DINOTEFURAN GROUP 4A INSECTICIDE



For control of sucking and chewing insects infesting cotton, cucurbits, fruiting vegetables, grapes, head and stem brassica, leafy brassica greens, including turnip greens, leafy vegetables, potatoes, and rice.

ACTIVE INGREDIENT:

Dinotefuran, N-methyl-N'-nitro-N"-((tetrahydro-3-furyl)methyl)guanidine 20.00%

OTHER INGREDIENTS: 80.00%

TOTAL: 100.00%

Contains 0.20 lb. active ingredient dinotefuran per pound of formulation.

# CAUTION/PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you **DO NOT** understand this 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 treatment advice.</li> </ul>				
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>DO NOT induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>DO NOT give anything by mouth to an unconscious person.</li> </ul>				
IF 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, after the first five minutes, then continue rinsing.</li> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>				
IF INHALED:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>				
	HOTLINE NUMBER				

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at **1-800-222-1222**. For general information about this product, contact the National Pesticides Information Center (NPIC) at **1-800-858-7378**, Monday through Friday, 8 AM to 12 PM PST, or at http://npic.orst.edu.

See label booklet for complete First Aid, Precautionary Statements, Directions For Use, and Storage and Disposal.

**Manufactured For:** 

Sharda USA LLC S Û

7217 Lancaster Pike, Suite A Hockessin. Delaware 19707 EPA Reg. No. 83529-305

EPA Est. No. AG 72159-GA-001; MA 83411-MN-001; MC 89332-GA-001; SC 39578-TX-001; TX 07401-TX-001
The EPA Establishment Number is identified by the circled letters above that match the first two letters in the batch number.

Net Contents: 12.5 lbs.

# PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash before reuse.

# Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves (made of any waterproof material)
- 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.

# **USER SAFETY RECOMMENDATIONS**

#### **Users must:**

- Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

# **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to aquatic invertebrates. **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 wash waters or rinsate into a natural drain or water body. **DO NOT** contaminate water when disposing of equipment wash waters or rinsate.

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

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

Dinotefuran and its degradate, MNG have the properties and characteristics associated with chemicals detected in groundwater. The high water solubility of dinotefuran, and its degradate, MNG, coupled with its very high mobility, and resistance to biodegradation indicates that this compound has a strong potential to leach to the subsurface under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Periodic monitoring of shallow groundwater in the use area is recommended.

# PROTECTION OF POLLINATORS

APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.

Look for the bee hazard icon in the **DIRECTIONS FOR USE** for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

This product can kill bees and other insect pollinators. Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar. Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications
- Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications. When Using This Product Take Steps To:
- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at: http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: www.npic.orst.edu or direct to EPA at: beekill@epa.gov.

## 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.



# For crops under contracted pollination services:

- DO NOT apply this product while bees are foraging.
- DO NOT apply this product until flowering is complete and all petals have fallen unless the following condition has been met.
- If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected for 38 hours following application.

## For food crops and commercially grown ornamentals not under contract for pollination services but are attractive to pollinators:

- DO NOT apply this product while bees are foraging.
- This product is toxic to bees exposed to residue 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 the appropriate State or Federal authorities.

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY 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 Worker 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 insecticides. 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)
- · Shoes plus socks.

# **INSECT RESISTANCE MANAGEMENT**

For resistance management, **Kruger** contains dinotefuran and is classified in the neonicotinoid chemical class as a Group 4A insecticide, neonicotinoid acetylcholine receptors (nAChRs) of the central nervous system of insects. Any insect population may contain individuals naturally resistant to **Kruger** and other Group 4A insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of Kruger or other Group 4A insecticides within a growing season, or among growing seasons, with different groups that control
  the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues for the targeted pests between the individual components of a mixture.
- In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
- Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
- Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
- When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
- Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
- The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.

- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local
  university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations
  for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Sharda USA, LLC at https://shardausa.com/

#### 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:

- Apply Kruger when insect pest populations begin to build, but before populations reach economically damaging levels. Check with your State and County Extension Service for availability of economic thresholds for pests controlled by Kruger.
- Kruger is a selective insecticide which will typically have minimal impact on beneficial arthropods and its use is compatible with Integrated Pest
  Management (IPM) programs. However, Kruger is toxic to bees exposed to direct treatment or to residue on blooming crops and weeds. DO NOT
  apply Kruger or allow it to drift onto blooming plants if bees are foraging in the treated area.
- Kruger is taken up into foliage after application. However, thorough spray coverage is essential for optimal performance. Apply Kruger in sufficient water to ensure good coverage.
- Kruger will suppress some pests. Suppression is defined as either inconsistent control (good to poor), or consistent control at a level below that
  generally considered acceptable for commercial control.
- If the maximum calendar year limit of **Kruger** as defined in the **CROP USE DIRECTIONS** section of this label 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 crops other than cotton, cucurbits, fruiting vegetables, grapes, head & stem brassica, leafy brassica greens, including turnip greens, leafy vegetables, potatoes, and rice, 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 **Kruger** to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after **Kruger** has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

# APPLICATION PROCEDURES AND SPRAY EQUIPMENT

# **Ground Application**

Select spray nozzles that will provide accurate and uniform spray deposition. Use spray nozzles which provide medium sized droplets and reduce drift. 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 **Kruger** 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. Spray adjuvants will improve spray coverage on some plant surfaces. **DO NOT** apply under conditions that will prevent adequate spray coverage or that will promote excessive spray drift.

# **Aerial Application**

Apply **Kruger** in water, using the minimum spray volume indicated in the Special Instructions of each crop, but not less than 3 gals/A. Increase spray volume where practical to improve coverage. **DO NOT** apply under conditions that will prevent adequate spray coverage or that will promote excessive spray drift.

# **Application Through Irrigation Systems (Chemigation)**

**Kruger** alone or in combination with other products which are registered for application through sprinkler irrigation may be applied through irrigation systems. Apply this product only through micro-irrigation (individual spaghetti tube), drip irrigation, overhead irrigation or motorized calibrated irrigation equipment. **DO NOT** apply through any other type of irrigation system. Lack of effectiveness can result from non-uniform distribution of treated water.

If you have questions about calibration, contact your State Extension Service specialist, equipment manufacturer or other experts. 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 Kruger** 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. **Kruger** may be applied through irrigation systems that are supplied by a public water system, but 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.

Any irrigation system using water supplied from a public water system must also meet the following requirements:

# Operating Instructions for All Recommended Types of Irrigation Systems:

- 1. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, contact your State Extension Service specialist, equipment manufacturer or other experts.
- 2. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 3. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.

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- 4. 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.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 6. 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.
- 8. **DO NOT** apply when wind speed favors drift beyond the area intended.

	CONVERSION CHART FOR LINEAR APPLICATIONS							
				Row Wid	th/Inches			
Rate/A of Product (lb.)	20"	24"	28"	30"	32"	34"	36"	40"
(12.)			C	unces Product	/1000 Row Fee	t		
1.13	0.69	0.83	0.96	1.03	1.10	1.17	1.24	1.38
1.20	0.73	0.88	1.02	1.10	1.17	1.24	1.32	1.46
1.27	0.77	0.93	1.08	1.16	1.24	1.32	1.39	1.55
1.32	0.81	0.97	1.12	1.21	1.29	1.37	1.45	1.62
1.34	0.82	0.98	1.14	1.23	1.31	1.39	1.47	1.64
1.65	1.00	1.21	1.40	1.50	1.61	1.71	1.81	2.01

# **EQUIPMENT CALIBRATION INSTRUCTIONS**

Apply Kruger 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. Check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler irrigation equipment.

## Center Pivot Irrigation Equipment

- 1. Use only drive systems that provide uniform water distribution.
- 2. **DO NOT** use end guns when chemigating **Kruger** through center pivot systems because of non-uniform application. 3. Plug the first nozzle closest to the well head to protect the water source.
- 4. Determine the size of the area to be treated.
- 5. Determine the time required to apply 0.1 to 0.25 inches of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. Run the system at 80 to 95% of the manufacturer's rated maximum travel speed.
- 6. Using water, determine the injection pump output when operated at normal line pressure.
- 7. Determine the amount of Kruger, and any tank mix partners, required to treat the area covered by the irrigation system.
- 8. Add the required amount of Kruger, and any tank mix partners, and sufficient water to meet the injection time requirements to the solution tanks. See Mixing Instructions section of this label.)
- 9. Make sure the system is fully charged with water before starting injection of the Kruger solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
- 10. Maintain constant agitation in the solution tank during the injection period.
- 11. Inject the specified amount of **Kruger** per acre continuously for one complete revolution of the system.
- 12. Stop the injection equipment after treatment is complete. Continue to operate the system until the Kruger solution has cleared all of the sprinkler heads.
- 13. Allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water.

