



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505T)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

91234-400

Date of Issuance:

12/16/25

NOTICE OF PESTICIDE:

☒ Registration
☐ Reregistration
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

A143.05 [TM]

Name and Address of Registrant (include ZIP Code):

Kristen Cianni
Atticus, LLC
940 NW Cary Parkway, Suite 200
Cary, NC 27513

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 under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

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 unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

Continues page 2

Signature of Approving Official:

Melissa Bridges, Product Manager 07
Invertebrate Vertebrate Branch 3
Registration Division (7505T)

Date:

12/16/25

2. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 91234-400."
3. Submit one copy of the final printed label for the record before you release the product for shipment.
4. If, after formal consultation with the appropriate Service(s), additional modifications are identified in the Service's Biological Opinion(s) for dinotefuran, EPA will notify Atticus, LLC in writing consistent with the terms in the Biological Opinion(s) of any necessary required changes. Atticus, LLC must submit an application for amendment incorporating any required changes, including amended labels, consistent with the timeline specified in EPA's notification. If Atticus, LLC fails to comply with this term agreed upon in the previous written acceptance dated **March 12, 2025**, EPA may cancel the registration under an expedited process under FIFRA 6(e).

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

The record for this product currently contains the following CSF(s):

- Basic CSF dated 12/22/2023

The alternate brand name Sesquin 35 SL has been added to the product record.

If you have any questions, please contact Andrés Garzón at (202)566-2690 or at GarzonMoreno.Andres@epa.gov.

Enclosure

{Note to reviewer: [Text] in brackets denotes optional or explanatory language}
{Note to reviewer: {Text} in braces denotes where in the final label text will appear}
{BOOKLET FRONT PANEL LANGUAGE}

DINOTEFURAN	GROUP	4A	INSECTICIDE
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A143.05^[TM]

[Alternate Brand Name: Sesquin 35 SL]

[Contains dinotefuran, the active ingredient used in Scorpion® [35SL] [Insecticide].]

[For control of listed sucking and chewing insect pests in listed crops] [For Agricultural Use Only]

ACTIVE INGREDIENT:	(% by weight)
Dinotefuran*, N-methyl-N'-nitro-N'-[(tetrahydro-3-furanyl) methyl]guanidine.....	35.0%
OTHER INGREDIENTS:	65.0%
TOTAL	100.0%

*Contains 3.24 pounds of 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.)

[See inside label booklet for [First Aid], [additional] Precautionary Statements, and Directions for Use.]

[See below for additional Precautionary Statements]

FIRST AID	
If on skin or clothing:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by the poison control center or doctor.• Do not give anything by mouth to an unconscious person.
If in eyes:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at 1-844-685-9173 for emergency medical treatment information.	

For Chemical Emergency:

Spill, Leak, Fire, Exposure, or Accident,

Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

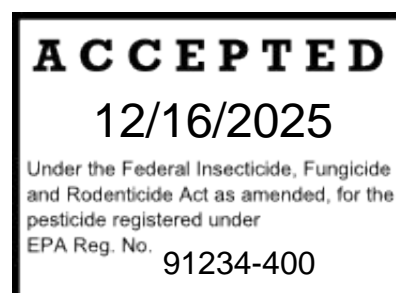
[A143.05 is not manufactured, or distributed by Gowan Company, seller of Scorpion® [35SL] [Insecticide].]

EPA Reg. No.: 91234-XX

EPA Est. No.:

Net Contents:

Manufactured for:
Atticus, LLC
940 NW Parkway, Suite 200
Cary, NC 27513



{LANGUAGE INSIDE BOOKLET}

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical resistant gloves made of barrier Laminate or Butyl Rubber \geq 14 mils.

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 should:

- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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 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 honeybees. The persistence of residues and potential residual toxicity of Dinotefuran in nectar and pollen suggests the possibility of chronic toxic risk to honeybee larvae and the eventual instability of the hive.

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 appropriate state or 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 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. **DO NOT** mix or allow to come in contact with water, 5% ammonium phosphate and any oxidizing agent. Hazardous chemical reaction may occur.

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 onto beehives or to offsite 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 directly to EPA at: beekill@epa.gov

DIRECTIONS FOR USE

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



1. 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.

2. FOR FOOD CROPS AND COMMERCIALY 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.

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.

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,
- shoes plus socks, and
- Chemical resistant gloves made of barrier Laminate or Butyl Rubber ≥ 14 mils.

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

A143.05 contains a Group 4A insecticide. Insect biotypes with acquired resistance to Group 4A insecticides may eventually dominate the insect population if Group 4 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 **A143.05** or other Group 4 insecticides.

To delay insecticide resistance consider:

- NOT using a foliar application of **A143.05** or any insecticide in the neonicotinoid class following an in-furrow or in soil application of **A143.05**.
- Optimizing resistance management by applying **A143.05** no more than three times per growing season.
- Avoiding the consecutive use of **A143.05** or other Group 4 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 **A143.05** has been applied and pest populations require additional treatments.
- For further information contact Atticus, LLC at 984-465-4800.

