Diamond®

NOVALURON | GROUP 15 | INSECTICIDE

Insecticide for use on: Cotton (Subgroup 20C); Peanuts*; Sorghum*; Soybeans*; Sugarcane*; Sunflower (subgroup 20B)

* Not Registered For Use In California

ACTIVE INGREDIENT:	**% BY WT.**
Novaluron: 1-[3-chloro-4-(1,1,2-trifluoro-2-trifluoromethoxyethoxy)phenyl]-3-(2,6-difluorobenzoyl)urea**	9.3%
OTHER INGREDIENTS:	90.7%
TOTAL:	100.0%

**Contains 0.83 lbs. novaluron per gallon.

EPA Reg. No. 66222-35

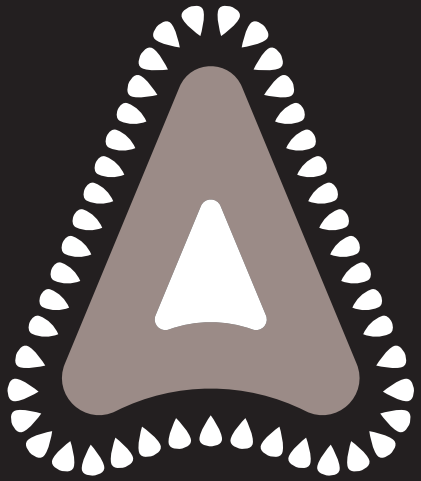
EPA Est. No. 37429-GA-001[BT]; 37429-GA-002[BO]
Letter(s) in lot number correspond(s) to superscript in EPA Est. No.

KEEP OUT OF REACH OF CHILDREN

WARNING - AVISO

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.)

For additional precautionary, handling and use statements, see inside of this booklet.



INSECTICIDE

How can we help?
1-866-406-6262

Net Contents
2.5 gallons

ADAMA

FIRST AID	
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 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF ON SKIN:	• 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. • Have person sip a glass of water if able to swallow. • **DO NOT** in duce vomiting unless told to do so by a poison control center or doctor. • **DO NOT** give anything by mouth to an unconscious person.
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 for further treatment advice.
Emergency Assistance: Have the product container or label with you when calling a poison control center or doctor or going for treatment. For non-emergency general information on this pesticide product (including health concerns or pesticide incidents), you may call 1-877-250-9291, 24 hours per day, 7 days per week. **NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.	

In case of spills, fire, leaks or accidents call 1-800-535-5053.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING: Causes substantial but temporary eye injury. **DO NOT** get in eyes or on clothing. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE)

Some materials that are chemical resistant to this product are listed below.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants;
- Chemical-resistant gloves such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, or Viton ≥14 mils;
- Shoes plus socks; and
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. **DO NOT** reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands 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 freshwater and estuarine/marine invertebrates. **DO NOT** apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. **DO NOT** contaminate water when disposing of equipment wash waters or rinsate. This product may impact surface water quality due to runoff or rain water. This is especially true for poorly draining soils and soils with shallow ground water.

Pollinator Advisory: *Because of its mode of action as an insect growth regulator, and since it is not systemic, DIAMOND® has the potential to impact larval bees (i.e., brood). In order to minimize the possibility of effects to honeybee brood,* **DO NOT** *use DIAMOND on blooming crops when bees are actively foraging.*

Surface Water Advisory: This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a medium potential for reaching both surface water and aquatic sediment via runoff for several weeks after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of novaluron from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours. Alternatively, for products with water-in requirements, avoid watering to the point of runoff.

DIRECTIONS FOR USE

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

PRECAUTIONS:

- Carefully read this product label for crop specific instructions and precautions, as failure to do so may result in crop injury.
- DIAMOND has demonstrated some phytotoxic effects to new, expanding leaves, when mixed with products that are formulated as emulsifiable concentrates, systemic in nature, and/or intended to improve plant uptake, e.g., foliar nutrients/amendments, and/or petroleum/plant oil-based products.
- Use low rates of non-ionic, silicone, and other non-oil and non-penetrating adjuvants and/or surfactants known to be safe on listed crops.
- Carefully read the adjuvant and/or surfactant label to determine the presence of oil and/or penetrant activity before use; or consult the adjuvant and/or surfactant manufacturer.
- When an adjuvant is to be used with this product, the manufacturer recommends the use of a Council of Producers & Distributors of Agrotechnology certified adjuvant.
- Apply the spray solution with adjuvant and/or surfactant to a small area of the crop and wait 7 to 10 days and observe for signs of phytotoxicity before treating the entire field.

