UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

May 11, 2017

Mr. Andrew Kieniksman
Registration Manager
ISK Biosciences Corporation
7470 Auburn Road, Suite A
Concord, OH 44077

Subject: PRIA Label Amendment – Flonicamid: New Uses on Citrus Fruits (Group 10-10); Addition of DFU for Use on Greenhouse Grown Peppers; Increased Tolerance for Residues on Fruiting Vegetables (Group 8-10); and Import Tolerance in/on Dried Tea
Product Name: Flonicamid 50WG
EPA Registration Number: 71512-9
Application Dates: October 23, 2015 and January 25, 2016
Decision Numbers: 510576, 513688 and 513689

Dear Mr. Kieniksman:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. “To distribute or sell” is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

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

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). If you have any questions, please contact Mr. Carmen J. Rodia, Jr. by phone at (703) 306-0327, or via email at *Rodia.Carmen@epa.gov*.

Sincerely,

Richard Gebken
Product Manager 10
Invertebrate & Vertebrate Branch 2
Registration Division (7505P)
Office of Pesticide Programs

Enclosures: *Stamped "Accepted" Master Label, dated May 11, 2017*
HED Risk Assessment for PP #5E8428, 5F8416 & 6F8443, dated October 14, 2016

ISK BIOSCIENCES

GROUP	29	INSECTICIDE

Flonicamid 50WG

EPA Reg. No. 71512-9 **EPA Est. No.**

ACCEPTED
05/11/2017
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 71512-9

Active Ingredient:	**By Wt.**
*Flonicamid	50.0%
Other Ingredients	50.0%
Total……..	**100.0%**

*Contains 0.5 pounds active ingredient per pound of formulated product
U.S. Patent No. 5360806

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 this label, find someone to explain it to you in detail.)

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 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 the 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 by mouth-to mouth, if possible. Call a poison control center or doctor for further treatment advice.
If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Note to Medical Doctor: Treatment is controlled by removal of exposure followed by symptomatic and supportive care.

HOTLINE 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, medical emergencies, or pesticide concerns), you may call 1-888-484-7546, twenty-four (24) hours per day, seven (7) days per week.

See other panels for additional precautionary statements.

Net Contents: 5 lbs.

ISK Biosciences Corporation
7470 Auburn Road, Suite A
Concord, Ohio 44077

PRECAUTIONARY STATEMENTS

Hazards to Humans (& Domestic Animals)

Warning

Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through the skin. Do not get on skin, in eyes, or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Do not breathe dust or spray mist. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove contaminated clothing and wash clothing before reuse.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear**:** long-sleeved shirt and long pants, shoes plus socks, protective eyewear and chemical-resistant gloves.

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. 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 [40CFR 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. As soon as possible wash thoroughly and change into clean clothing.

Environmental Hazards

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, 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), restricted-entry interval (REI) and notification to workers (as applicable). 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, and shoes plus socks.

STORAGE AND DISPOSAL

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

Pesticide Storage: Keep this product in its tightly closed original container, when not in use. Store in a cool, dry (preferably locked) area that is inaccessible to children and animals, and avoid excessive heat while in storage. Carefully open containers. After partial use, fold and roll back bags, clamp and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call CHEMTREC (800) 424-9300.

To confine spill: Cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

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

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water 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.
Offer for recycling, if available, or dispose of in a sanitary landfill or by incineration, or, if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

PRODUCT INFORMATION

Flonicamid 50WG is a 50 percent water dispersible granular formulation of the insecticide flonicamid. Flonicamid 50WG provides control of a variety of aphid and plant bug pests and suppression of some non-aphid pests in Brassica (cole) leafy vegetables, cotton, cucurbit vegetables, fruiting vegetables (except cucurbits), hop, leafy vegetables (except Brassica), tuberous and corm vegetables, root vegetables (except sugar beets), pome fruit, stone fruit, tree nuts, citrus, greenhouse cucumbers and tomatoes, greenhouse peppers, low growing berries, canola, alfalfa grown for seed, and mint.

The rate of application is dependent upon the insect species present, the level of insect pressure, and the amount of foliage present. Begin applications before populations begin to build or at economic thresholds according to local economic guidelines. Refer to local Cooperative Extension Guidelines and/or time applications for scouting results. Thorough plant coverage is essential for good performance.