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:

- **A143.05** must be applied when insect pest populations begin to build, but before populations reach economically damaging levels.
- Economic thresholds for pests controlled by **A143.05** may be available from your State and County Extension Service.
- **A143.05** is a selective insecticide that has minimal impact on beneficial arthropods and its use is compatible with Integrated Pest Management (IPM) programs. However, **A143.05** is toxic to bees exposed to direct treatment or to residues on blooming crops and weeds.
- **A143.05** is taken up into foliage after application. However, thorough spray coverage is essential for optimal performance. Apply **A143.05** in sufficient water to ensure good coverage.
- **A143.05** 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 **A143.05**, 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 berry and small fruit (subgroup 13-07F and 13-07H), cucurbits, fruiting vegetables, head & stem brassica, leafy vegetables, bulb onion (subgroup 3-07A), green onion (subgroup 3-07B), peach and nectarine, potato, tuberous and corm vegetables (subgroup 1C), and watercress 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 **A143.05** to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after **A143.05** has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

A143.05 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 **A143.05** in tank mixtures, all products in water soluble packaging must be added to the tank before any other tank mix partner, including **A143.05**. 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 **A143.05** 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.

A143.05 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 **A143.05**. To determine the physical compatibility of **A143.05** 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 AND SPRAY EQUIPMENT

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 ensure accuracy, calibrate sprayer before each use. For information on spray equipment and calibration, consult nozzle manufacturers and/or State and County Extension Service.

Apply **A143.05** 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 **A143.05** in water, using the minimum spray volume indicated in the Special Instructions of each crop, but not less than 3 gallons per acre. Increase sprays 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)

A143.05 alone or in combination with other products which are registered for application through sprinkler irrigation may be applied through irrigation systems where so noted in the soil application of each crop. **A143.05** may be applied through microirrigation (individual spaghetti tube), overhead irrigation, motorized calibrated irrigation equipment, drip or trickle irrigation where so noted in the soil application of each crop, but must NOT be applied through 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 A143.05 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. **A143.05** 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 be calibrated to uniformly apply the rates specified. If you have questions about calibration, you should contact State Extension Services specialists, equipment manufacturers, 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 back flow.
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.
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 pump 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.
7. 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.

Calibration and Application Instructions

A143.05 must be applied under the schedule specified in the specific **Crop Use Directions**, 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.

Center Pivot Irrigation Equipment:

Notes: 1) Use only drive systems that provide uniform water distribution. 2) **DO NOT** use end guns when chemigating **A143.05** through center pivot systems because of non-uniform application. 3) Plug the first nozzle closest to the well head to protect the water source.

1. Determine the size of the area to be treated.
2. Determine the time required to apply 0.1 – 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 - 95% of the manufacturer's rated maximum travel speed.
3. Using water, determine the injection pump output when operated at normal line pressure.
4. Determine the amount of **A143.05** and any tank mix partners, required to treat the area covered by the irrigation system.
5. Add the required amount of **A143.05** 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.)
6. Make sure the system is fully charged with water before starting injection of the **A143.05** solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
7. Maintain constant agitation in the solution tank during the injection period.
8. Inject the specified amount of **A143.05** per acre continuously for one complete revolution of the system.

9. Stop the injection equipment after treatment is complete. Continue to operate the system until the **A143.05** solution has cleared all of the sprinkler heads.
10. 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 – 40-minute time interval.
3. Determine the amount of **A143.05** required to treat the area covered by the irrigation system.
4. Add the required amount of **A143.05** 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 **A143.05** per acre for either a 20 – 40-minute period at the end of the regular irrigation set, or as a 20 – 40-minute injection as a separate application not associated with 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 **A143.05** 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 lines to mark the end of the application period.

RECOMMENDATIONS TO AVOID SPRAY DRIFT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making decisions. Where states have more stringent regulations, they must be observed. Follow these recommendations to avoid spray drift:

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

AIR ASSISTED TREE AND VINE SPRAYERS (BERRY / SMALL FRUIT AND TUBEROUS / CORM VEGETABLES ONLY)

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

1. Adjust deflectors and aiming devices so that spray is only directed into the canopy.
2. Block off upward pointed nozzles when there is no overhanging canopy.
3. Use only enough air volume to penetrate the canopy and provide good coverage. Use a minimum of 50 gallons finished spray per acre.
4. **DO NOT** allow spray to go beyond the edge of the cultivated area. Spray the outside row only from outside the planting.

CROP USE DIRECTIONS

BERRY AND SMALL FRUIT (SUBGROUP 13-07F) SMALL FRUIT VINE CLIMBING, EXCEPT FUZZY KIWI FRUIT

CROP	PEST	RATE	COMMENTS
Amur river grape Gooseberry Grape Kiwifruit, hardy Maypop Schisandra berry Cultivars, varieties and/or hybrids of these	Glassy-Winged Sharpshooter Grape Berry Moth (first and second generation only) Leafhoppers Mealybug Multi-colored Asian Lady Beetle Thrips	FOLIAR: 1.75 - 5.25 fl. oz./A (0.045 - 0.135 lb. ai/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 14 days. For best results, time application before a damaging population becomes established. Under severe pest pressure, use the higher specified rates. For Mealybug control, apply between budbreak and pea-berry size.
	Glassy-Winged Sharpshooter Grape Phylloxera (suppression only) Leafhoppers Mealy bug Thrips Vine Mealybug	SOIL: 9.00 - 13.25 fl. oz./A (0.23 - 0.338 lb. ai/A)	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. A143.05 can be mixed and/or alternated with commonly used insecticides such as fenpropathrin [(Danitol®)] or pyriproxyfen [(Knack®)], for better knockdown and/or improved control of pests.