# Solid Set, Hand Move and Moving Wheel Irrigation Equipment

- 1. Determine the acreage covered by the sprinklers.
- 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 **Kruger** required to treat the area covered by the irrigation system.
- 4. Add the required amount of Kruger, 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 Kruger 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 **Kruger** solution has cleared the last sprinkler head. To ensure lines are flushed and free from remaining pesticides, inject a dye indicator into the lines to mark the end of the application period.

# TANK MIXING INFORMATION

**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 the tank mix with this product.

Add 1/2 of the required amount of water to the mix tank. Start the agitator before adding any tank mix partners. Whenever possible add tank mix partners 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 **Kruger** in tank mixtures, add all products in water soluble packaging to the tank before any other tank mix partner, including **Kruger**. 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 **Kruger** 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. **DO NOT** exceed labeled dosage rate of any product in the tank mix. Follow the most restrictive label precautions and limitations of any product in the tank mix. **DO NOT** mix **Kruger** with any product whose label prohibits such mixing. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are labeled.

## Compatibility

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, confirm safety to the target crop.

**Kruger** 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 **Kruger**. To determine the physical compatibility of **Kruger** with other products, use a jar test, as described: 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.

# SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS. Applicator is responsible for employing practices that will minimize spray drift at the application site.

#### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### Controlling Droplet Size - Ground Boom

**Volume** - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.

Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.

Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

# Controlling Droplet Size – Aircraft

Adjust Nozzles - Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

# **BOOM HEIGHT - Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

# **RELEASE HEIGHT – Aircraft**

Higher release heights increase the potential for spray drift.

## SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

# **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

## **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

## WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

# Air Assisted (Air Blast) Tree and Vine Sprayers (Berry/Small Fruit and Tuberous/Corm Vegetables only)

Air assisted tree and vine sprayers carry droplets in the canopy of trees and 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:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy.
- 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 50 300 gals. of finished spray per acre.
- DO NOT allow spray to go beyond the edge of the cultivated area. Spray the outside row only from outside the planting.

# **MANDATORY SPRAY DRIFT MANAGEMENT**

# **Aerial Applications**

- Do not release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a medium or coarser (ASABE S572.1) droplet size.
- Do not apply when wind speeds exceed 15 mph at the application site. If the windspeed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- For aerial applicators, if the windspeed is 10 miles per hour or less, applicators must use 1/2 swath displacement upwind at the downwind edge of the field. When the windspeed is between 11 15 miles per hour, applicators must use 3/4 swath displacement upwind at the downwind edge of the field.
- DO NOT apply during temperature inversions.

# **Ground Boom Applications**

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

# **Boomless Ground Applications**

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

# **CROP-SPECIFIC USE DIRECTIONS**

# COTTON

CROP	PEST	RATE	USE-SPECIFIC INSTRUCTIONS
Cotton	Banded Wing Whitefly Cotton Aphid Leafhoppers Plant Bug Silverleaf Whitefly Sweet Potato Whitefly Thrips	0.225 - 0.67 lb./A (0.045 - 0.134 lb. a.i./A)	Higher water volumes provide improved insect control.  Begin applications when first pest activity is noticed or when insects reach threshold levels per University/Extension recommendations and 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 the higher specified rates.  Kruger may be mixed and/or alternated with commonly used insecticides to comply with local IPM and Resistance Management programs.

# **Precautions and Restrictions:**

# **Foliar Application**

Follow application instructions as indicated in Bee Hazard Direction for Use.



- Apply with air or ground equipment in adequate water for uniform coverage (3 to 10 gals/A by air or 10 to 50 gals/A by ground).
- DO NOT apply Kruger within fourteen (14) days of harvest.
- **DO NOT** apply more than a total of 1.34 lbs. of **Kruger** per acre per calendar year.
- Regardless of application method or product, **DO NOT** apply more than a total 0.54 lb. of Dinotefuran per acre per calendar year.

