Cormoran™

For agricultural use only on berries, brassicas, cotton, fruiting vegetables, pome fruits, potatoes, stone fruits, strawberries, and sweet corn

ACTIVE INGREDIENTS: % BY WT.
Novaluron ........................................ 9.1%
Acetamiprid .................................... 7.3%

OTHER INGREDIENTS: ......................... 83.6%
TOTAL: ........................................... 100.0%

CORMORAN™ is a dispersible concentrate insecticide contains 0.84 pounds of novaluron per gallon and 0.67 pounds of acetamiprid per gallon.

EPA Reg. No. 66222-264
EPA Est. No. 37429-GA-001²; 37429-GA-002ᵇ; 37429-GA-003ᵇ

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

KEEP OUT OF REACH OF CHILDREN
CAUTION / PRECAUTION

Si usted no entiende la etiqueta, busque a alquien 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 First Aid, Precautionary Statements, and Directions for Use, see inside of this booklet.

How can we help?
1-866-406-6262
# FIRST AID

## IF IN EYES:
- Hold eye open and rinse slowly and gently with water for 15 to 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 to 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 induce 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.

### Note to Physician:
Contact with the eyes may cause irritation. 
Symptoms of Poisoning: The compound does not cause any definite symptoms that would be diagnostic.

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, medical emergencies, or pesticide incidents, you may call PROSAR at 1-877-250-9291, 24 hours per day, 7 days per week.

In case of spills, fire, leaks or accident, call INFOTRAC at 1-800-535-5053.

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# PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### CAUTION/PRECAUTION
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. Keep out of reach of children and domestic animals.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below.
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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product’s concentrate. Do not reuse them.

Applicators and other handlers must wear:
- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, or butyl rubber > 14 mils or neoprene rubber > 14 mils or polyvinyl chloride > 14 mils or Viton > 14 mils.
- Shoes plus socks

## ENGINEERING CONTROLS STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

## 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. Wash thoroughly and change into clean clothing.
ENVIRONMENTAL HAZARDS

This pesticide is toxic to birds and aquatic invertebrates. This product is toxic to bees exposed to direct treatment. Do not apply this product while bees are actively visiting the treatment area. Do not apply directly to water, or 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 washwater or rinsate. Do not contaminate water used for irrigation or domestic purposes. 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. In order to minimize the possibility of developmental effects on pollinator larvae, including honey bee brood, do not use CORMORAN™ on blooming crops.

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

GROUND WATER ADVISORY

Acetamiprid has properties and characteristics associated with chemicals detected in ground water. Acetamiprid may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

SURFACE WATER ADVISORY

Acetamiprid 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. Acetamiprid is classified as having a high potential for reaching both surface water via runoff several months or more after application. Avoid accidental or intentional application of this product to ditches, swales, drainage ways, or impervious surfaces such as driveways. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

DIRECTIONS FOR USE

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

**USE RESTRICTIONS**

- Apply this product 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 commercial greenhouses, except tomatoes and cucumbers, is prohibited.
- Do not allow CORMORAN™ to drift on grapes as leaf spotting may occur.
- For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**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:


**Buffer Zone for Ground Application (All Crops):** Do not apply by ground equipment within 75 feet of bodies of water such as lakes, reservoirs, rivers, permanent streams, natural ponds, marshes or estuaries. 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 by air equipment within 150 feet of bodies of water such as lakes, reservoirs, rivers, permanent streams, natural ponds, marshes or estuaries. 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 by air equipment within 250 feet of bodies of water such as lakes, reservoirs, rivers, permanent streams, natural ponds, marshes or estuaries. 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 its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, 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
- Chemical-resistant gloves, such as barrier laminate or butyl rubber > 14 mils or neoprene rubber > 14 mils or polyvinyl chloride > 14 mils or Viton > 14 mils
- Shoes plus socks
- Protective eyewear

PRODUCT INFORMATION

CORMORAN™ is a broad-spectrum insecticide containing the active ingredients novaluron and acetamiprid. This mixture controls many sucking and chewing insects on the crops listed in this label. Novaluron and acetamiprid must be ingested and/or contacted by listed 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 the majority of insect population is at egg hatch or first instar. 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 CORMORAN™ per DIRECTIONS FOR USE to keep population within threshold limits. Scout fields regularly to determine optimum application timing based on pest levels and stages of growth.

For resistance-management, CORMORAN™ contains both a Group 15 and a Group 4A insecticide.

Any insect population may contain individuals naturally resistant to CORMORAN™ and other Group 15 and/or Group 4A insecticides. 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 reduce the potential for developing insect resistance, rotate to an insecticide with a different mode of action. Monitor treated pest populations for resistance development. Read the product label before applying any insecticide and follow label directions.