USE RESTRICTIONS:

- Apply this product outdoors only as specified the EPA approved label.
- **DO NOT** apply this product in a way that it will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.
- The use of novaluron on crops grown for food in greenhouses, except tomatoes and cucumbers, is prohibited.
- **DO NOT** allow Diamond to drift on grapes as leaf spotting may occur.
- **DO NOT** allow to enter indoor or outdoor drains. (No permita la entrada a desagües internos o exteros.)

- Follow proper disposal procedures on this label (*Siga las indicaciones del etiquetado para el desecho apropiado del producta.*).
- For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Water Protection Statements:

- **DO NOT** spray the product into fish pools, ponds, streams, or lakes.
- **DO NOT** apply directly to sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
- **DO NOT** allow the product to enter any drain during or after application.
- **DO NOT** apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.
- **DO NOT** apply or irrigate to the point of runoff.

Rain Related Statements:

- **DO NOT** make applications during rain. Avoid making applications when rainfall is expected before the product has sufficient time to dry (minimum 4 hours).
- Rainfall within 24 hours after application may cause unintended runoff of pesticide application.

BUFFER ZONES:

Vegetative Buffer Zones. Construct and maintain a minimum 25-foot vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; and estuarian/marine habitats). Only apply products containing novaluron onto fields where a well-maintained vegetative buffer strip of at least 25 feet exists between the field and down gradient aquatic habitat. For guidance, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA, NRCS. 2000. Fort Worth, Texas. 21pp.

Buffer Zone for Ground Application (All Crops). DO NOT apply within 75 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes, natural ponds; and estuarian/marine habitats). All applications must include a 25-foot vegetative buffer strip within the buffer zone to decrease runoff.

Buffer Zone for Aerial Application (Except Cotton). DO NOT apply within 150 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes, natural ponds; and estuarian/marine habitats). All applications must include a 25-foot vegetative buffer strip within the buffer zone to decrease runoff.

Buffer Zone for Aerial Application to Cotton. DO NOT apply within 250 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes, natural ponds; and estuarian/marine habitats). All applications must include a 25-foot vegetative buffer strip within the buffer zone to decrease runoff.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and 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 over long-sleeved shirt and long pants;
- Chemical-resistant gloves such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, or Viton ≥14 mils;
- Shoes plus socks; and
- Protective eyewear

PRODUCT INFORMATION

DIAMOND must be ingested and/or contacted by insects to be effective. Proper application techniques help ensure thorough spray coverage and correct dosage necessary to obtain optimum control. Apply at the required rates when insect populations reach locally determined economic thresholds. Consult the cooperative extension service, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area. Apply follow-up treatments of DIAMOND per **DIRECTIONS FOR USE**, to keep pest populations within threshold limits. Scout fields regularly to determine optimum application timing based on pest levels and stages of growth.

The primary mode of action is by disrupting cuticle formation and deposition occurring when insects molt, resulting in their death. Due to this mode of action, DIAMOND has no direct effect on adults.

NOTE: The compatibility of DIAMOND with concurrent releases of insects for biocontrol of plant pests has not been established. When used as directed, DIAMOND affects developing immature stages of insects by disrupting the molting process. Consequently, fully developed adult stages of pest and beneficial species are not affected.

Rotational Crops: Only registered crops may be rotated in a treated field within 30 days of the final application.

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance-management, DIAMOND contains a Group 15 insecticide. Any insect population may contain individuals naturally resistant to DIAMOND and any other Group 15 insecticide. The resistant individuals may dominate the insect population if these groups 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 DIAMOND or other Group 15 insecticide within a growing season, or among growing seasons, with different groups that control the same pests. Avoid application of more than the maximum seasonal use rate or the total number of consecutive sprays of DIAMOND or other insecticides in the same group in a season.
- 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):
- o 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.
  - o Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - o When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
  - o Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
  - o 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 ADAMA representatives at 1-866-406-6262 or at www.adama.com.