NOTE: Regardless of application method, **DO NOT** apply more than a total of 21.25 fl. oz. of **A143.05** (0.540 lb. ai) per acre per calendar year.

Foliar Application:

- Apply with air or ground equipment in adequate water for uniform coverage (5 to 10 gals./A by air or 50 to 300 gals./A by ground).
- **DO NOT** apply **A143.05** within one (1) day of harvest.
- **DO NOT** apply more than a total of 10.5 fl. oz. of **A143.05** (0.270 lb. ai) per acre per calendar year.

Soil Application:

- Make only one (1) soil application per year.
- Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals./A).
- **DO NOT** apply **A143.05** within twenty-eight (28) days of harvest.
- **DO NOT** apply more than a total of 13.25 fl. oz. of **A143.05** (0.338 lb. ai) per acre per calendar year.
- For drip application, prior to injection, mix specified dosage in sufficient carrier volume (minimum of 2 gals. of water per 1 lb. of product) to ensure uniform application and incorporation into the soil using drip or trickle irrigation water.
- Apply towards the end of the irrigation run to ensure the product does not leach past the root zone.

BERRY AND SMALL FRUIT (SUBGROUP 13-07H)
LOW GROWING BERRY SUBGROUP, EXCEPT STRAWBERRY

CROP	PEST	RATE	COMMENTS
Bearberry Bilberry Blueberry Lowbush Cloudberry Cranberry Lingonberry Muntries Partridgeberry Cultivars, varieties and/or hybrids of these	Blackheaded Fireworm (Suppression only) Cranberry Fruitworm (Suppression only) Cranberry Weevil (Suppression only) Flea Beetles Leafhoppers Spanworm (Suppression only) Sparganothis Fruitworm (Suppression only) Stinkbugs Tipworm (Suppression only)	FOLIAR: 3.5 – 7.0 fl. oz./A (0.090 - 0.180 lb. ai/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 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. A143.05 can be mixed and/or alternated with commonly used insecticides such as pyriproxyfen [(Knack)], to improve length of control and/or achieve better knockdown of pests.

NOTE:

Foliar Application:

- Apply with air or ground equipment in adequate water for uniform coverage (Use a minimum of 5 gals./A for air or 30 gals./A for ground applications).
- **DO NOT** apply **A143.05** within seven (7) days of harvest.
- **DO NOT** apply more than a total of 14 fl. oz. of **A143.05** (0.360 lb. ai) per acre per calendar year.

CUCURBITS

CROP	PEST	RATE	COMMENTS
Acorn Squash	Brown Marmorated	FOLIAR:	Higher water volumes provide improved insect control.
Balsam Apple	Stink Bug[+]	2.0 – 7.0 fl. oz./A	
Balsam Pear	Brown Stink Bug	(0.05 - 0.18 lbs. ai/A)	
Bitter Melon	Cabbage Looper[*]		Begin application when pest activity is first noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established.
Butternut Squash	Cucumber Beetle spp.	OR	
Calabaza	Flea Beetle spp.		
Cantaloupe	Grasshopper spp.	SOIL:	
Casaba	Green Peach Aphid[+]	9.0 – 13.0 fl. oz./A	
Chayote	Green Stink Bug	(0.23 - 0.33 lbs. ai/A)	
Chinese Cucumber	Harlequin Bug		
Chinese Okra	Melon Aphid[+]	[SOIL IN CA:	
Chinese Waxgourd	Leafhopper spp.	9.0 – 10.5 fl. oz./A	Under severe pest pressure, use higher specified rates.
(Chinese Preserving Melon)	Leafminer spp.	(0.23 - 0.27 lbs. ai/A)]	
Citron Melon	Southern Green Stink Bug		The rate applied affects the length of control. Use high rate where infestations occur later in crop development, or where pest pressure is continuous.
Crenshaw Melon	Spotted Cucumber Beetle		
Crookneck Squash	Squash Bug		
Cucumber	Striped Cucumber Beetle		
Edible Gourd	Thrips spp.		A143.05 may be mixed and/or alternated with commonly used insecticides to comply with local IPM and resistance management programs.
Gherkin	Whitefly spp. (Including		
Golden Pershaw Melon	Bandwinged Whitefly,		
Honey Balls	Silverleaf Whitefly, and		
Honeydew Melon	Sweet-potato		
Hubbard Squash	Whitefly)		
Mango Melon			
<i>Momordica</i> spp.			
Muskmelon			
Persian Melon			
Pineapple Melon			
Pumpkin			
Santa Claus Melon			
Scallop Squash			
Snake Mellon			
Spaghetti Squash			
Straightneck Squash			
Summer Squash			
True Cantaloupe			
Vegetable Marrow			
Watermelon			
Winter Squash			
Zucchini			

RESTRICTION:

- **DO NOT** combine foliar applications with soil application, or vice versa. Only use one application method.
- **DO NOT** apply to vegetables grown for seed.