To delay insecticide resistance, take the following steps:

- Rotate the use of CORMORAN™ or other Group 15 and/or Group 4A insecticides 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 CORMORAN™ per season.
- Use tank mixes with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
  - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
  - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticidal 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 Makhteshim Agan of North America, Inc. representatives at (toll free number) or at (Internet site).
APPLICATION PROCEDURES

Spray Volume: CORMORAN™ may be applied in a minimum of 15 gallons of spray solution per acre by ground sprayer or in a minimum of 5 gallons of spray solution per acre by aircraft spray equipment. Check equipment calibration frequently. Complete coverage and uniform application are essential for the most effective results, especially when lower spray volumes are applied. If necessary, increase the spray volume per acre for complete crop coverage (e.g., pome and stone fruit apply up to 400 GPA).

Chemigation: For chemigation use only on cranberries and potatoes. Chemigation should only be used after foliage has emerged and only through overhead sprinkler irrigation systems. Apply this product only through overhead sprinkler irrigation systems including center pivot, and lateral move, side (wheel) roll, solid set, or hand move irrigation systems after cranberry and potato foliage has emerged. 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. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. The overhead sprinkler chemigation 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 for materials that are compatible with pesticides and capable of being fitted with a system interlock.

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. 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 out of the year. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) of the functional equivalent in the water supply line upstream from the 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 flow 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 shut down. 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. Do not apply this product through any type of irrigation system. 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. Do not apply when wind speed favors drift beyond the area intended for treatment.

Sprinkler Chemigation: For sprinkler chemigation use only on cranberries and potatoes. For continuously moving systems, the mixture containing CORMORAN™ 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.

For permanently fixed systems, the pesticide containing CORMORAN™ must be injected continuously and uniformly into the irrigation water line as the sprinkler system is moving. 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. 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 out of the year. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) of the functional equivalent in the water supply line upstream from the 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 flow 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 shut down. 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. Do not apply this product through any type of irrigation system. 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. Do not apply when wind speed favors drift beyond the area intended for treatment.

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.

Sprinkler Chemigation for permanently fixed systems:

* 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.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) of the functional equivalent in the water supply line upstream from the 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 flow 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 shut down. 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. Do not apply this product through any type of irrigation system. 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. Do not apply when wind speed favors drift beyond the area intended for treatment.

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.

**Ground Application:** Apply required dosage by conventional ground sprayer equipment capable of delivering a minimum of 15 gallons of water per acre 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 hollow cone, disc-core hollow cone or twin jet fan nozzles suitable for insecticide spraying.

**Orchard Application:** Apply CORMORAN™ by conventional orchard sprayers that are calibrated to deliver 50 to 400 gallons of carrier to the trees. Apply at a carrier volume that insures complete coverage to trees. Operate spray equipment at proper ground speeds, adequate sprat pressures and spray volumes that assure that the air volume within the tree canopy is completely replaced by the output from the airblast sprayer resulting in proper coverage of the target crop. Do not use in alternate row middle application patterns since this method will result in off-timing application and poor performance.

**Aerial Application:** For aerial application in a total of 5 to 10 gallons of water per acre, using a nozzle configuration that will provide a median droplet size of 200-300 microns. Higher gallonage 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 wingspan, and swath markers. Use flagging or GPS system during application. Make applications when wind speed is between 2 and 10 MPH. Do not make application when wind speed exceeds 10 MPH. Under low humidity and high temperatures, adjust spar volume upward to compensate for evaporation of spray droplets.

**Spray Drift Management**

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interaction of many equipment-and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions regarding spraying.

**For groundboom applications:**
- Do not apply with a nozzle height greater than 4 feet above the ground or crop canopy, and when wind speed is 10 mph or less at the application site as measured by an anemometer outside of the orchard on the upwind side. The applicator must also use all other measures necessary to control drift.

**For orchard airblast applications:**
- Turn off outward pointing nozzles at row ends and outer rows. Apply only when wind speeds is <10 mph at the application site as measured by an anemometer outside of the orchard on the upwind side. The applicator must also use all other measures necessary to control drift.

**For aerial applications:**
- The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or 90% of the rotor blade diameter. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45°. Where states have more stringent regulations, they should be observed.
- The applicator should be familiar with and take into account the information covered in the Spray Drift Management section. To avoid spray drift, do not apply under windy conditions. Avoid spray overlap as crop injury may result.

**Information on Droplet Size**

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (see Wind, Temperature and Humidity and Temperature Inversions sections).