APPLICATION PROCEDURES

MIXING PROCEDURES

Prepare solution concentrations in a clean, empty spray tank. Use clean spray filters. Add water to 1/2 level of tank. Add the appropriate amount of DIAMOND to the tank and agitate to ensure proper mixture. Continue filling tank with water until desired dilution is achieved.

Shake or re-agitate material in the sprayer before use if application is interrupted. Make up only the amount of application volume as required. Dispose of any unused spray material at the end of each day according to the instructions found in the **STORAGE AND DISPOSAL** section of this label.

For those crops where an adjuvant can be used, ADAMA suggests the use of a Chemical Producers and Distributors Association certified adjuvant.

SPRAY COVERAGE

All parts of the crop must receive uniform spray coverage or else desired result may not occur. Higher water volumes and increased spray pressure generally provide better coverage. Consult your local agricultural specialist for specific information on the best rates, timings, and spray volumes for your region.

ORCHARD APPLICATION

Make applications of DIAMOND by conventional orchard sprayers that are calibrated to deliver 50 to 400 gallons of carrier to the trees. Apply at a carrier volume that ensures complete coverage to trees. Operate spray equipment at proper ground speeds, adequate spray pressures and spray volumes that assure that the air volume within the tree canopy is completely replaced by the output from the air-blast sprayer resulting in proper coverage of the target crop. **DO NOT** use DIAMOND in alternate row middle application patterns since this method will result in off-timing application and poor performance.

GROUND APPLICATION

Apply required dosage by conventional ground sprayer equipment capable of delivering sufficient water to obtain thorough, uniform coverage of the target crop. Orient spray equipment boom and nozzles in a manner to minimize boom height to optimize coverage uniformity, maximize deposition and reduce spray drift. Drop nozzles may be required to obtain uniform coverage against certain pests that develop down in the canopy. Use a minimum spray volume of 5 gallons per acre with ground spray equipment in cotton. Use a minimum of 10 gallons per acre in potatoes and vegetables. Higher gallonages will provide better coverage and performance. Use hollow cone, disc-core hollow cone or twin jet fan nozzles suitable for insecticide spraying.

BAND APPLICATION (IN COTTON ONLY)

Band applications may be appropriate early in the season when cotton is small. Proper nozzle selection, placement, boom orientation or shielding to compensate for windy conditions is critical to ensure adequate coverage. When banding, determine the amount of chemical to use per acre by dividing the band width by the row width and multiplying by the appropriate broadcast rate:

Band width in inches	X	Broadcast rate	=	Amount needed per acre of field
Row width in inches				

AERIAL APPLICATION

For aerial application apply in a total of 2 to 10 gallons per acre using a nozzle configuration that will provide a median droplet size of 200-300 microns. Use a minimum of 5 gallons of water per acre for potatoes. Higher gallonages will provide better coverage and performance. Adhere to the minimum safe application height – not greater than 12 feet above crop canopy. Boom length must be less than 75% of wing span and swath markers. Use flagging or GPS system during application. Make applications when wind speed is between 2 and 10 mph. **DO NOT** make applications when wind speed exceeds 10 mph. Under low humidity and high temperatures, adjust spray volume upward to compensate for evaporation of spray droplets.

APPLICATION THROUGH IRRIGATION SYSTEMS – CHEMIGATION

DIAMOND may be applied through properly equipped chemigation systems for insect control in cotton, cranberries, potatoes, grain sorghum and sweet corn. Apply this product only through sprinkler (including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move) irrigation systems. **DO NOT** apply this product 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.

In order to calibrate the irrigation system and injector to apply the mixture, determine the following: 1) Calculate the number of acres irrigated by the system; 2) Set the irrigation rate and determine the number of minutes for the system to cover the intended treatment area; 3) Calculate the total gallons of the mixture needed to cover the desired acreage. Divide the total gallons of mixture needed by the number of minutes to cover the treated area. This value equals the gallons per minute that the injector must deliver. Convert the gallons per minute to ounces per minute. Calibrate the injector pump with the system in operation at the desired irrigation rate. Calibrate the injector pump at least twice before operation, and the system be monitored during operation.