Mode of Action: Flonicamid 50WG is a member of the pyridinecarboxamide class of chemistry. Flonicamid 50WG controls target pests by contact and ingestion provoking rapid and irreversible feeding cessation. Aphids and other insects could remain on the plant until they desiccate.

Resistance Management: Some insects are known to develop resistance to products used repeatedly for insect control. Flonicamid 50WG is effective for strategic use in programs that attempt to minimize pest resistance. Flonicamid 50WG is a Group 29 (selective feeding blocker) insecticide and may be tank mixed or rotated with insecticides from different groups. An insect management program that includes alternation and/or tank mixes between Flonicamid 50WG and other labeled insecticides that have a different mode of action and/or control insects not controlled by Flonicamid 50WG is essential to prevent insect resistant populations from developing. Consult with your Federal or State Cooperative Extension Service representatives for guidance on the proper use of Flonicamid 50WG in programs that seek to minimize the occurrence of pest resistance.

Use Restrictions

Do not use this product in home gardens.

Crop Rotation Restrictions

Following application of Flonicamid 50WG, any crop listed on this label may be planted as a rotational crop.
All other crops may be planted 30 days after the last application of Flonicamid 50WG.

Maximum Seasonal Use and Pre-Harvest Intervals

Crop	Maximum Seasonal Total (pounds active ingredient/Acre)	PHI Days
Listed Brassica (Cole) Leafy Vegetables	0.267	0
Cotton	0.267	30
Listed Cucurbit Vegetables	0.267	0
Listed Fruiting Vegetables (except cucurbits)	0.267	0
Hop	0.267	10
Listed Leafy Vegetables (except Brassica)	0.267	0
Listed Tuberous and Corm Vegetables	0.267	7
Listed Root Vegetables (except Sugar Beets)	0.267	3
Listed Pome Fruit	0.267	21
Listed Stone Fruit	0.267	14
Listed Tree Nuts	0.267	40
Listed Citrus	0.267	14
Green House Cucumbers	0.267	0
Green House Tomatoes	0.267	0
Green House Peppers	0.267	0
Rapeseed/Canola	0.267	7
Low Growing Berries	0.267	0
Strawberry	0.267	0
Mint	0.267	7
Alfalfa Seed	0.18	14

Mixing and Loading Instructions

The spray system must be clean and free of residues from previous applications. Fill the spray tank ½ full with clean water. The agitation system must be operating and sufficient to provide uniform spray mixing during application and until the spray tank has been emptied. Complete filling the spray tank to the desired level.

Do not store Flonicamid 50WG spray mixtures overnight.

Do not use liquid fertilizer as a carrier for Flonicamid 50WG.

Tank Mixtures

Flonicamid 50WG can be mixed with products labeled for use on the crops/sites listed on this label in accordance with the more (most) restrictive of label limitations and precautions. No label dosage rates may be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing. Read and follow all manufacturer's label recommendations for the companion product. Flonicamid 50WG is generally compatible with other insecticides, fungicides, fertilizers and micronutrient products provided sufficient free water is available for dispersion of all the tank mix products. However, the physical compatibility of Flonicamid 50WG with tank mix partners should be evaluated using a jar test before use.

The crop safety of all potential tank mixtures on all crops may not have been tested. Before applying any tank mixture not specifically recommended on this label, the safety to the target crop must be confirmed.

In general, tank mix partners should be added in the following order: products in water-soluble packaging, wettable powders or wettable granules or dry flowables, liquid flowables, liquids, then emulsifiable concentrates. Allow each tank mix partner to become completely dispersed before adding the next product.

Spray Equipment Clean Out:

After spraying Flonicamid 50WG, thoroughly clean the sprayer before using sprayer equipment for any other applications. In addition, users must take appropriate steps to ensure proper equipment clean out for any other products mixed with Flonicamid 50WG as required on the other product labels. Refer to the Disposal and Environmental Hazards statements regarding disposal of equipment washwaters.

Application Information

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers. Use the largest droplet size consistent with good pest control.

Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage. Finished spray volumes should be increased under extreme pest populations or dense plant foliage.