**Controlling Droplet Size**

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer’s recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle-type that is designed for the intended application. With most nozzle types, such as low-drift nozzles, narrower spray angles produce larger droplets. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.
Boom Length:  
For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height  
Applications should be made at the lowest height consistent with efficacy and flight safety. Do not make at a height greater than 10 feet above the top of the largest plants unless a greater height is recommended for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment  
When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

Wind  
Drift potential is lowest between wind speeds of 2-10 mph. However, many factors including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they can minimize spray drift.

Temperature and Humidity  
When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions  
Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified 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.

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.

MIXING PROCEDURES

1. Be sure sprayer is clean and not contaminated with any other materials or crop injury or sprayer clogging may result.
2. Fill tank 1/2 full with clean water.
3. Start agitation.
4. Be certain that the agitation system is working properly and creates a rippling or rolling action on the liquid surface.
5. Pour appropriate amount of product directly from container into partially filled spray tank.
6. Continue filling tank until desired dilution has been achieved. Increase agitation if necessary to maintain surface action.
7. Maintain continuous agitation during mixing and application to assure uniform suspension. If mixture sits without agitation for extended periods, agitate the mixture for at least 10 minutes before use.

When an adjuvant is to be used with this product, ADAMA suggests the use of a Chemical Producers and Distributors Association (CPDA) certified adjuvant. Compatibility: To determine the compatibility of CORMORAN™ with other products, the following procedure should be followed: Pour the recommended proportions of the products into a suitable container of water, mix thoroughly and allow to stand at least five (5) minutes. If the combination remains mixed or can be re-mixed readily, the mixture is considered physically compatible. For further information, contact your local ADAMA representative.
### Beans

<table>
<thead>
<tr>
<th>CROPS</th>
<th>PESTS</th>
<th>PRODUCT RATE PER ACRE</th>
<th>REMARKS</th>
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</thead>
<tbody>
<tr>
<td>Chickpea, Garbanzo Bean, Sweet Lupine, White Sweet Lupine White Lupine, Gain Lupine, Kidney Bean, Lima Bean, Mung Bean, Pinot Bena, Snap Bean, Wax Bean, Broad Bean, Fava Bean, Asparagus Bean, Blackeyed Pea, and Cowpea and Cultivars, and varieties and/or hybrids of these.</td>
<td>Aphids, Armyworms, Bean leaf beetle, Bean platspid, Cucumber beetle, Leafhoppers, Loopers, Mexican bean beetle, Webworms</td>
<td>9.0-12.0 fl oz</td>
<td>Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control. Aphid and thrips species may differ in susceptibility to this product. If you are unsure of the aphid or thrips species present and its susceptibility, use the higher rates within the listed rate range.</td>
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<tr>
<td></td>
<td>Lygus, Thrips, Whiteflies</td>
<td>12.0 fl oz</td>
<td>Do not apply more than two applications against whiteflies or thrips per season.</td>
</tr>
</tbody>
</table>

**Beans Restrictions:**
- Do not apply more than 0.23 lb Novaluron active ingredient containing products per acre per calendar year.
- Do not apply more than 0.3 lb Acetamiprid active ingredient containing products per acre per calendar year.
- Do not apply more than 36.0 fl oz of formulated product per acre per season.
- Repeat applications if needed to maintain control, but do not make applications less than 7 days apart.
- Preharvest interval of 7 days.
- Restricted entry interval (REI) of 12 hours.
- Use higher rates and higher spray volumes when larvae are large or foliage canopy is tall or dense.

### Berries (Low-Growing) (see separate directions for Strawberries)

<table>
<thead>
<tr>
<th>CROPS</th>
<th>PESTS</th>
<th>PRODUCT RATE PER ACRE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bearberry, Billberry, Blueberry (lowbush), Cloudberry, Cranberry (lowbush), Lingonberry, Muntries, Partridgeberry and Cultivars, Varieties and/or hybrids of these.</td>
<td>Aphids, Leafhoppers</td>
<td>9.0-12.0 fl oz</td>
<td>Apply in a minimum finished spray volume of 10 gallons per acre by air or 20 gallons per acre per ground.</td>
</tr>
<tr>
<td></td>
<td>Blackheaded Fireworm, Blueberry Maggot, Cranberry Blossomworm, Cranberry Flea Beetle, Cranberry Fruitworm, Cranberry Spanworm, Cranberry Tipworm, Drosophila spp (Including Spotted Winged Drosophila), Gypsy Moth, Japanese Beetle, Oblique Banded Leaf Roller, Plant Bugs, Sap Beetle, Sparganothis Fruitworm, Spanworm, Spittlebug, Spotted Fireworm, Thrips, Whitefly</td>
<td>12.0 fl oz</td>
<td></td>
</tr>
</tbody>
</table>