#### **CUCURBITS**

CROP	PEST	RATE	USE-SPECIFIC INSTRUCTIONS
Balsam pear (bitter melon) Calabaza Chayote (fruit) Chinese okra Chinese waxgourd Citron melon Cucumber Gherkin Gourds Edible melons including hybrids Cantaloupe Casaba Chinese Preserving Melon Crenshaw Honeydew Melons Honey Balls Mango Melon Muskmelon Persian Melon Vinter Melon Pumpkin, Squash (including Summer, Winter Acorn, Spaghetti) Watermelon including hybrids	Green Peach Aphid Leafhoppers Leafminers Melon Aphid Thrips Whiteflies	FOLIAR:  0.225 - 0.895 lb./A (0.045 - 0.179 lb. a.i./A)  OR  SOIL:  1.13 - 1.65 lbs./A (0.226 - 0.33 lb. a.i./A)	Higher water volumes provide improved insect control.  Begin applications when first pest activity is noticed or when insects reach threshold levels per University/Extension recommendations and repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before an emerging population becomes established.  Under severe pest pressure, use the higher specified rates.  The rate applied affects the length of control. Use the high rate where infestations occur later in crop development, or where pest pressure is continuous.  Kruger may be mixed and/or alternated with commonly used insecticides to comply with local IPM and Resistance Management programs.

# **Precautions and Restrictions:**

- DO NOT combine foliar applications with soil applications, or vice versa. Only use one application method. DO NOT apply to vegetables grown for seed.
- Regardless of application method or product, **DO NOT** apply more than a total 0.54 lb. of Dinotefuran per acre per calendar year.

# **Foliar Application**



Follow application instructions as indicated in Bee Hazard Direction for Use.

- Apply with air or ground equipment in adequate water for uniform coverage (3 to 10 gals/A by air or 20 to 40 gals/A by ground).
- DO NOT apply Kruger within one (1) day of harvest.
- **DO NOT** apply more than a total of 1.34 lbs. of **Kruger** per acre per calendar year.

# **Soil Application**

- See conversion chart for linear application plant application rates.
- DO NOT apply Kruger within twenty-one (21) days of harvest.
- DO NOT apply more than a total of 2.68 lbs. of Kruger per acre per calendar year.

- In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results band width should 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. Applications should be made with sufficient water to insure incorporation into the
  root zone.
- As a sidedress immediately after transplanting operations are finished. Applications should be placed within 2 to 4" to the side of each row and incorporated 1 or more inches deep. Applications should be made to each row if there are two rows per bed.
- In drip or trickle irrigation water immediately after transplanting.

#### FRUITING VEGETABLES

CROP	PEST	RATE	USE-SPECIFIC INSTRUCTIONS
Eggplant Ground Cherry Pepinos Pepper (including Bell Peppers, Chili Peppers, Cooking Peppers, Pimentos, and Sweet Peppers) Tomatillos Tomato	Green Peach Aphid Potato Aphid Colorado Potato Beetle Flea beetles Leafhoppers Leafminers Thrips Whiteflies	FOLIAR:  0.225 - 0.895 lb./A (0.045 - 0.179 lb. a.i./A)  OR  SOIL:  1.13 - 1.65 lbs./A (0.226 - 0.33 lb. a.i./A)	Higher water volumes provide improved insect control.  Begin applications when first pest activity is noticed or when insects reach threshold levels per University/Extension recommendations and 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 the higher specified rates.  Kruger may be mixed and/or alternated with commonly used insecticides to comply with local IPM and Resistance Management programs.  The rate applied affects the length of control. Use the high rate where infestations occur later in crop development, or where pest pressure is continuous.

# **Precautions and Restrictions:**

- DO NOT combine foliar applications with soil applications, or vice versa. Only use one application method.
- Regardless of application method or product, **DO NOT** apply more than a total 0.54 lb. of Dinotefuran per acre per calendar year.

# **Foliar Application**



Follow application instructions as indicated in **Bee Hazard Direction for Use**.

- Apply with air or ground equipment in adequate water for uniform coverage (3 to 10 gals/A by air or 20 to 40 gals/A by ground).
- DO NOT apply Kruger within one (1) day of harvest.
- **DO NOT** apply more than a total of 1.34 lbs. of **Kruger** per acre per calendar year.

# **Soil Application**

- See conversion chart for linear application plant application rates.
- DO NOT apply Kruger within twenty-one (21) days of harvest.
- DO NOT apply more than a total of 2.68 lbs. of Kruger per acre per calendar year.

- 1. In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results band width should 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. Applications should be made with sufficient water to insure incorporation into the root zone.
- 4. As a sidedress immediately after transplanting operations are finished. Applications should be placed within 2 to 4" to the side of each row and incorporated 1 or more inches deep. Applications should be made to each row if there are two rows per bed.
- 5. In drip or trickle irrigation water immediately after transplanting.