Ground Application
Do not apply this product with mechanically pressurized handgun equipment.
Utilize a boom and nozzle sprayer equipped with the appropriate nozzles, spray tips and screens and adjusted to provide optimum spray distribution and coverage at the appropriate operating pressures. Utilize nozzles that produce minimal amounts of fine spray droplets. Do not exceed 30 psi spray pressure unless otherwise required by the manufacturer of drift reducing nozzles. Sprayers should be adjusted to position spray tips a minimum of 18 inches above the crop. Be aware that overlaps and slower ground speeds while starting, stopping or turning while spraying may result in higher application rates.

Aerial Application
Utilize a boom and nozzle sprayer equipped with the appropriate nozzles, spray tips and screens and adjusted to provide optimum spray distribution and coverage at the appropriate operating pressures. Utilize nozzles that produce minimal amounts of fine spray droplets. Do not exceed 30 psi spray pressure unless otherwise required by the manufacturer of drift reducing nozzles. Use nozzle types and arrangements that will provide optimum coverage while producing a minimal amount of fine droplets.

Chemigation Application
Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, drip (trickle) (greenhouse cucumbers, peppers, and tomatoes only) or hand move irrigation systems. Do not apply this product through any other type of irrigation system. Do not connect any irrigation system, including greenhouse systems, used for pesticide application to a public water system. Crop injury, lack of effectiveness or illegal 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 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 also 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. Flonicamid 50WG should be applied continuously for the duration of the water application. Flonicamid 50WG should be diluted in sufficient volume to insure accurate application over the area to be treated. Use the appropriate amount of water to carry the product to the target pest. Agitation generally is not required when suitable diluents are used. A diluents test should be conducted to ensure that phase separation would not occur during dilution and application. Failure to achieve a uniform dilution throughout the time of application may result in undesirable residues or less than desirable control.

Using Water from Public Water Systems: DO NOT APPLY Flonicamid 50WG THROUGH ANY IRRIGATION SYSTEM PHYSICALLY CONNECTED TO A PUBLIC WATER SYSTEM. Public water system means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Flonicamid 50WG may be applied through irrigation systems, which may be supplied by a public water system only if water from the water system is discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

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. Where states have more stringent regulations, they must be observed.

OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS, MARSHES OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.

1. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.
2. Do not cultivate within 10 feet of the aquatic area so as to allow growth of a vegetative filter strip.
3. Do not apply by ground equipment within 25 feet, or by air within 150 feet of lakes; reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds. Increase the buffer zone to 450 feet when ultra low volume (ULV) applications are made.

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory below.

Aerial Drift Reduction Advisory

(This section is advisory in nature and does not supersede the mandatory label requirements).

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).

Controlling Spray 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 provides uniform coverage.

Nozzle Orientation – For aerial application, orient nozzles so that the spray is released parallel to the air stream as this 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, narrower spray angles produce larger droplets.

Boom Length - For some aerial 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 – Aerial applications should not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment - When aerial applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the upwind 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 winds speeds of 3 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 3 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 affect 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 wind is blowing away from adjacent sensitive areas such as residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops.

Insect Spectra

The following tables list various insect species, which are either effectively controlled or suppressed[1] when appropriate application rates of Flonicamid 50WG are made at appropriate timings. See specific crop sections for recommendations on specific pests.

[1]Suppression may be erratic control ranging from good to poor, or a consistent level of control below that generally considered commercially acceptable.

Aphid Pests

Common Name	Scientific Name
Apple Aphid	Aphis pomi
Black bean Aphid	Aphis fabae
Black Cherry Aphid	*Myzus cerasi*
Cabbage Aphid	*Brevicoryne brassicae*
Cotton / Melon Aphid	*Aphis gossypii*
Cowpea Aphid	*Aphis craccivora*
English Grain Aphid	*Sitobion avenae*
Green Peach Aphid	*Myzus persicae*
Greenbug	*Schizaphis graminum*
Hop Aphid	*Phorodon humuli*
Leaf Curl Plum Aphid	*Brachycaudis helichrysi*
Mealy Plum Aphid	*Hyalopterus pruni*
Foxglove Aphid	*Aulocorthum solani*
Pea Aphid	*Acyrthosiphon pisum*
Potato Aphid	*Macrosiphum euphorbiae*
Red Lettuce Aphid	*Uroleucon pseudambrosiae*
Rosy Apple Aphid	*Dysaphis plantaginea*
Spirea Aphid	*Aphis spiraecola*
Turnip Aphid	*Lipaphis erysimi*
Woolly Apple Aphid	*Eriosoma lanigerum*
Red Lettuce Aphid	*Nasanovia ribis-nigri*
Spotted Alfalfa Aphid	*Therioaphis maculata*
Blue Alfalfa Aphid	*Acyrthosiphon kondoi*
Strawberry aphid	*Chaetosiphon fragaefolii*
Soybean Aphid	*Aphis glycines*
Black Pecan Aphid	*Melanocallis caryaefoliae*
Yellow Pecan Aphid	*Monelliopsis pecanis*
Blackmargined Aphid	*Monellia caryella*