**Berries (Low-Growing) (see separate directions for Strawberries) Restrictions:**
- Do not apply more than 0.23 lb Novaluron active ingredient containing products per acre per calendar year.
- Do not apply more than 0.26 lb Acetamiprid active ingredient containing products per acre per calendar year.
- Do not apply more than 35.0 fl oz of formulated product per acre per season.
- Repeat applications if needed to maintain control, but do not make applications less than 7 days apart.
- Preharvest interval of 1 day.
- Restricted entry interval (REI) of 12 hours.
- Some phytotoxic symptoms to foliage in the form of mottled chlorosis may be observed when CORMORAN™ Is applied to blueberries under conditions of high temperatures and/or drought stress, particularly during periods of new, tender shoot growth. Such phytotoxic symptoms will not occur on future growth, and will not affect fruiting or yields. Higher spray volumes and lower spray concentration will minimize the risk of transient phytotoxic symptoms on newly expanded foliage.
- Do not flood cranberry bogs within 60 days following an application of CORMORAN™.
### Bushberries

<table>
<thead>
<tr>
<th>CROPS</th>
<th>PESTS</th>
<th>PRODUCT RATE PER ACRE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aronia Berry, Blueberry (highbush), Buffalo Currant, Chilean Guava, Cranberry (highbush), Black Currant, Red Currant, Elderberry, European Barberry, Gooseberry, Honeysuckle (edible), Huckleberry, Jostaberry, Juneberry, Lingonberry, Native Currant, Sea Buckthorn and Cultivars, Varieties and/or hybrids of these.</td>
<td>Aphids, Blueberry Flea Beetle, Blueberry Gall Midge, Blueberry Maggot, Blueberry Spanworm, Cherry Fruitworm, Cranberry Fruitworm, Drosophil Spp. Including Spotted Wing Drosophila, Flea Beetle, Japanese Beetle, Leafhoppers, Oblique-banded Leafroller, Plum Curculio, Sap Beetles, Spanworm, Sparganothis Fruitworm, Strawberry Rootworm, Tarnished Plant Bug, Thrips, Western Raspberry Fruit Worm, Whitefly</td>
<td>20 fl oz</td>
<td>Apply in a minimum finished spray volume of 5 gallons per acre by air or 20 gallons per acre by ground.</td>
</tr>
</tbody>
</table>

**Bushberries Restrictions:**
- Do not apply more than 0.58 lb Novaluron active ingredient containing products per acre per calendar year.
- Do not apply more than 0.5 lb Acetamiprid active ingredient containing products per acre per calendar year.
- Do not apply more than 89.0 fl oz of formulated product per acre per season.
- Repeat applications if needed to maintain control, but do not make applications less than 10 days apart.
- Preharvest interval of 8 days.
- Restricted entry interval (REI) of 12 hours.
- Some phytotoxic symptoms to foliage in the form of mottled chlorosis may be observed when CORMORAN™ is applied to blueberries under conditions of high temperatures and/or drought stress, particularly during periods of new, tender shoot growth. Such phytotoxic symptoms will not occur on future growth, and will not affect fruiting or yields. Higher spray volumes and lower spray concentration will minimize the risk of transient phytotoxic symptoms on newly expanded foliage.

### Cotton

<table>
<thead>
<tr>
<th>CROPS</th>
<th>PESTS</th>
<th>PRODUCT RATE PER ACRE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton</td>
<td>Aphids, Tobacco Budworm, Cotton Bollworm Fleahoppers</td>
<td>6.0-9.0 fl oz</td>
<td>Do not apply more than four applications against armyworm or other foliage feeding caterpillars per season.</td>
</tr>
<tr>
<td></td>
<td>Beet Armyworm, Fall Armyworm, Foliage Feeding Caterpillars</td>
<td>6.0-12.0 fl oz</td>
<td>Do not apply more than two applications against whiteflies per season.</td>
</tr>
<tr>
<td></td>
<td>Plantbugs, Stink bugs, Thrips</td>
<td>9.0-12.0 fl oz</td>
<td>Do not apply more than two applications against thrips per season.</td>
</tr>
<tr>
<td></td>
<td>Whitefly</td>
<td>12 fl oz</td>
<td></td>
</tr>
</tbody>
</table>

**Cotton Restrictions:**
- Do not apply more than 0.27 lb Novaluron active ingredient containing products per acre per calendar year.
- Do not apply more than 0.4 lb Acetamiprid active ingredient containing products per acre per calendar year.
- Do not apply more than 41.0 fl oz of formulated product per acre per season.
- Repeat applications if needed to maintain control, but do not make applications less than 7-14 days apart.
- Preharvest interval of 30 days.
- Restricted entry interval (REI) of 12 hours.
### Cucurbits