If you have questions about calibration, contact State Extension Service specialists, 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.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

If the chemigation system is connected to a public water supply, the following conditions must also be met:

- Public water systems mean 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 out of the year.
- Chemigation systems connected to public water systems must contain a functional reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from a point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection.
- The pesticide injection pipeline must 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 shutdown.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, 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.
- Upon completion of insecticide application, remove scale, pesticide residues, and other foreign matter from the supply tank and entire injector system. Flush thoroughly with clean water.
- **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

SPRINKLER CHEMIGATION

For continuously moving systems, the mixture containing DIAMOND must be injected continuously and uniformly into the irrigation water line as the sprinkler is moving. If continuously moving irrigation equipment is used, apply in no more than 0.25 inch of water. For sprinkler systems that **DO NOT** move during operation, apply in no more than 0.25 inch of irrigation immediately before the end of the irrigation cycle.

Maintain continuous agitation of the pesticide supply tank for the duration of the application period.

To apply a pesticide using sprinkler chemigation, the chemigation system must meet the following specifications:

- 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.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 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.
- **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

SPRAY DRIFT

DO NOT *allow DIAMOND to drift on grapes as leaf spotting may occur.*

Mandatory Spray Drift Management

Airblast Applications:

- Spray must be directed into the canopy.
- **DO NOT** apply when wind Speeds exceed 15 miles per hr at the application site.
- User must turn off outward pointing nozzles at row ends and when spraying outer row.
- **DO NOT** apply during temperature inversions.

Aerial applications:

- **DO NOT** release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators must select nozzle and pressure that deliver medium or courser droplets in accordance with American Society of Agricultural & Biological Engineers Standard 641 (ASABE S641).
- **DO NOT** apply when wind speeds exceed 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must be 65% or less of the wingspan for the fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- 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:

- **DO NOT** release spray at a height greater than 4 feet above the ground or crop canopy.
- Applicators must select nozzle and pressure that deliver medium or courser droplets in accordance with American Society of Agricultural & Biological Engineers Standard 572 (ASABE S572).
- **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 must select nozzle and pressure that deliver medium or courser droplets in accordance with American Society of Agricultural & Biological Engineers Standard 572 (ASABE S572).
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

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.

Boom-less Ground Applications:

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

Handheld Technology Applications:

Take precautions to minimize spray drift.

Sensitive Areas

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

Ultra Low Volume (ULV) application is not permitted.

CROPS

Crop	PHI	Target Pests	Rates (Fl. Ozs. / A)	Application Instructions
COTTON (CROP SUBGROUP 20C): COTTONSEED; CULTIVARS, VARIETIES, AND/OR HYBRIDS OF THESE	**DO NOT** apply within 30 days of harvest.	Plant Bugs (Tarnished, Clouded, And Western Tarnished), Stink Bug Nymphs (Green, Brown, Southern Green)	9 to 12 6 to 9 (If used with a knockdown insecticide)	Begin application when plant bugs, stink bugs or fleahoppers appear and oviposition is initiated. Repeat at 7 to 14 day intervals as needed to maintain control. DIAMOND will not control adults. For adult control, tank mix with an adulticide.
		Cotton Fleahopper	6 to 9	
		Tobacco Budworm, Cotton Bollworm	12 to 14 6 to 9 (If used with a knockdown insecticide)	Apply when the majority of eggs are in the blackhead stage and up to 1/8-inch larval length. Use higher rates and higher spray volumes when larvae are more than ¼ inch long, the target pest population is 2X or more above state threshold level or foliage canopy is tall or dense and larvae are present in the lower part of the canopy. Reapplication on a 7 to 14-day interval will be required to protect new growth. Scout fields twice weekly for the most effective control.
		Beet Armyworm, Fall Armyworm, Other Foliage Feeding Caterpillars, such as: Loopers, Cotton Leaf, Perforator, and Saltmarsh Caterpillar	6 to 12	Apply at egg hatch stage or when first signs of feeding occur. Use higher rates and higher spray volumes when larvae are more than ¼ inch long, the target pest population is 2X or more above state threshold level or foliage canopy is tall or dense and larvae are present in the lower part of the canopy. Under heavy infestations or continuous oviposition, reapplication on a 7 to 14 day interval will be required to protect new growth. Scout fields twice weekly for the most effective control.
		Whiteflies (Suppression)	6 to 12	Begin application when whitefly adults appear and once oviposition is initiated. A second application at 14 days may be necessary to achieve acceptable suppression. **DO NOT** apply more than two applications against whiteflies per year.
		Thrips (Suppression)	9 to 14	Begin application when thrips adults appear and once oviposition is initiated. Repeat at 14 days later if needed. DIAMOND will not control adult thrips. For adult control, tankmix with an adulticide. **DO NOT** apply more than two applications against Thrips per year.
		Cotton Use Restrictions: • **DO NOT** apply more than four applications per year minimum 7 days apart. • **DO NOT** apply more than 42 fl. oz. (0.27 lb a.i.) of formulated product per acre per calendar year. • **DO NOT** apply more than two applications at the rate of 14 fl oz/A per calendar year • **DO NOT** apply more than three applications at the rate of 12 fl oz/A per calendar year **NOTE:** For application to cotton through irrigation systems, refer to the section entitled "**APPLICATION THROUGH IRRIGATION SYSTEMS- CHEMIGATION".**		