Non-Aphid Insect Pests

Common Name	Scientific Name
Cotton Fleahopper	*Pseudatomoscelis seriatus*
Greenhouse Whitefly	*Trialeurodes vaporariorum*
Tarnished Plant Bug	*Lygus lineolaris*
Western Plant Bug	*Lygus Hesperus*
Potato Psyllid	*Bactericera cockerelli*
Tomato Psyllid	*Bactericera cockerelli*
Asian Citrus Psyllid	*Diaphorina citri*

Rate Conversion Chart for Flonicamid 50WG

Ounces Flonicamid 50WG/A	Pounds Flonicamid 50WG / A	Pounds AI/A	Treated Acres / Pound Flonicamid 50WG
1.4	0.088	0.044	11.4
1.7	0.106	0.053	9.4
2.0	0.125	0.062	8.0
2.4	0.15	0.075	6.7
2.8	0.175	0.089	5.7

BRASSICA (COLE) LEAFY VEGETABLES (0 DAY PHI) INCLUDING:

Broccoli, Chinese broccoli, Broccoli raab (rapini), Brussels sprouts, Cabbage, Chinese cabbage (bok choy), Chinese cabbage (napa), Chinese mustard cabbage, Cauliflower, Cavalo broccoli, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens and Turnip greens.

PESTS	Rate of Application		COMMENTS[1, 2]
	Ounces Flonicamid 50WG/Acre	Lbs. Active Ingredient /Acre	
Aphids and Plant Bugs	2.0 to 2.8	0.062 to 0.089	Begin applications before populations begin to build and before damage is evident according to local pest management guidelines. Use LOWER RATE for building populations and use HIGHER RATE for greater populations and/or dense foliage. Rapidly growing plants may need retreatment. Scout fields often and retreat as necessary to maintain populations below damaging levels.
Greenhouse Whitefly	2.8	0.089	Apply when adult whiteflies first appear. Do not allow population to increase unchecked before making first application. Application provides SUPPRESSION only. For control, apply in combination with other effective products labeled for use on these listed crops. Scout fields often and retreat as necessary to maintain populations below damaging levels.

[1]Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 10 gallons per acre when applied by ground; use a minimum of 3 gallons per acre by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz/ acre Flonicamid 50WG (0.089 lbs. ai/acre) per application; do not apply more than 8.4 oz/acre Flonicamid 50WG (0.267 lbs. ai/acre) per season. Do not apply more than 3 applications at the 2.8 oz/acre Flonicamid 50WG rate per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGHER RATE.

[2] Flonicamid 50WG reduces the numbers of aphids which may carry viruses, plant diseases or plant pathogens.

COTTON (30 DAY PHI)

Pests	Rate of Application		Comments[1]
	Ounces Flonicamid 50WG/Acre	Pounds Active Ingredient/Acre	
Plant Bugs and Fleahoppers	1.7 to 2.8	0.053 to 0.089	Begin applications before populations begin to build or at economic thresholds according to local economic guidelines. The low rate can be used early season for low pest densities or when tank mixing with other products labeled for target insect control on cotton. Use the high rate for large pest populations, dense foliage, and longer residual. Rapidly growing cotton may need retreatment. Scout fields often and retreat as necessary to maintain pest populations below damaging levels.
Aphids	1.4 to 2.8	0.044 to 0.089	

[1]Thorough spray coverage of plant foliage is essential for optimum control. Use a minimum of 5 gallons per acre by ground and 3 gallons per acre by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz/acre Flonicamid 50WG (0.089 lbs. ai/ acre) per application. Do not apply more than 8.4 oz/acre Flonicamid 50WG (0.267 lbs. ai/acre) per season. Do not apply more than 3 applications at the 2.8 oz/acre Flonicamid 50WG rate per season. Allow a minimum of 7 days between applications.