<table>
<thead>
<tr>
<th>CROPS</th>
<th>PESTS</th>
<th>PRODUCT RATE PER ACRE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balsam Apples, Balsam Pears, Bitter Melon, Cantaloupe, Chayote (Fruit), Chinese Cucumber, Chinese Waxgour, Citron Melon, Cucumbers, Gherkin, Gourds (Hyotan, Cucuzza, Hechima, Chinese okra), Muskmelon (Cantaloupe, Honeydew), Pumpkins, Squash (Summer and Winter: Butternut, Calabaza, Hubbard, Acorn, Spaghetti), and Watermelon and Cultivars, Varieties and/or hybrids of these.</td>
<td>Armyworms, Aphids, Cucumber Beetles, Leafhoppers, Leafminers (Lepidopteran), Loopers, Whitefly</td>
<td>9.0-12.0 fl oz</td>
<td>Apply in a minimum finished spray volume of 5 gallons per acre by air or 20 gallons per acre by ground. Do not apply more than two applications against whiteflies or thrips per season.</td>
</tr>
<tr>
<td></td>
<td>Leafminer (Dipteran), Melonworm, Pickleworm, Sap Beetles, Squash Bug, Squash Vine Borer, Thrips</td>
<td>12.0 fl oz</td>
<td></td>
</tr>
</tbody>
</table>

**Cucurbits Restrictions:**
- Do not apply more than 0.23 lb Novaluron active ingredient containing products per acre per calendar year.
- Do not apply more than 0.5 lb Acetamiprid active ingredient containing products per acre per calendar year.
- Do not apply more than 35.0 fl oz of formulated product per acre per season.
- Repeat applications if needed to maintain control, but do not make applications less than 14 days apart.
- Preharvest interval of 1 day.
- Restricted entry interval (REI) of 12 hours.

### Fruiting Vegetables

<table>
<thead>
<tr>
<th>CROPS</th>
<th>PESTS</th>
<th>PRODUCT RATE PER ACRE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eggplant, Groundcherry, Pepino, Pepper (Chile, Bell, Non Bell, Pimento, Sweet), Tomato (Including Bush and Currant Tree), Tomatillo and Cultivars, Varieties and/or hybrids of these.</td>
<td>Colorado Potato Beetle</td>
<td>9.0 fl oz</td>
<td>Apply in a minimum finished spray volume of 5 gallons per acre by air or 20 gallons per acre by ground. For Colorado potato beetle, do not apply more than twice to a single generation and do not apply to successive generations. Do not apply more than two applications against whiteflies or thrips per season.</td>
</tr>
<tr>
<td></td>
<td>Armyworms, Aphids, European Corn Borer, Foliage Feeding Caterpillars, Leafminers (Lepidopteran), Loopers, Pepper Weevil, Tomato Fruitworm, Tomato Hornworm, Tomato Pinworm, Whitefly (Field Only)</td>
<td>9.0-12.0 fl oz</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leafminers (Dipteran), Stink Bugs, Thrips</td>
<td>12.0 fl oz</td>
<td></td>
</tr>
</tbody>
</table>

**Fruiting Vegetables Restrictions:**
- Do not apply more than 0.23 lb Novaluron active ingredient containing products per acre per calendar year.
- Do not apply more than 0.3 lb Acetamiprid active ingredient containing products per acre per calendar year.
- Do not apply more than 35.0 fl oz of formulated product per acre per season.
- Repeat applications if needed to maintain control, but do not make applications less than 7 days apart.
- Preharvest interval of 7 days.
- Restricted entry interval (REI) of 12 hours.
# Head and Stem Brassica Vegetables

<table>
<thead>
<tr>
<th>CROPS</th>
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<th>PRODUCT RATE PER ACRE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broccoli, Chinese</td>
<td>Alfalfa Looper, Armyworms, Aphids, Cabbage Looper, Cabbage Webworm, Corn Earworm, Cucumber Beetles, Imported Cabbageworm, Leafminers (Lepidopteran), Southern Cabbageworm</td>
<td>9.0-12.0 fl oz</td>
<td>Apply in a minimum finished spray volume of 5 gallons per acre by air or 20 gallons per acre by ground. Do not apply more than two applications against whiteflies or thrips per season.</td>
</tr>
<tr>
<td>Broccoli, Brussels Sprouts, Cabbage, Chinese</td>
<td>Bagrada Bugs, Diamondback Moth, Leafminers (Dipteran), Lygus Bugs, Stink Bugs, Swede Midge, Thrips, Vegetable Weevil, Whitefly (field use only)</td>
<td>12.0 fl oz</td>
<td></td>
</tr>
</tbody>
</table>

**Head and Stem Brassica Vegetables Restrictions:**

- Do not apply more than 0.15 lb Novaluron active ingredient containing products per acre per calendar year.
- Do not apply more than 0.37 lb Acetamiprid active ingredient containing products per acre per calendar year.
- Do not apply more than 23.0 fl oz of formulated product per acre per season.
- Repeat applications if needed to maintain control, but do not make applications less than 7 days apart.
- Preharvest interval of 7 days.
- Restricted entry interval (REI) of 12 hours.