# **GRAPES**

CROP	PEST	RATE	USE-SPECIFIC INSTRUCTIONS
Grapes	Grape mealybug Leafhoppers Thrips Glassy-wing sharpshooter	FOLIAR:  0.225 - 0.66 lb./A  (0.045 - 0.132 lb. a.i./A)  SOIL:  1.13 - 1.65 lbs./A  (0.226 - 0.33 lb. a.i./A)	Higher water volumes provide improved insect control.  Begin foliar applications when first pest activity is noticed or when insects reach threshold levels per University/Extension recommendations and 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.  The rate applied affects the length of control. Use the high rate where infestations occur later in crop development, or where pest pressure is continuous.  Kruger may be mixed and/or alternated with commonly used insecticides to comply with local IPM and Resistance Management programs.

# **Precautions and Restrictions:**

• Regardless of application method or product, **DO NOT** apply more than a total of 0.54 lb. of Dinotefuran per acre per calendar year.

# **Foliar Application**

Follow application instructions as indicated in the **Bee Hazard Direction for Use**.



- Apply with air or ground equipment in adequate water for uniform coverage (3 to 10 gals/acre by air or 10 to 50 gals/acre by ground).
- DO NOT apply Kruger within one (1) day of harvest.
- DO NOT apply more than a total of 1.32 lbs. of Kruger (0.264 lb. a.i.) per acre per calendar year.

# **Soil Application**

- **DO NOT** apply within twenty-eight (28) days of harvest.
- Make only one (1) soil application.
- DO NOT apply more than a total of 1.65 lbs. of Kruger (0.33 lb. a.i.) per acre per calendar year.

Apply specified dosage in sufficient carrier volume to ensure uniform application and incorporate into the soil using in drip or trickle irrigation water.

#### **HEAD & STEM BRASSICA**

CROP	PEST	RATE	USE-SPECIFIC INSTRUCTIONS
Broccoli Brussels sprouts Cabbage Cauliflower Cavalo broccoli Chinese broccoli Chinese cabbage Chinese mustard cabbage Kohlrabi	Green peach aphids Cabbage aphids Leafminers Whiteflies	FOLIAR:  0.225 - 0.895 lb./A (0.045 - 0.179 lb. a.i./A)  OR  SOIL:  1.13 - 1.65 lbs./A (0.226 - 0.33 lb. a.i./A)	Higher water volumes provide improved insect control.  Begin applications when first pest activity is noticed or when insects reach threshold levels per University/Extension recommendations and 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 the higher specified rates.  The rate applied affects the length of control. Use the high rate where infestations occur later in crop development, or where pest pressure is continuous.  Kruger may be mixed and/or alternated with commonly used insecticides to comply with local IPM and Resistance Management programs.

# **Precautions and Restrictions:**

- DO NOT apply to vegetables grown for seed. DO NOT combine foliar applications with soil applications, or vice versa. Only use one application method.
- Regardless of application method or product, **DO NOT** apply more than a total 0.54 lb. of Dinotefuran per acre per calendar year.

# **Foliar Application**



Follow application instructions as indicated in the Bee Hazard Direction for Use.

- Apply with air or ground equipment in adequate water for uniform coverage (3 to 10 gals/acre by air or 20 to 40 gals/acre by ground).
- DO NOT apply Kruger within one (1) day of harvest.
- **DO NOT** apply more than a total of 1.34 lbs. of **Kruger** (0.268 lb. a.i.) per acre per calendar year.

## **Soil Application**

- See conversion chart for linear application plant application rates.
- DO NOT apply within 21 days of harvest.
- **DO NOT** apply more than a total of 2.68 lbs. of **Kruger** (0.536 lb. a.i.) per acre per calendar year.

- 1. In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results, apply in band 2" or less in width and 1 to 2" below the seed depth.
- 2. In-furrow spray at or below seed level or a narrow surface band above the seed line 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. Apply with sufficient water to insure incorporation into the root zone.
- 4. As a side dress after plants are established. Applications should be placed within 2 to 4" to the side of each row and incorporated 1 or more inches deep. Applications should be made to each row if there are two rows per bed.
- 5. In drip or trickle irrigation water.

# **LEAFY BRASSICA GREENS**

CROP	PEST	RATE	USE-SPECIFIC INSTRUCTIONS
Broccoli Raab Chinese Cabbage (Bok Choy) Collards Kale Mizuna Mustard Greens Mustard Spinach Rape Greens Turnip Greens	Aphids Flea Beetles Whitefly	0.44 to 0.67 lb./A (0.088 to 0.134 lb. a.i./A)	Higher water volumes provide improved insect control.  Begin applications when first pest activity is 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 the higher specified rates.  The rate applied affects the length of control. Use the high rate where infestations occur later in crop development, or where pest pressure is continuous.  Kruger may be mixed and/or alternated with commonly used insecticides to comply with local IPM and Resistance Management programs.