Crop	PHI	Target Pests	Rates (Fl. Ozs. / A)	Application Instructions
PEANUTS *	**DO NOT** harvest within 28 days of application.	Green Cloverworm, Mexican Bean Beetle, Velvet Bean Caterpillar	6 to 8	Make applications when larvae are small (< 0.5 inches) to give greater control and minimum insect damage to leaves. Repeat application if damaging numbers reappear. Use higher rates and higher spray volumes when the target pest population is 2X or more above state threshold level, or foliage canopy is tall, or dense and larvae are present in the lower part of the canopy, or if greater residual control is desired. Aerial Application: Apply in sufficient water (3 to 10 gallons per acre) to achieve uniform coverage of foliage. Reapplication on a 7 (minimum) to 14-day interval may be required (refer to Grasshopper Application Instructions for more information).
		Armyworms, Including: Beet Armyworm, Fall Armyworm, Southern Armyworm, Yellow-Striped Armyworm, Lesser Cornstalk Borer, Soybean Looper, Thrips, (Suppression)	6 to 12	Apply at egg-hatch stage or when first signs of feeding occur. Use higher rates and higher spray volumes when larvae are more than ¼ inch long, the target pest population is 2X or more above state threshold level, or foliage canopy is tall or dense and larvae are present in the lower part of the canopy. Repeat application if damaging numbers reappear to protect new growth. Aerial Application: Apply in sufficient water (3 to 10 gallons per acre) to achieve uniform coverage of foliage. Reapplication on a 7 (minimum) to 14-day interval may be required (refer to Grasshopper Application Instructions for more information).
		Grasshoppers (Nymphs Only)	9 to 12	Apply when the majority of infesting grasshoppers are in the early nymphal stages of development. When a large influx from neighboring fields occurs, a tank mix with a knockdown insecticide may be necessary to reduce the population to minimize extensive foliage feeding. Aerial Application: Apply in sufficient water (3 to 10 gallons per acre) to achieve uniform coverage of foliage. Reapplication on a 7 (minimum) to 14-day interval may be required (refer to Grasshopper Application Instructions for more information).
		Peanuts Use Restrictions: • Ground Application: Apply in 9 to 35 gallons of water per acre to give uniform coverage. • **DO NOT** exceed 36 fl. oz (0.23 lb a.i.) of formulated product per acre per calendar year. • **DO NOT** feed treated peanut hay or vines to livestock. • **DO NOT** apply more than three applications per calendar year. *Not registered for use in California.		