### Pears

<table>
<thead>
<tr>
<th>CROPS</th>
<th>PESTS</th>
<th>PRODUCT RATE PER ACRE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pear, Asian</td>
<td>Aphids, Apple Maggot, Budmoths, Codling Moth, Dogwood Borer, European Apple Sawfly, Lacinobia Fruitworm, Leafhoppers, Leafminers, Leafrollers, Lesser Appleworm, Plum Curculio, Japanese Beetle, Mealybug, Mullein Plant Bug, San Jose Scale (Suppression), Tentiform Leafminer, Oriental Fruit Moth, Plant Bug, Psylla, White Apple Leafhopper, Stink Bugs (Including Brown Marmorated Stink Bug)</td>
<td>20.0-28.0 fl oz</td>
<td>Apply in a minimum finished spray volume of 50 to 400 gallons per acre by ground and insure complete spray coverage</td>
</tr>
</tbody>
</table>

**Pears Restrictions:**

- Do not apply more than 0.97 lb Novaluron active ingredient containing products per acre per calendar year.
- Do not apply more than 0.6 lb Acetamiprid active ingredient containing products per acre per calendar year.
- Do not apply more than 95.0 fl oz of formulated product per acre per season.
- Repeat applications if needed to maintain control, but do not make applications less than 10-14 days apart.
- Preharvest interval of 12 days.
- Restricted entry interval (REI) of 12 hours.
- Phytotoxicity: Given the right set of environmental conditions phytotoxicity may occur when applied after pear turn-down. Factors increasing the probability of crop injury are: 1) varietal sensitivity; 2) excessive rainfall, high temperatures and/or drought. And 3) incompatibility with other products (e.g., oils or strobilurin fungicides).
### Pome Fruits (except Pears) see separate directions for Pears

<table>
<thead>
<tr>
<th>CROPS</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Apple, Crabapple, Loquat, Mayhaw and Cultivars, Varieties and/or hybrids of these.</td>
<td>Aphids, Apple Maggot, Budmaths, Codling Moth, Dogwood Borer, European Apple Sawfly, Lacaonobia Fruitworm, Leafhoppers, Leafminers, Leafrollers, Lesser Appleworm, Plum Curculio, Japanese Beetle, Mealybug, Mullein Plant Bug, San Jose Scale (Suppression), Oriental Fruit Moth, Plant Bug, Pear Psylla, Psylla, White Apple Leafhopper, Stink Bugs (Including Brown Marmorated Stink Bug), Thrips*</td>
<td>20.0-28.0 fl oz</td>
<td>Apply in a minimum finished spray volume of 50 to 400 gallons per acre by ground and insure complete spray coverage. Do not apply more than two applications against whiteflies or thrips per season.</td>
</tr>
</tbody>
</table>

**Pome Fruit (except Pears) Restrictions:**
- Do not apply more than 0.62 lb Novaluron active ingredient containing products per acre per calendar year.
- Do not apply more than 0.6 lb Acetamiprid active ingredient containing products per acre per calendar year.
- Do not apply more than 95.0 fl oz of formulated product per acre per season.
- Repeat applications if needed to maintain control, but do not make applications less than 12 days apart.
- Preharvest interval of 14 days.
- Restricted entry interval (REI) of 12 hours.
* Not for Use in California

### Potatoes and Sweet Potatoes

<table>
<thead>
<tr>
<th>CROPS</th>
<th>PESTS</th>
<th>PRODUCT RATE PER ACRE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arracacha, Arrowroot, Chinese Artichoke, Jerusalem Artichoke, Canna (edible), Cassava (Bitter and Sweet), Chayote (Root), Chufa, Dasheen, Ginger, Lëren, Sweet Potato Tanier, Turmeric, Yam (Bean and True) and Cultivars, Varieties and/or hybrids of these.</td>
<td>Armyworms, Colorado Potato Beetle, Cucumber Beetle, Flea Beetle, Foliage Feeding Caterpillars, Leafhoppers, Loopers, Potato Tuberworm, Sweet Potato Leafminer, Aphids, European Corn Borer, Potato Psyllid, Whiteflies</td>
<td>6.0-12.0 fl oz</td>
<td>Apply in a minimum finished spray volume of 5 gallons per acer by air or 20 gallons per acer by ground. Do not apply to successive generations of Colorado potato beetle. Do not apply more than two applications against whiteflies per season.</td>
</tr>
</tbody>
</table>