Foliar Application:

- Apply with air or ground equipment in adequate water for uniform coverage (**DO NOT** use less than 3 gals./acre for aerial application or 20 gals./acre for ground applications).
- **DO NOT** apply **A143.05** within one (1) day of harvest.
- **DO NOT** apply more than a total of 10.5 fl. oz. of **A143.05** (0.266 lb. ai) per acre per calendar year.

Soil Application:

- See **Conversion Chart for Linear Applications** for linear application rates.
- Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals./A).
- **DO NOT** apply **A143.05** within twenty-one (21) days of harvest.
- **DO NOT** apply more than a total of 21 fl. oz. of **A143.05** (0.532 lb. ai) per acre per calendar year.

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

1. In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results band width must be 2" or less and placed 1" to 2" below the seed depth.
2. In-furrow spray at or below seed level or a narrow surface band above the seedline during planting. For surface banded applications incorporate to a depth of 1 ½" with sufficient irrigation within 24 hours to insure satisfactory insect control.
3. As a post-seeding drench, transplant drench or hill drench. Make applications with sufficient water to insure incorporation into the root zone.
4. As a sidedress after plants are established. Make applications within 2" to 4" to the side of each row and incorporated 1 or more inches deep. Applications must be made to each row if there are two rows per bed.
5. In drip or trickle irrigation water.

[*Not Registered for Use by California]

[+ Suppression Only]

FRUITING VEGETABLES

CROP	PEST	RATE	COMMENTS
Bell Pepper	Brown Marmorated Stink Bug[+]	FOLIAR:	Higher water volumes provide improved insect control.
Chili Pepper	Brown Stink Bug	2.0 – 7.0 fl. oz./A	
Cooking Pepper	Cabbage Looper[*]	(0.05 - 0.18 lbs. ai/A)	Begin application when pest activity is first noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established.
Eggplant	Colorado Potato Beetle	OR	
Ground Cherry	Conspense Stink Bug	SOIL:	
Pepino	Cucumber Beetle spp.	9.0 – 13.0 fl. oz./A	
Pimento	Flea Beetle spp.	(0.23 - 0.33 lbs. ai/A)	
Sweet Pepper	Grasshopper spp.	[SOIL IN CA:	
Tomatillo	Green Peach Aphid[+]	9.0 – 10.5 fl. oz./A	
Tomato	Green Stink Bug	(0.23 - 0.27 lbs. ai/A)]	Under severe pest pressure, use higher specified rates.
	Harlequin Bug		The rate applied affects the length of control. Use high rate where infestations occur later in crop development, or where pest pressure is continuous.
	Leafhopper spp.		
	Leafminer spp.		
	Pepper Weevil		
	Psyllid spp. (including Potato Psyllid)		
	Potato Aphid[+]		
	Southern Green Stink Bug		
	Squash Bug		
	Thrips spp. (including Eastern Flower Thrips, Onion Thrips, Tobacco Thrips, and Western Flower Thrips)		A143.05 may be mixed and/or alternated with commonly used insecticides to comply with local IPM and resistance management programs.
	Whitefly spp. (including Band-winged Whitefly, Silverleaf White-fly, and Sweetpotato Whitefly)		

RESTRICTION:

- **DO NOT** combine foliar applications with soil application, or vice versa. Only use one application method.
- **DO NOT** apply to vegetables grown for seed.

Foliar Application:

- Apply with air or ground equipment in adequate water for uniform coverage (**DO NOT** use less than 3 gals./acre for aerial application or 20 gals./acre for ground applications).
- **DO NOT** apply **A143.05** within one (1) day of harvest.
- **DO NOT** apply more than a total of 10.5 fl. oz. of **A143.05** (0.27 lb. ai) per acre per calendar year.

Soil Application:

- See **Conversion Chart for Linear Application** for linear application rates.
- Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals/A).
- **DO NOT** apply **A143.05** within twenty-one (21) days of harvest.
- **DO NOT** apply more than a total of 21 fl. oz. of **A143.05** (0.532 lb. ai/A) per acre per calendar year.

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

1. In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results band width must be 2" or less and placed 1" to 2" below the seed depth.
2. In-furrow spray at or below seed level or a narrow surface band above the seedline during planting. For surface banded applications incorporate to a depth of 1 ½" with sufficient irrigation within 24 hours to insure satisfactory insect control.
3. As a post-seeding drench, transplant drench or hill drench. Make applications with sufficient water to insure incorporation into the root zone.
4. As a sidedress after plants are established. Applications must be placed within 2" to 4" to the side of each row and incorporated 1 or more inches deep. Applications must be made to each row if there are two rows per bed.
5. In drip or trickle irrigation water.

