depth.
			rel or a narrow surface band above the seedline during planting. For surface
			a depth of 1-1/2" with sufficient irrigation within 24 hours to insure satisfactory
	insect control	•	a departer in the with administrating and it within 124 flours to insufe satisfactory
			ant drench or hill drench. Make applications with sufficient water to insure
			int dienor of the dienor. Make applications with sufficient water to insure
		into the root zone.	whiched. Applications must be placed within 2 to 4" to the side of sect rever
			ablished. Applications must be placed within 2 to 4" to the side of each row
			deep. Applications must be made to each row if there are two rows per bed.
	5. In drip or trick	le irrigation water.	

## **DIRECTIONS FOR USE ON GRAPES**

CROP	PEST	RATES	COMMENTS
Grapes	Brown Marmorated	Foliar:	Higher water volumes provide improved insect control.
	Stink Bug	2 to 5 fl oz/A	1 1919 112tor Feldings profited improfed indest oblider.
	Flea Beetle spp	0.05 to 0.13 lbs	Begin application when pest activity is first noticed or when insects reach
ł	Glassy-Winged	ai/A	threshold levels per State and County Extension Service
	Sharpshooter	·	recommendations. Repeat as needed to maintain control, but not more
	Grape Berry Moth		often than every 7 days. For best results, time application before a
	Japanese Beetle		damaging population becomes established.
Ì	Leafhopper spp	ļ	
	Mealybug spp		Under severe pest pressure, use higher recommended rates.
1	(including Citrus	i	
,	Mealybug, Grape	1	The rate applied affects the length of control. Use high rate where
1		]	
1	Mealybug,	i	infestations occur later in crop development, or where pest pressure is
	Longtailed	i	continuous.
•	Mealybug, Obscure		· ·
İ	Mealybug, and Vine		SCORPION may be mixed and/or alternated with commonly used
•	Mealybug)		insecticides to comply with local IPM and resistance management
:	Multicolored Asian		programs.
į		l. •	programs.
	Ladybeetle		
	Thrips spp	[	
	Whitefly spp		
1	(including		
	, , ,		
	Bandwinged		
ļ	Whitefly, Silverleaf		, and the second
1	Whitefly, and		
1	Sweetpotato		
İ	Whitefly)		
	v vinceny)		
	Brown Marmorated	Soil:	
	Stink Bug	9 to 10.5 fl oz/A	
	Flea Beetle spp	0.23 to 0.27 lbs	
	Glassy-Winged	ai/A	
!		a"^	
	Sharpshooter		
<u> </u>	Leafhopper spp		
	Mealybug spp		
	(including Citrus		
	Mealybug, Grape		
	Mealybug	ĺ	
!	Longtailed		
i	Mealybug, Obscure		
	Mealybug, and Vine		
	Mealybug)		
	Phylloxera spp.		
	,		,
	Thrips spp		
	Whitefly spp		'
	(including	*	
1	Bandwinged		
	Whitefly, Silverleaf		
1	Whitefly, and		•
	Sweetpotato		
ŀ	Whitefly)		
]			
1	Note: Do not combine for	line appliantions with	poil application or vice verse. Only use one emplication maths
·	Note. Do not combine to	mai applications with	soil application, or vice versa. Only use one application method.
	l·		
	Foliar Application		
	Apply with air or gr	ound equipment in ad	equate water for uniform coverage (Do not use less than 5 gallons/acre for
l			ground applications).
i			
!		RPION within one (1)	
ł		than a total of 10.25 t	fl oz/A of SCORPION (0.259 lb ai/A) per season.
	Soil Application		
1	1	soil application per se	22500
			te water for uniform coverage (10 to 100 gals/A).
	<ul> <li>Do not apply SCOI</li> </ul>	RPION within twenty-	eight (28) days of harvest.
			oz/A of SCORPION (0.266 lb ai/A) per season.
			· · · · · · · · · · · · · · · · · · ·
			specified dosage in sufficient carrier volume (minimum of 2 gals of water per
			tion and incorporation into the soil using drip or trickle irrigation water. Apply
1	towards the end of	the irrigation run to e	nsure the product does not leach past the root zone.
1		-	