**Potatoes and Sweet Potatoes Restrictions:**
- Do not apply more than 0.15 lb Novaluron active ingredient containing products per acre per calendar year.
- Do not apply more than 0.3 lb Acetamiprid active ingredient containing products per acre per calendar year.
- Do not apply more than 23.0 fl oz of formulated product per acre per season.
- Repeat applications if needed to maintain control, but do not make applications less than 7-14 days apart.
- Preharvest interval of 14 days.
- Restricted entry interval (REI) of 12 hours.
- Do not make a foliar application of CORMORAN™ following a seed treatment application of acetamiprid in the same crop.
### Stone Fruits

<table>
<thead>
<tr>
<th>CROPS</th>
<th>PESTS</th>
<th>PRODUCT RATE PER ACRE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apricot, Japanese Apricot, Capulin, Black Cherry, Nanking Cherry, Sweet Cherry, Tart Cherry, Chinese Jujube, Nectarine, Peach, Plum, American Plum, Beach Plum, Canada Plum, Cherry Plum, Chicksaw Plum, Damson Plum, Japanese Plum, Klamath Plum, Prune, Plumcote, Sloe, and Cultivars, Varieties and/or hybrids of these.</td>
<td>Aphids, Leafhoppers, Lesser Peachtree Borer, Peachtree Borer, Sap Beetle, Black Cherry Fruit Fly, Cat-facing Insects, Cherry Fruit Fly, Fruit Flies, Glassywinged Sharpshooter, Japanese Beetle, Leafrollers, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Rose Chafer, San Jose Scale, Stink Bugs, (Including Brown Marmorated Stink Bug) Western Cherry Fruit Fly or Drosophila spp (Including Spotted Winged Drosophila), Thrips *</td>
<td>20.0 fl oz</td>
<td>Apply in a minimum finished spray volume of 50 to 400 gallons per acre by ground and insure complete spray coverage. Do not make alternate row treatments.</td>
</tr>
</tbody>
</table>

**Stone Fruits Restrictions:**

- Do not apply more than 0.97 lb Novaluron active ingredient containing products per acre per calendar year.
- Do not apply more than 0.6 lb Acetamiprid active ingredient containing products per acre per calendar year.
- Do not apply more than 95.0 fl oz of formulated product per acre per season.
- Repeat applications if needed to maintain control, but do not make applications less than 10 days apart.
- Preharvest interval of 8 days.
- Restricted entry interval (REI) of 12 hours.

* Not for Use in California

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### Strawberries

<table>
<thead>
<tr>
<th>CROPS</th>
<th>PESTS</th>
<th>PRODUCT RATE PER ACRE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strawberry</td>
<td>Aphids, Leafhoppers, Spittlebug</td>
<td>9.0-12.0 fl oz</td>
<td>Apply in a minimum finished spray volume of 10 gallons per acre by air or 20 gallons per acre by ground.</td>
</tr>
<tr>
<td></td>
<td>Armyworms, Asian Cockroach, Corn Earworm, Drosophila spp (Including Spotted Winged Drosophila), Japanese Beetle, Loopers, Plant Bugs, Sap Beetle, Thrips, Webworms, Whiteflies</td>
<td>12.0 fl oz</td>
<td></td>
</tr>
</tbody>
</table>

**Strawberries Restrictions:**

- Do not apply more than 0.23 lb Novaluron active ingredient containing products per acre per calendar year.
- Do not apply more than 0.26 lb Acetamiprid active ingredient containing products per acre per calendar year.
- Do not apply more than 35.0 fl oz of formulated product per acre per season.
- Repeat applications if needed to maintain control, but do not make applications less than 7 days apart.
- Preharvest interval of 1 day.
- Restricted entry interval (REI) of 12 hours.
## Sweet Corn

<table>
<thead>
<tr>
<th>CROPS</th>
<th>PESTS</th>
<th>PRODUCT RATE PER ACRE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweet Corn</td>
<td>Aphids, Armyworms, Corn Earworms, Cucumber Beetle, European Corn Borer, Grasshoppers (adults only)</td>
<td>9.0-12.0 fl oz</td>
<td>Apply in a minimum finished spray volume of 5 gallons per acre by air or 20 gallons per acre by ground.</td>
</tr>
<tr>
<td></td>
<td>Corn Flea Beetle, Corn Rootworm Adults, Corn (Dusky) Sap Beetle, Corn Silk Fly, Stink Bugs, Japanese Beetle Adults</td>
<td>12.0 fl oz</td>
<td></td>
</tr>
</tbody>
</table>