CUCURBIT VEGETABLES CROP GROUP 9 (0 DAY PHI) INCLUDING:

Chayote (fruit); Chinese waxgourd (Chinese preserving melon); Citron melon; Cucumber; Gherkin; Gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica spp* (includes balsam apple, balsam pear, bitter melon, Chinese cucumber); Muskmelon, hybrids and/or cultivars of *Cucumis melo* (includes true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon); Pumpkin; Squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); Squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash; Watermelon (includes hybrids and/or varieties of *Citrullus lanatus*)

PESTS	Rate of Application		COMMENTS[1, 2]
	Ounces Flonicamid 50WG/Acre	Lbs. Active Ingredient/Acre	
Aphids and Plant Bugs	2.0 to 2.8	0.062 to 0.089	Begin applications before populations begin to build and before damage is evident, according to local pest management guidelines. Use LOWER RATE for building populations and use HIGHER RATE for greater populations and/or, dense foliage. Rapidly growing plants may need retreatment. Scout fields often and retreat as necessary to maintain populations below damaging levels.
Greenhouse Whitefly	2.8	0.089	Apply when adult whiteflies first appear. Do not allow population to increase unchecked before making first application. Application provides SUPPRESSION only. For control, apply in combination with other effective products labeled for use on these listed crops. Scout fields often and retreat as necessary to maintain populations below damaging levels.

[1]Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 10 gallons per acre when applied by ground; use a minimum of 3 gallons per acre by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz./acre Flonicamid 50WG (0.089 lbs. ai/acre) per application; do not apply more than 8.4 oz./acre Flonicamid 50WG (0.267 lbs. ai/acre) per season. Do not apply more than 3 applications at the 2.8 oz/acre Flonicamid 50WG rate per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGHER RATE.

[2] Flonicamid 50WG reduces the numbers of aphids which may carry viruses, plant diseases or plant pathogens.

FRUITING VEGETABLES CROP GROUP 8-10 (0 DAY PHI) INCLUDING:

African eggplant; bush tomato; bell pepper; cocona; currant tomato; eggplant; garden huckleberry; goji berry; groundcherry; martynia; naranjilla; okra; pea eggplant; pepino; nonbell pepper; roselle; scarlet eggplant; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these.

PESTS	Rate of Application		COMMENTS[1, 2]
	Ounces Flonicamid 50WG/Acre	Lbs. Active Ingredient/Acre	
Aphids, Plant Bugs and Tomato Psyllid	2.8 to 4.28	0.089 to 0.133	Begin applications before populations begin to build and before damage is evident, according to local pest management guidelines. Use LOWER RATE for building populations and; use HIGHER RATE for greater populations and/or, dense foliage. Scout fields often and retreat as necessary to maintain populations below damaging levels. Rapidly growing plants may need retreatment.
Greenhouse Whitefly	2.8 to 4.28	0.089 to 0.133	Apply when adult whiteflies first appear. Do not allow population to increase unchecked before making first application. Application provides SUPPRESSION only. For control, apply in combination with other effective products labeled for use on these listed crops. Scout fields often and retreat as necessary to maintain populations below damaging levels.

[1]Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 10 gallons per acre when applied by ground; use a minimum of 3 gallons per acre by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 4.28 oz/ acre Flonicamid 50WG (0.133 lbs. ai/acre) per application; do not apply more than 8.4 oz./acre Flonicamid 50WG (0.267 lbs. ai/acre) per season. Do not apply more than 3 applications at the 2.8 oz/acre Flonicamid 50WG rate per season. Do not apply more than 2 applications at the 4.28 oz/acre Flonicamid 50WG rate per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGHER RATE.

[2] Flonicamid 50WG reduces the numbers of aphids which may carry viruses, plant diseases or plant pathogens.

HOP (10 DAY PHI)

PESTS	Rate of Application		COMMENTS[1]
	Ounces Flonicamid 50WG/Acre	Lbs. Active Ingredient /Acre	
Hop Aphid	1.7 to 2.8	0.053 to 0.089	Begin applications before populations begin to build and before damage is evident, according to local pest management guidelines. Use LOWER RATE for building populations and use HIGHER RATE for greater populations and/or dense foliage. Scout fields often and retreat as necessary to maintain populations below damaging levels. Rapidly growing plants may need retreatment.