## DIRECTIONS FOR USE ON HEAD AND STEM BRASSICA

CROP	PEST	RATE	COMMENTS						
Broccoli	Brown Stink Bug	Foliar:	Higher water volumes provide improved insect control.						
Brussels Sprouts	Cabbage Aphid	2 to 7 fl oz/A							
Cabbage	Cabbage Looper	0.05 to 0.18 lbs ai/A	Begin application when pest activity is first noticed or when insects reach						
Cauliflower	Cucumber Beetle spp		threshold levels per State and County Extension Service						
Cavalo Broccolo	Flea Beetle spp	OR	recommendations. Repeat as needed to maintain control, but not more						
Chinese Cabbage	Grasshopper spp	•	often than every 7 days. For best results, time application before a						
Chinese Mustard	Green Peach Aphid	Soil:	damaging population becomes established.						
Cabbage	Green Stink Bug	9 to 10.5 fl oz/A							
Kohlrabi	Harlequin Bug	0.23 to 0.27 lbs ai/A	Under severe pest pressure, use higher recommended rates.						
	Leafminer spp								
	Southern Green Stink		Do not apply to vegetables grown for seed.						
	Bug								
	Squash Bug		The rate applied affects the length of control. Use high rate where						
	Thrips spp (including	·	infestations occur later in crop development, or where pest pressure is						
,	Onion Thrips)	,	continuous.						
	Whitefly spp								
	(including	,	SCORPION may be mixed and/or alternated with commonly used						
	Bandwinged		insecticides to comply with local IPM and resistance management						
	Whitefly, Silverleaf		programs.						
	Whitefly, and								
	Sweetpotato Whitefly)								
	vormeny)								
	Note: Do not combine foli	iar applications with soil ag	pplication, or vice versa. Only use one application method.						
		Trate. So not combine relial 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.								
ŧ	Do not apply more than a total of 10.5 fl oz/A of SCORPION (0.266 lb ai/A) per season.								
	Soil Application	·							
l <sub>o</sub>		rt on this label for linear ap							
			er for uniform coverage (10 to 100 gals/A).						
	<ul> <li>Do not apply SCORI</li> </ul>	PION within twenty-one (2	1) days of harvest.						
			SCORPION (0.532 lb ai/A) per season.						
1		sufficient carrier volume to	o insure uniform application and incorporate into the soil using one of the						
	following methods:		startle tradition and attached by the Property Control of the Cont						
			vin the bedding operation just prior to planting. For best results band width						
		ess and placed 1 to 2" belo							
			a narrow surface band above the seedline during planting. For surface th of 1-1/2" with sufficient irrigation within 24 hours to insure satisfactory						
	insect control.	mons incorporate to a dep	ur or 1-1/2 with sufficient imgation within 24 hours to insure satisfactory						
		ding dranch transplant dr	ench or hill drench. Make applications with sufficient water to insure						
		ito the root zone.	enon or this drenot. Islane applications with sufficient water to histie						
			d. Applications must be placed within 2 to 4" to the side of each row and						
			olications must be made to each row if there are two rows per bed.						
	5. In drip or trickle		mountaine made de made le caon terr in there are the terre per bed.						
<u> </u>									

## DIRECTIONS FOR USE ON LEAFY VEGETABLES

(Except Brassica Vegetables)