[*Not Registered for Use by California]

[+ Suppression Only]

GRAPES

CROP	PEST	RATE	COMMENTS
Grapes	Brown Marmorated Stink Bug[+] Flea Beetle spp. Glassy-Winged Sharpshooter Grape Berry Moth Japanese Beetle Leafhopper spp. Mealybug spp. (including Citrus Mealybug, Grape Mealybug, Longtailed Mealybug, Obscure Mealybug, and Vine Mealybug) Multicolored Asian Ladybeetle Thrips spp. Whitefly spp. (including Band-winged Whitefly, Silverleaf Whitefly, and Sweetpotato Whitefly)	FOLIAR: 2.0 – 5.0 fl. oz./A (0.05 - 0.13 lbs. ai/A)	Higher water volumes provide improved insect control. Begin application when pest activity is first noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established. Under severe pest pressure, use higher specified 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.
	Brown Marmorated Stink Bug[+] Flea Beetle spp. Glassy-Winged Sharpshooter Leafhopper spp. Mealybug spp. (including Citrus Mealybug, Grape Mealybug, Longtailed Mealybug, Obscure Mealybug, and Vine Mealybug) Phylloxera spp. Thrips spp. Whitefly spp. (including Band-winged Whitefly, Silverleaf Whitefly, and Sweetpotato Whitefly)	SOIL: 9.0 - 10.5 fl. oz./A (0.23 - 0.27 lbs. ai/A)	A143.05 may be mixed and/or alternated with commonly used insecticides to comply with local IPM and resistance management programs.
	Spotted Lanternfly (SLF)[*]	FOLIAR: 5.0 fl. oz./A (0.13 lb. ai/A) SOIL:	

		10.5 fl. oz./A (0.27 lb. ai/A)	
RESTRICTION: <ul style="list-style-type: none"> Regardless of application method, DO NOT apply more than a total of 20.9 fl. oz. of A143.05 (0.529 lb. ai) per acre per calendar year. Foliar Application: <ul style="list-style-type: none"> Apply with air or ground equipment in adequate water for uniform coverage (DO NOT use less than 5 gals./acre for aerial applications or 10 gals./acre for ground applications). DO NOT apply A143.05 within one (1) day of harvest. DO NOT apply more than a total of 10.25 fl. oz. of A143.05 (0.259 lb. ai) per acre per calendar year. Soil Application: <ul style="list-style-type: none"> Make only one (1) soil application per year. Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals./A). DO NOT apply A143.05 within twenty-eight (28) days of harvest. DO NOT apply more than a total of 10.5 fl. oz. of A143.05 (0.266 lb. ai) per acre per calendar year. For drip application, prior to injection, mix specified dosage in sufficient carrier volume (minimum of 2 gals of water per 1 lb. of product) to ensure uniform application and incorporation into the soil using drip or trickle irrigation water. Apply towards the end of the irrigation run to ensure the product does not leach past the root zone. 			

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[+ Suppression Only]

HEAD AND STEM BRASSICA

CROP	PEST	RATE	COMMENTS
Broccoli Brussels Sprouts Cabbage Cauliflower Cavalo Broccolo Chinese Cabbage Chinese Mustard Cabbage Kohlrabi	Brown Stink Bug Cabbage Aphid[+] Cabbage Looper[*] Cucumber Beetle spp. Flea Beetle spp. Grasshopper spp. Green Peach Aphid[+] Green Stink Bug Harlequin Bug Leafminer spp. Southern Green Stink Bug Squash Bug Thrips spp. (including Onion Thrips) Whitefly spp. (including Bandwinged Whitefly, Silverleaf Whitefly, and Sweetpotato Whitefly)	FOLIAR: 2.0 – 7.0 fl. oz./A (0.05 - 0.18 lbs. ai/A) OR SOIL: 9 - 13 fl. oz./A (0.23 - 0.33 lbs. ai/A) [SOIL IN CA [AND AZ]: 9 – 10.5 fl. oz./A (0.23 - 0.27 lbs. ai/A)]	Higher water volumes provide improved insect control. Begin application when pest activity is first noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established. Under severe pest pressure, use higher specified 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. A143.05 may be mixed and/or alternated with commonly used insecticides to comply with local IPM and resistance management programs.

RESTRICTIONS: <ul style="list-style-type: none"> DO NOT combine foliar applications with soil application, or vice versa. Only use one application method. DO NOT apply to vegetables grown for seed. Foliar Application: <ul style="list-style-type: none"> Apply with air or ground equipment in adequate water for uniform coverage (DO NOT use less than 3 gals./acre for aerial application or 20 gals./acre for ground applications). DO NOT apply A143.05 within one (1) day of harvest. DO NOT apply more than a total of 10.5 fl. oz. of A143.05 (0.266 lb. ai) per acre per calendar year. Soil Application:			
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- See **Conversion Chart for Linear Applications** for linear application rates.
- Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals./A).
- **DO NOT** apply **A143.05** within twenty-one (21) days of harvest.
- **DO NOT** apply more than a total of 21 fl. oz. of **A143.05** (0.532 lb. ai) per acre per calendar year.

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

1. In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results band width must be 2" or less and placed 1" to 2" below the seed depth.
2. In-furrow spray at or below seed level or a narrow surface band above the seedline during planting. For surface banded applications incorporate to a depth of 1 ½" with sufficient irrigation within 24 hours to insure satisfactory insect control.
3. As a post-seeding drench, transplant drench or hill drench. Make applications with sufficient water to insure incorporation into the root zone.
4. As a sidedress after plants are established. Applications must be placed within 2" to 4" to the side of each row and incorporated 1 or more inches deep. Applications must be made to each row if there are two rows per bed.
5. In drip or trickle irrigation water.