# **Precautions and Restrictions:**

**DO NOT** apply to vegetables grown for seed. **DO NOT** apply **Kruger** within one (1) day of harvest.

# **Foliar Application**

Follow application instructions as indicated in the Bee Hazard Direction for Use.



- Apply with air or ground equipment in adequate water for uniform coverage (3 to 10 gals/A by air or 20 to 40 gals/A by ground).
- DO NOT apply Kruger within one (1) day of harvest.
- **DO NOT** apply more than a total of 1.34 lbs. of **Kruger** (0.262 lb. a.i.) per acre per calendar year.
- Regardless of application method or product, **DO NOT** apply more than a total 0.54 lb. of Dinotefuran per acre per calendar year.

# **LEAFY VEGETABLES**

CROP	PEST	RATE	USE-SPECIFIC INSTRUCTIONS
Leafy Vegetables Amaranth Arugula Cardoon Celery Chinese Celery Celtuce Chervil Edible-leaved & Garland Chrysanthemum Com Salad Garden & Upland Cress Dandelion Dock Endive Florence Fennel Head & Leaf Lettuce Orach Parsley Garden & Winter Purslane Radicchio Rhubarb Spinach New Zealand & Vine Spinach Swiss Chard	Potato Aphid Green Peach Aphid Sweet Potato Whitefly Silverleaf Whitefly Banded Wing Whitefly Leafhopper Leafminer	FOLIAR:  0.225 - 0.67 lb./A (0.045 - 0.134 lb. a.i./A)  OR  SOIL:  1.13- 1.65 lbs./A (0.226 - 0.33 lb. a.i./A)	Higher water volumes provide improved insect control.  Begin applications when first pest activity is noticed or when insects reach threshold levels per University/Extension recommendations and 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 the higher specified rates.  The rate applied affects the length of control. Use the high rate where infestations occur later in crop development, or where pest pressure is continuous.  Kruger may be mixed and/or alternated with commonly used insecticides to comply with local IPM and Resistance Management programs.

# **Precautions and Restrictions:**

- DO NOT apply to vegetables grown for seed. DO NOT combine foliar applications with soil applications, or vice versa. Only use one application method.
- Regardless of application method or product, **DO NOT** apply more than a total 0.54 lb. of Dinotefuran per acre per calendar year.

# **Foliar Application**





- Apply with air or ground equipment in adequate water for uniform coverage (3 to 10 gals/acre by air or 20 to 40 gals/acre by ground).
- DO NOT apply Kruger within seven (7) days of harvest.
- **DO NOT** apply more than a total of 1.34 lbs. of **Kruger** (0.268 lb. a.i.) per acre per calendar year.

# **Soil Application**

- See conversion chart for linear application plant application rates.
- DO NOT apply within 21 days of harvest.
- **DO NOT** apply more than a total of 2.68 lbs. of **Kruger** (0.536 lb. a.i.) per acre per calendar year.

- 1. In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results, apply in band 2" or less in width and 1 to 2" below the seed depth.
- 2. In-furrow spray at or below seed level or a narrow surface band above the seed line 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. Apply with sufficient water to insure incorporation into the root zone.
- 4. As a side dress after plants are established. Applications should be placed within 2 to 4" to the side of each row and incorporated 1 or more inches deep. Applications should be made to each row if there are two rows per bed.
- 5. In drip or trickle irrigation water.

#### **POTATO**

CROP	PEST	RATE	USE-SPECIFIC INSTRUCTIONS
Potato	Green Peach Aphids Potato Aphids Colorado Potato Beetle Flea beetles Potato Leafhopper Psyllids	FOLIAR:  0.25 - 0.33 lb./A  (0.050 - 0.066 lb. a.i./A)  OR  SOIL:  1.40 - 1.65 lbs./A  (0.28 - 0.33 lb. a.i./A)	Begin foliar applications when first pest activity is noticed or when insects reach threshold levels per University/Extension recommendations and 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 the higher specified rates. The rate applied affects the length of control. Use the high rate where infestations occur later in crop development, or where pest pressure is continuous.  Kruger may be mixed and/or alternated with commonly used insecticides to comply with local IPM and Resistance Management programs.