Crop	PHI	Target Pests	Rates (Fl. Ozs. / A)	Application Instructions
GRAIN SORGHUM *	**DO NOT** apply within 7 days of harvest for grain sorghum forage, and within 14 days of harvest for grain sorghum and stover.	Cutworm, Sorghum Midge, Beet Armyworm, Armyworms, Fall Armyworm, Falls Chinch Bug, True Armyworm, Webworm, Stinkbugs	6 to 12	Apply when the majority of the population is at egg hatch to the second instar. Use higher rates and higher spray volumes when larvae are large, or foliage canopy is tall or dense. Reapplication on a 7(minimum) to 14-day interval will be required to protect new growth. For the most effective control, scout fields twice weekly.
		Grain Sorghum Use Restrictions: • **DO NOT** apply more than 3 applications per crop per year. • **DO NOT** apply more than 36 fl. oz. (0.23 lb a.i.) of formulated product per acre per calendar year. **Note**: • For application to grain sorghum through irrigation systems, refer to the section entitled "**APPLICATION THROUGH IRRIGATION SYSTEMS- CHEMIGATION".** *Not registered for use in California.		

Crop	PHI	Target Pests	Rates (Fl. Ozs. / A)	Application Instructions
SOYBEANS *	**DO NOT** harvest within 30 days of application.	Green Cloverworm, Mexican Bean Beetle, Saltmarsh Caterpillar, Velvet Bean Caterpillar	6 to 10	Make applications when larvae are small (< 0.5 inches) to give greater control and minimum insect damage to leaves. Repeat application if damaging numbers reappear. Use higher rates and higher spray volumes when the target pest population is 2X or more above state threshold level, or foliage canopy is tall, or dense and larvae are present in the lower part of the canopy, or if greater residual control is desired. DIAMOND may be applied at the lower rate (6 fl. oz.) to prevent velvet bean caterpillar build-up when the vegetative growth of soybeans is completed and as pod formation begins. Consult local Extension Service regarding infestation levels requiring treatment. Reapplication on a 10 (minimum) to 14-day interval may be required.
		Beet Armyworm, Cabbage Looper, Corn Earworm, Fall Armyworm, Soybean Looper, Stink Bug Nymphs, Tobacco Budworm	6 to 12	Apply at egg-hatch stage or when first signs of feeding occur. Use higher rates and higher spray volumes when larvae are more than ¼ inch long, the target pest population is 2X or more above state threshold level, or foliage canopy is tall or dense and larvae are present in the lower part of the canopy. Repeat application if damaging numbers reappear to protect new growth. Reapplication on a 10 (minimum) to 14-day interval may be required.
		Grasshoppers (Nymphs Only)	9 to 12	For best results, apply when the majority of infesting grasshoppers are in the early nymphal stages of development. When a large influx from neighboring fields occurs, a tank mix with a knockdown insecticide may be necessary to reduce the population to minimize extensive foliage feeding. Reapplication on a 10 (minimum) to 14-day interval may be required.
		Soybeans Use Restrictions: • **DO NOT** exceed 36 fl. oz (0.23 lb a.i.) of formulated product per acre per calendar year. • **DO NOT** feed treated soybean forage to livestock. • **DO NOT** apply more than three applications per calendar year. **NOTE:** • Aerial Application: Apply in sufficient water (3 to 10 gallons per acre) to achieve uniform coverage of foliage. • Ground Application: Apply in 9 to 35 gallons of water per acre to give uniform coverage. *Not registered for use in California.		

Crop	PHI	Target Pests	Rates (Fl. Ozs. / A)	Application Instructions
SUGARCANE*	**DO NOT** apply within 14 days of harvest.	Sugarcane Borer *(Diatrea saccharalis)*	9 to 12	Begin applications when live larvae infestations in the leaf sheath reach 5 % threshold as defined by the LSU AgCenter or Cooperative Extension Service. Use higher rates and higher spray volumes when infestation levels are high. Make repeat applications when threshold levels are again exceeded.
		Mexican rice borer *(Eoreuma loftini)*	12	Required spray volume is 2-5 gallons per acre for aerial applications and a minimum of 10 gallons per acre for ground applications. Use higher spray volumes when treating Mexican rice borer infestations. For the most effective control, scout fields. Reapplication on a 10 (minimum) to 14-day interval may be required.
		Sugarcane Use Restrictions: • **DO NOT** apply more than 60 fl. oz. (0.39 lb a.i.) of formulated product per acre per calendar year. • **DO NOT** apply more than 5 applications per year. • Only registered crops may be rotated in a treated field within 30 days of the final application. *Not registered for use in California.		