[*Not Registered for Use by California]

[+ Suppression Only]

LEAFY VEGETABLES (EXCEPT BRASSICA VEGETABLES)

CROP	PEST	RATE	COMMENTS
Amaranth (Chinese Spinach)	Brown Stink Bug	FOLIAR:	Higher water volumes provide improved insect control.
Arugula (Roquette)	Cabbage Looper[*]	2.0 - 5.25 fl. oz./A	
Cardoon	Cucumber Beetle	(0.05 - 0.13 lbs. ai/A)	
Celery	Flea Beetle spp.		Begin application when pest activity is first noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established.
Celtuce	Grasshopper spp.	OR	
Chervil	Green Peach Aphid[+]		
Chinese Celery	Green Stink Bug	SOIL:	
Chrysanthemum Edible-leaved, Garland	Harlequin Bug	9.0 - 13.0 fl. oz./A	
Corn Salad	Leafhopper spp.	(0.23 - 0.33 lbs. ai/A)	
Cress Garden, Upland	Leafminer		
Dandelion	Leafminer spp.	[SOIL IN CA:	
Dock (Sorrel)	Potato Aphid[+]	9.0 - 10.5 fl. oz./A	Under severe pest pressure, use higher specified rates.
Endive (Escarole)	Southern Green Stink Bug	(0.23 - 0.27 lbs. ai/A)]	
Florence Fennel	Squash Bug		The rate applied affects the length of control. Use high rate where infestations occur later in crop development, or where pest pressure is continuous.
Lettuce Head, Leaf	Thrips spp. (including Western Flower Thrips)		
Orach	Whitefly spp. (including Bandwinged Whitefly, Silverleaf Whitefly, and Sweetpotato Whitefly)		A143.05 may be mixed and/or alternated with commonly used insecticides to comply with local IPM and resistance management programs.
Parsley			
Purslane Garden, Winter			
Radicchio (Red Chicory)			
Rhubarb			
Spinach			
Spinach, New Zealand			
Spinach, Vine			
Swiss Chard			

RESTRICTIONS:

- **DO NOT** combine foliar applications with soil application, or vice versa. Only use one application method.
- **DO NOT** apply to vegetables grown for seed.

Foliar Application:

- Apply with air or ground equipment in adequate water for uniform coverage (**DO NOT** use less than 3 gals./acre for aerial applications or 20 gals./acre for ground applications).
- **DO NOT** apply **A143.05** within seven (7) days of harvest.

- **DO NOT** apply more than a total of 10.5 fl. oz. of **A143.05** (0.266 lb. ai) per acre per calendar year.

Soil Application:

- See **Conversion Chart for Linear Application** for linear application rates.
- Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals/A).
- **DO NOT** apply **A143.05** within twenty-one (21) days of harvest.
- **DO NOT** apply more than a total of 21 fl. oz. of **A143.05** (0.532 lb. ai) per acre per calendar year.

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

1. In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results band width must be 2" or less and placed 1" to 2" below the seed depth.
2. In-furrow spray at or below seed level or a narrow surface band above the seedline during planting. For surface banded applications incorporate to a depth of 1 ½" with sufficient irrigation within 24 hours to insure satisfactory insect control.
3. As a post-seeding drench, transplant drench or hill drench. Make applications with sufficient water to insure incorporation into the root zone.
4. As a sidedress after plants are established. Applications must be placed within 2" to 4" to the side of each row and incorporated 1 or more inches deep. Applications must be made to each row if there are two rows per bed.
5. In drip or trickle irrigation water.

[*Not Registered for Use by California]

[+ Suppression Only]

ONION, BULB AND GREEN (SUBGROUPS 3-07A AND 3-07B)

CROP	PEST	RATE	COMMENTS
Bulb onion, includes: Daylily, bulb Fritillaria, bulb Garlic, bulb Garlic Greatheaded bulb, Garlic serpent bulb Lily, bulb Onion, bulb Onion, Chinese, bulb Onion, pearl Onion, potato, bulb Shallot, bulb Cultivars, varieties and/ or hybrids of these Green onion, includes: Chive, fresh leaves Chive, Chinese, fresh leaves Elegans hosta Fritillaria leaves Kurrat Leady's leek Leek Leek, wild Onion, Beltsville bunching Onion, fresh Onion, green Onion, macrostem Onion, tree, tops Onion, Welsh, tops Shallot, fresh leaves	Flea Beetles Grasshoppers Leafhoppers	FOLIAR: 3.5 – 7.0 fl. oz./A (0.090 - 0.180 lb. ai/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.
	Stink bugs Leafminers Thrips Whiteflies	FOLIAR: 5.25 – 7.0 fl. oz./A (0.135 - 0.180 lb. ai/A)	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. A143.05 can be mixed and/or alternated with commonly used insecticides, such as pyriproxyfen [(Knack)], to improve the length of control and/or achieve better knockdown of pests.
	Leafminers Thrips Whiteflies	SOIL: 8.75 - 10.5 fl. oz./A (0.225 - 0.270 lb. ai/A)	

