



NOVALURON | GROUP 15 | INSECTICIDE

SUPRADO

Insecticide

For control of listed insect pests in or on golf courses; sports and recreational turf; commercial sod farms; and lawns on and around residential, commercial and institutional properties

ACTIVE INGREDIENT:

Novaluron 10.0%

OTHER INGREDIENTS: 90.0%

TOTAL: 100.00%

Contains 0.89 lbs. novaluron per gallon.



ADAMA

Consumer & Professional Solutions

Control Solutions, Inc.
5903 Genoa Red Bluff
Pasadena, TX 77507

EPA Reg. No: 53883-480
EPA Est. No: 53883-TX-002
Net Contents: ONE 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 side panel(s) for First Aid, Precautionary Statements, Directions for Use and Storage and Disposal.

FIRST AID	
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. For additional information on this pesticide product (including health concerns or medical emergencies), you may also contact SafetyCall® International at 1-844-685-9173 , twenty-four (24) hours per day, seven (7) days per week.	

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants; and
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, 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/PPE 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 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 contaminate water through drift of spray in wind. This product has a potential for runoff for several days to weeks after application. Poorly draining soil with shallow water tables is more prone to produce runoff. A level, well-maintained vegetative (grass) buffer strip between areas to which this product is applied and the surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

PHYSICAL AND CHEMICAL HAZARDS

Do not mix or allow coming in contact with Oxidizing agents. Hazardous Chemical reaction may occur.

DIRECTIONS FOR USE

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

READ ALL DIRECTIONS COMPLETELY BEFORE USE.

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 (made of any waterproof material); and
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. The area treated must be vacated by unprotected persons.

Do not enter or allow others to enter until sprays have dried.

Do not treat areas while unprotected humans or domestic animals are present in the treatment area. Because certain States may require more restrictive reentry intervals, consult your State Department of Agriculture for further information.

PRODUCT INFORMATION

NOVALURON, the active ingredient in SUPRADO, is an **insect growth regulator (IGR)** that controls immature stages of listed insect pests. The primary mode of action is to disrupt cuticle formation and deposition when immature insects change from one developmental stage to another, resulting in death at molting. Due to this mode of action, SUPRADO has no curative effect on adults that no longer molt. Novaluron has the potential to reduce the number of offspring produced by adults in some species. Consult the "Application Instructions" section of this label for timing instructions on specific pests.

SUPRADO should not be expected to provide a rapid, knock-down effect. IGRs such as SUPRADO do not kill immature susceptible insects until the next time they molt. Due to this, it may be necessary to wait several days or weeks to accurately evaluate SUPRADO's efficacy, depending on target species life cycle and growth stages present.

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, SUPRADO contains a Group 15 insecticide. Any insect population may contain individuals naturally resistant to SUPRADO and other Group 15 insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of SUPRADO or other Group 15 insecticides within a growing season, or among growing seasons, with different Groups that control the same pests.
- Use tank mixtures with an insecticide from a different group that is equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
 - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.

- Mixtures with components having the same IRAC mode of action classification are not recommended for IRM.
- When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
- Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
- The IRM 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 IRM benefit for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide 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 advisor for any additional IRM and/or IPM recommendations for specific site and pest problems in your area.
- For further information or to report suspected contact your local retailer or your local university extension specialist.

TANK MIXING: SUPRADO may also be used in tank mixtures. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Test compatibility of the intended tank mixture before adding SUPRADO to the spray or tank mix. Add proportionate amounts of each ingredient to a pint or quart jar, cap, shake, and let set 15 minutes. Formation of precipitates that do not readily redisperse indicates an incompatible mixture that cannot be used. Add other products in the following order:

1. Water-soluble bags,
2. Wettable powders,
3. Dry flowables,
4. Liquid flowables,
5. Emulsifiable concentrates, and
6. Soluble materials such as fertilizers.

If tank mixing with other products, especially soluble fertilizers containing nitrogen or boron, allow products packed in water soluble bags to dissolve first. Read and follow label directions of all products used in the tank mix before using. When tank mixing, always read all individual manufacturers' labels. In interpreting all labels for the tank mix, the most restrictive situations must apply. Tank mixtures are permitted only in those states where the tank mix partner is registered.

TURFGRASS APPLICATIONS

SUPRADO may be used to control listed soil- and thatch-inhabiting insect pests on turfgrass including residential lawns, business and office complexes, shopping complexes, multi-family residential complexes, golf courses, airports, cemeteries, parks, playgrounds, athletic fields and sod farms.

For optimum control of listed pests, applications should be timed as described for each species in the table below. Application timing can be based on historical monitoring of the site, previous records or experiences, current season adult trapping, soap flushes, or consult your State Extension Turf Specialist for specific information concerning timing in your region.

Apply SUPRADO in sufficient water (minimum 2 gallons per 1,000 ft²), depending on target pest, to provide adequate canopy and thatch penetration. Low volume applications (2 gallons per 1,000 ft²) must be watered in immediately with 0.25" – 0.5" of irrigation to move the active ingredient into the thatch and soil unless directed otherwise below for a specific pest. The use of accurately calibrated equipment normally used for the application of turfgrass insecticides is recommended. Use equipment which will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off target drift. Check calibration periodically to ensure that equipment is working properly.