Crop	PHI	Target Pests	Rates (Fl. Ozs. / A)	Application Instructions
SUNFLOWER (SUBGROUP 20B), INCLUDING: CALENDULA; CASTOR OIL PLANT; CHINESE TALLOWTREE; EUPHORBIA; EVENING PRIMROSE; JOJOBA; NIGER SEED; ROSE HIP; SAFFLOWER; STOKES ASTER; SUNFLOWER; TALLOWWOOD; TEA OIL PLANT; VERNONIA; CULTIVARS, VARIETIES, AND/OR HYBRIDS OF THESE	**DO NOT** apply within 30 days of harvest.	Lygus bugs	12	Apply when the majority of the population is at egg hatch to the second instar. Required spray volume is a minimum of 5 gallons per acre for aerial applications and for ground applications. Reapplication on a 7 day interval.
		Sunflower (Subgroup 20B) Restrictions: • **DO NOT** apply more than (48 fl. oz. (0.31lb a.i.)) per acre per calendar year • **DO NOT** apply more than 4 applications per calendar year.		

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

PESTICIDE STORAGE: Keep this product in its tightly closed original container. Store in a cool, dry (preferably locked) area that is inaccessible to children and animals, in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed. Keep above freezing.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility. **DO NOT** pour or dispose of down the drain or sewer. Call your local solid waste agency for local disposal options.

CONTAINER HANDLING:

Nonrefillable Container (five gallons or less): Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling, if available. Clean container 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 reconditioning, or puncture and dispose of in a sanitary landfill, or other procedures allowed by State and local authorities.

Nonrefillable Container (greater than five gallons): Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling, if available. Clean container 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. Replace 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 reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures allowed by State and local authorities.

LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following **CONDITIONS**, **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. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of ADAMA. 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, ADAMA makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of ADAMA is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, ADAMA disclaims any liability whatsoever for special, incidental, or consequential damages resulting from the use or handling of this product.

LIMITATIONS OF LIABILITY: 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 or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at ADAMA's election, the replacement of product.

Diamond® is a registered trademark of an ADAMA Group Company.

Manufactured for:
Makhteshim Agan of North America, Inc (d/b/a ADAMA).
8601 Six Forks Road, Suite 300
Raleigh, NC 27615

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Diamond®

NOVALURON | GROUP 15 | INSECTICIDE

Insecticide for use on: Cotton (Subgroup 20C); Peanuts*; Sorghum*; Soybeans*; Sugarcane*; Sunflower (subgroup 20B)
* Not Registered For Use In California

ACTIVE INGREDIENT:	**% BY WT.**
Novaluron: 1-[3-chloro-4-(1,1,2-trifluoro-2-trifluoromethoxyethoxy)phenyl]-3-(2,6-difluorobenzoyl)urea**	9.3%
OTHER INGREDIENTS:	90.7%
TOTAL:	100.0%

**Contains 0.83 lbs. novaluron per gallon.

EPA Reg. No. 66222-35 **EPA Est. No. 37429-GA-001[BT]; 37429-GA-002[BO]**

Letter(s) in lot number correspond(s) to superscript in EPA Est. No.

KEEP OUT OF REACH OF CHILDREN

WARNING - AVISO

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.)

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals
WARNING: Causes substantial but temporary eye injury. **DO NOT** get in eyes or on clothing. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

How can we help?
1-866-406-6262

Manufactured for:
Makhteshim Agan of North America, Inc.
(d/b/a ADAMA)
8601 Six Forks Road, Suite 300
Raleigh, NC 27615

INSECTICIDE

Net Contents
2.5 gallons

ADAMA

FIRST AID
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 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF ON SKIN: 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. Have person sip a glass of water if able to swallow. **DO NOT** in duce vomiting unless told to do so by a poison control center or doctor. **DO NOT** give anything by mouth to an unconscious person.
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 for further treatment advice.
Emergency Assistance: Have the product container or label with you when calling a poison control center or doctor or going for treatment. For non-emergency general information on this pesticide product (including health concerns or pesticide incidents), you may call 1-877-250-9291, 24 hours per day, 7 days per week. **NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

In case of spills, fire, leaks or accidents call 1-800-535-5053.

STORAGE AND DISPOSAL

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For additional precautionary, handling and use statements, see inside of this booklet.

PEEL BACK BOOK HERE

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