Cultivars, varieties and/ or hybrids of these			
<p>NOTE: Regardless of application method of A143.05 DO NOT exceed 15 fl. oz. (0.383 lb. ai) per acre per calendar year.</p> <p>RESTRICTION:</p> <ul style="list-style-type: none"> • DO NOT apply to vegetables grown for seed. <p>Foliar Application:</p> <ul style="list-style-type: none"> • Apply with air or ground equipment in adequate water for uniform coverage (A minimum of 5 gals./A by air or 20 gals./A by ground). • DO NOT apply A143.05 within one (1) day of harvest. • DO NOT apply more than a total of 10.5 fl. oz. of A143.05 (0.270 lb. ai) per acre per calendar year. <p>Soil Application:</p> <ul style="list-style-type: none"> • See Conversion Chart for Linear Application for linear plant application rates. • Apply with ground equipment in adequate water for uniform coverage (A minimum of 10 gals/A). • Apply A143.05 at planting or immediately after transplanting. • DO NOT apply more than a total of 10.5 fl. oz. of A143.05 (0.270 lb. ai) per acre per calendar year. <p>Apply specified dosage in sufficient carrier volume to ensure uniform application and incorporate into the soil using one of the following methods:</p> <ol style="list-style-type: none"> 1. In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results band width 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 ½" 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. 			

PEACH AND NECTARINE

CROP	PEST	RATE	COMMENTS
Peach Nectarine	Aphids (Suppression only) Sharpshooters Leafhoppers	FOLIAR: 3.5 – 7.0 fl. oz./A (0.090 - 0.180 lb. ai/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.
	Peach tree borer[+] Plum curculio[+] Aphids (Suppression only) Stinkbugs Spotted Lanternfly (SLF) [*]	FOLIAR: 5.25 – 7.0 fl. oz./A (0.135 - 0.180 lb. ai/A)	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.
	Aphids (Suppression only) Sharpshooters Leafhoppers Peach tree borer[+] Spotted Lanternfly (SLF) [*]	SOIL: 10.5 fl. oz./A (0.270 lb. ai/A)	A143.05 applied foliar can be mixed and/or alternated with commonly used insecticides, such as fenpropathrin [(Danitol)] or pyriproxyfen [(Knack)], to improve length of control and/or achieve better knockdown of pests
	<p>NOTE: Regardless of application method, DO NOT apply more than a total of 14.25 fl. oz. of A143.05 (0.360 lb. ai) per acre per calendar year.</p>		

Foliar Application:

- Apply with air or ground equipment in adequate water for uniform coverage (A minimum of 5 gals./A by air or 50 gals./A by ground).
- **DO NOT** apply **A143.05** within three (3) days of harvest.
- **DO NOT** apply more than a total of 10.5 fl. oz. of **A143.05** (0.270 lb. ai) per acre per calendar year.
- Interval between applications cannot be less than 7 days.

Soil Application:

- **DO NOT** apply **A143.05** within twenty one (21) days of harvest
- Apply with ground equipment in adequate water for uniform coverage (A minimum of 100 gals./A).
- **DO NOT** apply more than a total of 10.5 fl. oz. of **A143.05** (0.270 lb. ai) per acre per calendar year.

Apply specified dosage in sufficient carrier volume to ensure uniform application and distribution within and around the root zone of each tree using one of the following methods:

1. As a drench. Applications should be made with sufficient water to insure incorporation into the root zone.
2. Using drip, trickle, micro sprinkler or any customized irrigation system derived from those systems to water trees independently.

[*Not Registered for Use by California]

[+ Suppression Only]

TUBEROUS AND CORM VEGETABLES (SUBGROUP 1C)

CROP	PEST	RATE	COMMENTS
Arracacha	Colorado Potato	FOLIAR:	Higher water volumes provide improved insect control.
Arrowroot	Beetle	2 - 2.75 fl. oz./A	Begin applications when first pest activity is noticed or when
Artichoke, Chinese	Flea Beetle	(0.045 - 0.068 lb.	insects reach threshold levels per State and County
Artichoke, Jerusalem	Green Peach Aphid	ai/A)	Extension Service Recommendations Repeat as needed to
Canna, edible	(Suppression only)		maintain control, but not more often than every 14 days.
Cassava, bitter and	Potato Aphid		For best results, time application before a damaging
sweet	(Suppression only)		population becomes established.
Chayote (root)	Potato Leafhopper		
Chufa	Psyllid		Under severe pest pressure, use the higher specified rates.
Dasheen (taro)	Colorado Potato Beetle	SOIL:	
Ginger	Flea Beetle	11.5 – 13.25 fl.	The rate applied affects the length of control. Use the high
Leren	Green Peach Aphid	oz./A	rate where infestations occur later in crop development, or
Potato	(Suppression only)	(0.293 – 0.338 lb.	where pest pressure is continuous.
Sweet Potato	Potato Aphid	ai/A)	A143.05 can be mixed and/or alternated with other
Tanier	(Suppression only)		insecticides registered for this use for better knockdown
Turmeric	Leafhoppers		and/or improved control of pests.
Yam bean	Psyllid spp.		Aphids: A143.05 provides only suppression of established
Yam, true	(Suppression only)		or heavy aphid populations. Control may require use of tank
	Lygus bugs [*] (Potato		mixes with other labeled insecticides.
	Only)		Lygus Bugs[*]: When used as part of an integrated pest
			management program, according to the labeled
			instructions, A143.05 can control lygus bugs in potatoes.