USE RESTRICTIONS:

- **DO NOT** apply through any irrigation system.
- **DO NOT** apply this product in a way that will contact people or pets.
- **DO NOT** allow children or pets to enter treated areas until applications have been watered in and areas have dried.
- **DO NOT** apply more 4 quarts SUPRADO (0.89 lbs. of novaluron) per acre in a single application.
- **DO NOT** make applications at less than 30 day intervals.
- **DO NOT** exceed a total of 9.2 quarts SUPRADO (2.03 lbs. of novaluron) per acre per year.
- **DO NOT** make applications when turfgrass areas are waterlogged or the soil is saturated with water. Sufficient distribution of the active ingredient cannot be achieved under these conditions. The treated turf area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile.
- **DO NOT** mow until after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected.

SUPRADO TURF APPLICATION RATES				
Target Pests	SUPRADO quarts/acre	SUPRADO fl. oz./1,000 ft ²	lbs. A.I. per acre	Application Instructions
Annual bluegrass weevil larvae [<i>Listronotus maculicollis</i>]	3 – 4	2.2 - 3	0.67 – 0.89	<p>Water applications in immediately with 0.1" of irrigation.</p> <p>Preventive Applications: To avoid turf damage, applications should be timed to adult peak migration period, early-instar stage (inside the stem), or at peak 3rd-instar emergence timing before visible damage typically develops.</p> <p>SUPRADO can also be used on overlapping growth stages as a curative approach in second-generation populations occurring later in summer months.</p>

				Repeat if desired every 30 days to target larvae of second and third generations
Billbug larvae Bluegrass billbug [, <i>Sphenophorus parvulus</i>] Hunting billbug[, <i>Sphenophorus venatus vestitus</i>]	3 - 4	2.2 - 3	0.67 - 0.89	Time application to target larvae when they leave the grass stems to feed on turf crowns and roots
Turf caterpillars Armyworms, Cutworms, Sod Webworms	1 - 2	0.7 - 1.5	0.22 - 0.45	If site data suggests a history of caterpillars, SUPRADO can be used as a preventative treatment. Repeat applications as necessary for subsequent generations.
White grubs Northern & Southern masked chafers[, <i>Cyclocephala borealis</i> , <i>C. immaculata</i> , and/or <i>C. lurida</i>]; Asiatic garden beetle[, <i>Maladera castanea</i>]; European chafer[, <i>Rhizotrogus majalis</i>]; Green June beetle[, <i>Cotinis nitida</i>]; May or June beetle[, <i>Phyllophaga spp.</i>] Japanese beetle[, <i>Popillia japonica</i>] Oriental beetle[, <i>Anomala orientalis</i>]	3 - 4	2.2 - 3	0.67 - 0.89	Preventive Applications: Make applications through peak egg hatch of target species. Use the upper end of the rate range if application is made 14 days or more prior to peak adult flight and/or egg laying. Post egg hatch application: After egg hatch of the target species has occurred or there is obvious turf damage from the current generation, use the upper end of the rate range.
Chinch bug larvae Southern chinch bug[, <i>Blissus insularis</i>] Hairy chinch bug[, <i>Blissus leucopterus</i>]	3 - 4	2.2 - 3	0.67 - 0.89	SUPRADO controls immature stages of chinch bugs.
Black turfgrass atatenius larvae [, <i>Atatenius spretulus</i>]	3 - 4	2.2 - 3	0.67 - 0.89	Preventive Applications: Apply when early stages of first generation grubs

				are present. Higher rate may be required for late-stage grubs causing visible damage. Target grub stages of second generation in regions where they occur.
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Turf Application Dilution Chart

Application Volume gal./1,000 ft ²	Turf Application Rates			Quarts of SUPRADO diluted to these volumes of finished spray			
	SUPRADO fl. oz./1,000 ft ²	SUPRADO quarts/acre	lbs. A.I. per acre	1 gallon	5 gallons	10 gallons	100 gallons
2	0.7	1	0.22	0.5	3	5	50
	1.5	2	0.45	1	5	10	100
	2.2	3	0.67	1.5	8	15	150
	3.0	4	0.89	2	10	20	200
3	0.7	1	0.22	0.3	1.7	3.3	33.3
	1.5	2	0.45	0.7	3.3	6.7	66.7
	2.2	3	0.67	1	5	10	100
	3.0	4	0.89	1.3	6.7	13	133
4	0.7	1	0.22	0.25	1.25	2.5	25
	1.5	2	0.45	0.5	2.5	5	50
	2.2	3	0.67	0.75	3.75	7.5	75
	3.0	4	0.89	1	5.0	10	100
5	0.7	1	0.22	0.2	1	2	20
	1.5	2	0.45	0.4	2	4	40
	2.2	3	0.67	0.6	3	6	60
	3.0	4	0.89	0.8	4	8	80

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original container in secured, dry storage area. Do not store above 100°F for extended periods of time. Storage below 32°F may cause freezing. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

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

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container! Empty container by using the product according to the label directions. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows:

[(<5 gal) Empty the remaining contents into application equipment or a mix tank and drain for 10 sec after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 sec. 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 2 more times.]

[(>5 gal) Empty remaining contents into application equipment or a mix tank. Fill the container 1/4 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 sec. 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 2 more times.]

Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other means allowed by Federal, state or local authorities.

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

WARRANTY STATEMENT

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

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