# **Precautions and Restrictions:**

- DO NOT combine foliar applications with soil applications, or vice versa. Only use one application method.
- Regardless of application method or product, **DO NOT** apply more than a total 0.54 lb. of Dinotefuran per acre per calendar year.

# **Foliar Application**



Follow application instructions as indicated in the **Bee Hazard Direction for Use**.

- Apply with air or ground equipment in adequate water for uniform coverage (3 to 10 gals/acre by air or 10 to 50 gals/acre by ground).
- DO NOT apply Kruger within seven (7) days of harvest.
- **DO NOT** apply more than a total of 0.99 lb. of **Kruger** (0.198 lb. a.i.) per acre per calendar year.

# **Soil Application**

- See conversion chart for linear application plant application rates.
- DO NOT apply more than a total of 1.65 lbs. of Kruger (0.33 lb. a.i.) per acre per calendar year.

- 1. In a narrow band centered on the plant row in the bedding operation just prior to planting.
- 2. In-furrow spray at planting. Direct spray in the furrow on the seed pieces or potatoes.
- 3. As a side dress to both sides of the row or as a spray at ground crack directly over the row during hilling. Cover immediately with soil. Apply once at pre-plant, pre-emergence, or at ground crack as directed above.

#### RICE

CROP	PEST	RATE	USE-SPECIFIC INSTRUCTIONS
Rice	Rice Stink Bug (RSB) (Oebalus pugnax)	product per A	Begin applications when insects reach threshold levels per State Extension Service recommendations. Repeat as needed to maintain control, but not more than every seven days. For best results, time application before a damaging population becomes established.

# **Precautions and Restrictions:**

- **DO NOT** exceed the maximum of 2 applications per acre per calendar year.
- **DO NOT** make more than two applications per calendar year with a minimum of 7 days between applications.
- **DO NOT** apply more than a total of 1.34 lbs. of **Kruger** (0.262 lb. a.i.) per acre per year.
- Regardless of application method or product, **DO NOT** apply more than a total 0.54 lb. of Dinotefuran per acre per calendar year.
- Pre-Harvest Interval (PHI) **DO NOT** apply within 7 days of harvest.
- Kruger must only be applied through aerial application.
- Confine all applications to field areas. Cut off application equipment to avoid treating adjacent roads, field drains, ditches, banks, and other non-target areas. Apply Kruger only when weather conditions are calm to prevent misplacement of spray droplets. In order to protect managed bees and also native pollinators in the treatment area, avoid making application under conditions where uniform coverage cannot be obtained or where excessive drift may occur.



- DO NOT use flood water from treated fields for irrigation purposes for any food/feed crops.
- **DO NOT** use product if the rice fields are used for fish production, especially catfish or crayfish farming.

Follow application instructions as indicated in Bee Hazard Direction for Use.

# STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in the original container. **DO NOT** store in a manner where cross-contamination with other pesticides, fertilizers, food, or feed could occur. In the event of a spill during handling or storage, absorb with sand or other inert material and dispose of absorbent in accordance with the Pesticide Disposal instructions listed below.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate, is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

## CONTAINER HANDLING:

Non-refillable Plastic Containers (Capacity Equal to or Less than 50 Pounds): DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. 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 or more times. Offer for recycling, or puncture and dispose of in a sanitary landfill, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Non-refillable Plastic Containers (Capacity Equal to or more than 50 Pounds): DO NOT reuse or refill this container. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank. Hold container upside down over application equipment or a mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. DO NOT burn, unless allowed by State and local ordinances.

Non-refillable Paper or Plastic Bags, Fiber Sacks including Flexible Intermediate Bulk Containers (FIBC) or Fiber Drums with Liners: DO NOT reuse or refill this container. Completely empty paper or plastic bag, fiber sack or drum liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer for recycling if available or dispose of empty paper or plastic bag, fiber sack or fiber drum and liner in a sanitary landfill, or by incineration. DO NOT burn, unless allowed by State and local ordinances.

Container Handling/Return: DO NOT DISCARD THIS CONTAINER. DO NOT attempt to open or tamper with the container. Completely empty container into application equipment. All containers must be returned per instructions provided. DO NOT reuse this container for any other purpose.

# **CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Sharda USA LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Sharda USA LLC and Seller harmless for any claims relating to such factors.