**Sweet Corn Restrictions:**
- Do not apply more than 0.39 lb Novaluron active ingredient containing products per acre per calendar year.
- Do not apply more than 0.21 lb Acetamiprid active ingredient containing products per acre per calendar year.
- Do not apply more than 40.0 fl oz of formulated product per acre per season.
- Repeat applications if needed to maintain control, but do not make applications less than 14 days apart.
- Preharvest interval of 7 days.
- Restricted entry interval (REI) of 12 hours.
- The retreatment of sweet corn with CORMORAN™ is prohibited (i.e., only 1 application at 11 fl oz per acre) arid areas which receive less than 20 inches of precipitation (including irrigation) per year.

**ROTATIONAL CROPS**

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

**IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer 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.
STORAGE AND DISPOSAL

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

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. Do not store above 100°F for extended periods of time. Storage below 20°F can result in formation of crystals. If product crystallizes, store at 50°F to 70°F and agitate to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

PESTICIDE DISPOSAL:
Open dumping is prohibited. Pesticide wastes are toxic. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the hazardous waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

NONREFILLABLE CONTAINERS:

Rigid, Nonrefillable containers small enough to shake (i.e. with capacities equal to less than five gallons).
Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Once container is rinsed, offer for recycling if available, or puncture and dispose of in a sanitary landfill.

Rigid, Nonrefillable containers that are too large to shake (i.e. with capacities greater than 5 gallons or 50 lbs).
Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. 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. Offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Once container is rinsed, offer for recycling if available, or puncture and dispose of in a sanitary landfill.

RECYCLE OR DISPOSAL OF CONTAINERS:
End users are authorized to remove tamper evident cable as required to remove the product from the container unless the container is equipped with one way valves and refilling or returning is planned. Instructions for container rinsing and either recycling or disposal are as follows:

Bottom Discharge IBC (e.g. Schuetz Caged IBC or Snyder Square Stackable).
Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g. Snyder 120 Next Gen, Bonar B120, Drums and Kegs).
Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.
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. 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.

CORMORAN is a trademark of an ADAMA Group Company.

Manufactured for:
Makhteshim Agan of North America, Inc.
(d/b/a ADAMA)
3120 Highwoods Blvd., Suite 100
Raleigh, NC 27604
Cormoran™

For agricultural use only on berries, brassicas, cotton, fruiting vegetables, pome fruits, potatoes, stone fruits, strawberries, and sweet corn

ACTIVE INGREDIENTS: % BY WT.
- Novaluron ................................................ 9.1%
- Acetamiprid ............................................. 7.3%

OTHER INGREDIENTS: 83.6%

TOTAL: 100.0%

CORMORAN™ is a dispersible concentrate insecticide contains 0.84 pounds of novaluron per gallon and 0.67 pounds of acetamiprid per gallon.

EPA Reg. No. 66222-264 
EPA Est. No. 37429-GA-001BT; 37429-GA-002BO; 37429-GA-003BV

Keep out of reach of children

KEEP OUT OF REACH OF CHILDREN

CAUTION / PRECAUTION

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

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION/ PRECAUTION
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. Keep out of reach of children and domestic animals.

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

Manufactured for:
Makhteshim Agan of North America, Inc. (d/b/a ADAMA)
3120 Highwoods Blvd., Suite 100
Raleigh, NC 27604

Net Contents
2.5 gallons

FIRST AID

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15 to 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 to 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 induce 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.

Note to Physician: Contact with the eyes may cause irritation. Symptoms of Poisoning: The compound does not cause any definite symptoms that would be diagnostic. 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, medical emergencies, or pesticide incidents, you may call PROSAR at 1-877-250-9291, 24 hours per day, 7 days per week.

In case of spills, fire, leaks or accident, call INFOTRAC at 1-800-535-5053.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. 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. Do not store above 100°F for extended periods of time. Storage below 20°F can result in formation of crystals. If product crystallizes, store at 50°F to 70°F and agitate to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

PESTICIDE DISPOSAL: Open dumping is prohibited. Pesticide wastes are toxic. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the hazardous waste representative at the nearest EPA Regional Office for guidance. CONTAINER HANDLING: NONREFILLABLE CONTAINERS: Rigid, Nonrefillable containers small enough to shake. Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. See inside of attached booklet for complete instructions.