CROP	PEST	RATE	COMMENTS					
Amaranth (Chinese	Brown Stink Bug	Foliar:	Higher water volumes provide improved insect control.					
Spinach)	Cabbage Looper	2 to 5.25 fl oz/A						
Arugula (Roquette)	Cucumber Beetle	0.05 to 0.13 lbs ai/A	Begin application when pest activity is first noticed or when insects reach					
Cardoon	Flea Beetle spp		threshold levels per State and County Extension Service					
Celery	Grasshopper spp	OR	recommendations. Repeat as needed to maintain control, but not more					
Celtuce	Green Peach Aphid		often than every 7 days. For best results, time application before a					
Chervil	Green Stink Bug	Soil:	damaging population becomes established.					
Chinese Celery	Harlequin Bug	9 to 10.5 fl oz/A						
Chrysanthemum	Leafhopper spp	0.23 to 0.27 lbs ai/A	Under severe pest pressure, use higher recommended rates.					
Edible-leaved	Leafminer							
Garland	Leafminer spp		Do not apply to vegetables grown for seed.					
Corn Salad	Potato Aphid							
Cress	Southern Green Stink		The rate applied affects the length of control. Use high rate where					
Garden	Bug		infestations occur later in crop development, or where pest pressure is					
Upland	Squash Bug		continuous.					
Dandelion	Thrips spp (including							
Dock (Sorrel)	Western Flower		SCORPION may be mixed and/or alternated with commonly used					
Endive (Escarole)	Thrips)		insecticides to comply with local IPM and resistance management					
Florence Fennel	Whitefly spp		programs.					
Lettuce	(including							
Head	Bandwinged							
Leaf	Whitefly, Silverleaf							
Orach	Whitefly, and							
Parsley	Sweetpotato	,						
Purslane	Whitefly)							
Garden								
Winter	Note: Do not combine fol	iar applications,with soil ap	oplication, or vice versa. Only use one application method.					
Radicchio (Red								
Chicory)	Foliar Application							
Rhubarb	Apply with air or group	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).						
Spinach Spinach, New								
Zealand		PION within one (1) day of						
Spinach, Vine		nan a total of 10 fl oz/A of	SCORPION (0.266 lb ai/A) per season.					
Swiss Chard	Soil Application							
Owner and	<ul> <li>See conversion cha</li> </ul>	rt on this label for linear ap	oplication rates.					
	Apply with ground e	quipment in adequate wate	er for uniform coverage (10 to 100 gals/A).					
		PION within twenty-one (2						
			SCORPION (0.532 lb ai/A) per season.					
		i sumcient carrier volume t	o insure uniform application and incorporate into the soil using one of the					
	following methods:  1. In a narrow bar	d contared on the aleat	win the hadding eneration just prior to planting. For heat we like head with					
. !		ess and placed 1 to 2" belo	v in the bedding operation just prior to planting. For best results band width					
			a narrow surface band above the seedline during planting. For surface					
			th of 1-1/2" with sufficient irrigation within 24 hours to insure satisfactory					
	insect control.	mone moorporate to a dep	and it 1772 was summers impassor within 24 hours to insure satisfactory					
		ding drench transplant dr	ench or hill drench. Make applications with sufficient water to insure					
[		nto the root zone.	chort of this diction. Make applications with sufficient water to insure					
ľ			d. Applications must be placed within 2 to 4" to the side of each row and					
]			olications must be made to each row if there are two rows per bed.					
		irrigation water.	The second secon					
		J						
<u> </u>	<del></del>							

## **DIRECTIONS FOR USE ON POTATO**

CROP	PEST	RATE	COMMENTS
Potato	Colorado Potato Beetle Flea Beetle spp Green Peach Aphid Potato Aphid Potato Leafnopper 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.
	Foliar Application  Apply with air or group applications or 10 g  Do not apply SCOR  Do not apply more to soil Application  See conversion chate Apply with ground et apply once at preplation Do not apply more to Apply specified dosage in following methods:  In a narrow bate apply more to the specified dosage in following methods:  In furrow at plate	und equipment in adequate allons/acre for ground app PION within seven (7) day han a total of 7.75 fl oz/A out on this label for linear apquipment in adequate wat ant, preemergence or at grant a total of 13 fl oz/A of a sufficient carrier volume and centered on the plant rounting. Direct spray in the sto both sides of the row	y of harvest. of SCORPION (0.196 lb ai/A) per season.

	20	24	28_	30	32	34	36	40
Rate/A of Product (FI oz)	Fluid Ounces Product/1000 Row Ft.							
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

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.

SCORPION™ is a trademark of Gowan Company L.L.C.

EPA Text: Scorpion (resent to EPA 3-11-10)