NOTE: DO NOT combine foliar applications with soil applications, or vice versa. Only use one application method.

Foliar Application:

- 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 **A143.05** within seven (7) days of harvest.
- **DO NOT** apply more than a total of 8 fl. oz. of **A143.05** (0.203 lb. ai) per acre per calendar year.

Soil Application:

- See **Conversion Chart for Linear Application** for linear plant application rates.
- Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals./A).
- Apply once at preplant, preemergence or at ground crack as directed below.
- **DO NOT** apply more than a total of 13.25 fl. oz. of **A143.05** (0.338 lb. ai) per acre per calendar year.

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

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

[*Not Registered for Use by California]

WATERCRESS

CROP	PEST	RATE	COMMENTS
Watercress	Cucumber beetle Sharpshooters Leafhoppers Flea beetles	FOLIAR: 3.5 - 7 fl. oz./A (0.090 - 0.180 lb. ai/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.
	Aphids (Suppression only) Stinkbugs Whiteflies Thrips	FOLIAR: 5.25 - 7 fl. oz./A (0.135 - 0.180 lb. ai/A)	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. A143.05 can be mixed and/or alternated with commonly used insecticides, such as fenpropathrin [(Danitol)] or pyriproxyfen [(Knack)], for better knockdown and/or improved control of pests.

Foliar Application:

- Apply with air or ground equipment in adequate water for uniform coverage (5 to 10 gals./A by air or 50 to 300 gals./A by ground).
- **DO NOT** apply **A143.05** within one (1) day of harvest.
- Interval between application cannot be less than 7 days
- **DO NOT** apply more than a total of 14 fl. oz. of **A143.05** (0.360 lb. ai) per acre per calendar year.

CONVERSION CHART FOR LINEAR APPLICATION

Rate of Product (fl. oz./A)	20	24	28	30	32	34	36	40
	Fluid Ounces Product/1,000 Row Ft.							
9.0	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	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	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	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	0.50	0.60	0.70	0.75	0.80	0.85	0.90	0.99

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the 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:

[For plastic containers ≤ 5 gallons: Nonrefillable Container: 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 and drain for 10 seconds after the flow begins to drip. Fill the container ¼ 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

[For plastic containers > 5 gallons: Nonrefillable container: 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 ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

LIMITATION OF WARRANTY AND LIABILITY

IMPORTANT: READ BEFORE USE. Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. **CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. **LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, neither ATTICUS, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

[A143.05 is a trademark of Atticus, LLC.]

[Scorpion® is a registered trademark of Gowan Company L.L.C.]

[Danitol® and Knack® are registered trademarks of Valent U.S.A. LLC]

{LANGUAGE ON LABEL AFFIXED TO CONTAINER}

DINOTEFURAN GROUP 4A INSECTICIDE

A143.05^[TM]

[Alternate Brand Name: *Sesquin 35 SL*]

[Contains dinotefuran, the active ingredient used in Scorpion® [35SL]
[Insecticide].]

[For control of listed sucking and chewing insect pests in listed crops] [For
Agricultural Use Only]

ACTIVE INGREDIENT: (% by weight)

Dinotefuran*, N-methyl-N'-nitro-N'-[(tetrahydro-3-furanyl)
methyl]guanidine..... 35.0%

OTHER INGREDIENTS:..... 65.0%

TOTAL 100.0%

*Contains 3.24 pounds of active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

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

FIRST AID	
If on skin or clothing:	<ul style="list-style-type: none">Take off contaminated clothing.Rinse skin immediately with plenty of water for 15-20 minutes.Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none">Call a poison control center or doctor immediately for treatment advice.Have person sip a glass of water if able to swallow.Do not induce vomiting unless told to do so by the poison control center or doctor.Do not give anything by mouth to an unconscious person.
If in eyes:	<ul style="list-style-type: none">Hold eye open and rinse slowly and gently with water for 15-20 minutes.Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at 1-844-685-9173 for emergency medical treatment information.	

For Chemical Emergency:

Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

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

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 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 honeybees. The persistence of residues and potential residual toxicity of Dinotefuran in nectar and pollen suggests the possibility of chronic toxic risk to honeybee larvae and the eventual instability of the hive.

This product is toxic to bees exposed to residue for more than 38 hours following treatment. **DO NOT** apply this product to blooming, pollen- hedding 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 groundwater. 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. **DO NOT** mix or allow to come in contact with water, 5% ammonium phosphate and any oxidizing agent. Hazardous chemical reaction may occur.

STORAGE AND DISPOSAL

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See inside label booklet for additional Precautionary Statements and Directions for Use.

[A143.05 is not manufactured, or distributed by Gowan Company, seller of Scorpion® [35SL] [Insecticide].]

Manufactured for:
Atticus, LLC
940 NW Cary Parkway, Suite 200
Cary, NC 27513

EPA Reg. No.: 91234-XX
EPA Est. No.: _____
NET CONTENTS: _____

{Optional Marketing graphics}