Sharda USA LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or Sharda USA LLC and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, SHARDA USA LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, neither Sharda USA LLC nor Seller shall be liable for any incidental, consequential, or special damages resulting from the use or handling of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer, and the exclusive liability of sharda usa llc and seller for any and all claims, losses, injuries or damages (including claims based on breach of warranty, contract, negligence, tort, strict liability or otherwise) resulting from the use or handling of this product, shall be the return of the purchase price of the product or, at the election of sharda usa llc or seller, the replacement of the product.

Sharda USA LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of Sharda USA LLC.

DINOTEFURAN GROUP 4A INSECTICIDE

# Kruger

For control of sucking and chewing insects infesting cotton, cucurbits, fruiting vegetables, grapes, head and stem brassica, leafy brassica greens, including turnip greens, leafy vegetables, potatoes, and rice.

 ACTIVE INGREDIENT:
 WT. BY %

 Dinotefuran, N-methyl-N'-nitro-N"-((tetrahydro-3-furyl)methyl)guanidine.
 20.00%

 OTHER INGREDIENTS:
 80.00%

 TOTAL:
 100.00%

Contains 0.20 lb. active ingredient dinotefuran per pound of formulation.

# CAUTION/PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you **DO NOT** understand this label, find someone to explain it to you in detail.)

FIRST AID - IF ON SKIN OR CLOTHING: • Take off contaminated clothing.
• Rinse skin immediately with plenty of water for 15 - 20 minutes. • Call a poison control center or doctor for treatment advice. IF SWALLOWED: • Call a poison control center or doctor immediately for treatment advice. • DO NOT induce vomiting unless told to do so by a poison control center or doctor.
• Have person sip a glass of water if able to swallow. • DO NOT give anything by mouth to an unconscious person. IF IN EYES: • Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. • Remove contact lenses, if present, after the first five minutes, then continue rinsing. • Call a poison control center or doctor immediately for treatment advice. IF INHALED:
• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
• Call a poison control center or doctor immediately for treatment advice.

HOTLINE NUMBER - Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at 1-800-222-1222. For general information about this product, contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST, or at http://npic.orst.edu.

See label booklet for complete First Aid, Precautionary Statements, Directions For Use, and Storage and Disposal.

PRECAUTIONARY STATEMENTS - HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION - Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash before reuse.

**ENVIRONMENTAL HAZARDS** - This pesticide is toxic to aquatic invertebrates. **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 wash waters or rinsate into a natural drain or water body. **DO NOT** contaminate water when disposing of equipment wash waters or rinsate. This compound is toxic to honey bees. The persistence of residues and potential residual toxicity of Dinotefuran in nectar and pollen suggest the possibility of chronic risk to honey bee larvae and the eventual instability of the hive. This product is toxic to bees exposed to residues for more than 38 hours following treatment. **DO NOT** apply this product to blooming, pollen-shedding or nectar-producing parts of plants during this time period, unless the application is made in response to a public health emergency declared by appropriate state and federal authorities. Dinotefuran and its degradate, MNG have the properties and characteristics associated with chemicals detected in groundwater. The high water solubility of dinotefuran, and its degradate, MNG, coupled with its very high mobility, and resistance to biodegradation indicates that this compound has a strong potential to leach to the subsurface under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Periodic monitoring of shallow groundwater in the use area is recommended.

PHYSICAL OR CHEMICAL HAZARDS - DO NOT use, pour, spill or store near heat or open flame.

**DIRECTIONS FOR USE** - It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

# STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in the original container. **DO NOT** store in a manner where cross-contamination with other pesticides, fertilizers, food, or feed could occur. In the event of a spill during handling or storage, absorb with sand or other inert material and dispose of absorbent in accordance with the Pesticide Disposal instructions listed below.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate, is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

# **CONTAINER HANDLING:**

Non-refillable Plastic Containers (Capacity Equal to or Less than 50 Pounds): D0 NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. 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 or more times. Offer for recycling, or puncture and dispose of in a sanitary landfill, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Container Handling/Return: DO NOT DISCARD THIS CONTAINER. DO NOT attempt to open or tamper with the container. Completely empty container into application equipment. All containers must be returned per instructions provided. DO NOT reuse this container for any other purpose.

Manufactured For: Sharda USA LLC, 7217 Lancaster Pike, Suite A, Hockessin, Delaware 19707

EPA Reg. No. 83529-305

EPA Est. No. AG 72159-GA-001; MA 83411-MN-001; MC 89332-GA-001; SC 39578-TX-001; TX 07401-TX-001
The EPA Establishment Number is identified by the circled letters above that match the first two letters in the batch number.

Net Contents: 12.5 lbs.