[1]Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 50 gallons per acre when applied by ground, preferably air-blast; use a minimum of 10 gallons per acre by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz/acre Flonicamid 50WG (0.089 lbs. ai/acre) per application; do not apply more than 8.4 oz/ acre Flonicamid 50WG (0.267 lbs. ai/acre) per season. Do not apply more than 3 applications at the 2.8 oz/acre Flonicamid 50WG rate per season. Allow a minimum of 7 days between applications.

LEAFY VEGETABLES (EXCEPT BRASSICA) (0 DAY PHI) INCLUDING:

Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (rouquette), Cardoon, Celery, Chinese Celery, Celtuce, Chervil, Chrysanthemum (edible leaved and garland), Corn salad, Cress (garden and upland), Dandelion, Dock (sorrel), Endive (escarole), Florence fennel, Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chicory), Rhubarb, Spinach, Spinach (New Zealand), Swiss chard, Vine spinach (Malabar and Indian)

PESTS	Rate of Application		COMMENTS[1, 2]
	Ounces Flonicamid 50WG/Acre	Lbs. Active Ingredient/Acre	
Aphids and Plant Bugs	2.0 to 2.8	0.062 to 0.089	Begin applications before populations begin to build and before damage is evident, according to local pest management guidelines. Use LOWER RATE for building populations and use HIGHER RATE for greater populations and/or dense foliage. Scout fields often and retreat as necessary to maintain populations below damaging levels. Rapidly growing plants may need retreatment.
Greenhouse Whitefly	2.8	0.089	Apply when adult whiteflies first appear. Do not allow population to increase unchecked before making first application. Application provides SUPPRESSION only. For control, apply in combination with other effective products labeled for use on these listed crops. Scout fields often and retreat as necessary to maintain populations below damaging levels.

[1]Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 10 gallons per acre when applied by ground; use a minimum of 3 gallons per acre by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz/acre Flonicamid 50WG (0.089 lbs. ai/acre) per application; do not apply more than 8.4 oz/acre Flonicamid 50WG (0.267 lbs. ai/acre) per season. Do not apply more than 3 applications at the 2.8 oz/acre Flonicamid 50WG rate per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGHER RATE.

[2] Flonicamid 50WG reduces the numbers of aphids which may carry viruses, plant diseases or plant pathogens.

TUBEROUS AND CORM VEGETABLES (7 DAY PHI) INCLUDING:

Arracacha, Arrowroot, Chinese artichoke, Jerusalem artichoke, Edible canna, Cassava (bitter and sweet), Chayote (root), Chufa, Dasheen, Ginger, Leren, Potato, Sweet potato, Tanier, Tumeric, Yam bean, Yam (true).

PESTS	Rate of Application		COMMENTS[1.2.3]
	Ounces Flonicamid 50WG/Acre	Lbs. Active Ingredient/Acre	
Aphids, Plant Bugs and Potato Psyllid	2.0 to 2.8	0.062 to 0.089	Begin applications before populations begin to build or and before damage is evident, according to local pest management guidelines. Use LOWER RATE for building populations and use HIGHER RATE for greater populations and/or dense foliage. Rapidly growing plants may need retreatment. Scout fields often and retreat as necessary to maintain populations below damaging levels.
Greenhouse Whitefly	2.8	0.089	Apply when adult whiteflies first appear. Do not allow population to increase unchecked before making first application. Application provides SUPPRESSION only. For control, apply in combination with other effective products labeled for use on these listed crops. Scout fields often and retreat as necessary to maintain populations below damaging levels.

[1]Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 10 gallons per acre when applied by ground; use a minimum of 3 gallons per acre by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz/acre Flonicamid 50WG (0.089 lbs. ai/acre) per application; do not apply more than 8.4 oz/acre Flonicamid 50WG (0.267 lbs. ai/ acre) per season. Do not apply more than 3 applications at the 2.8 oz/acre Flonicamid 50WG rate per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGHER RATE.

[2] Flonicamid 50WG is recommended as a supplemental foliar control of Green Peach Aphid in long season potatoes following an at-plant program using systemic insecticides and for primary foliar control of Green Peach Aphid in short season potatoes. Scout fields, before aphid flights begin, at intervals and in locations sufficient to provide representative information on population development. Consult local pest management guidelines for correct procedures. Foliar application of Flonicamid 50WG should begin when Green Peach aphid number reach 5 per 100 leaves, 1 winged aphid per plant or the observation of wingless aphids; consult local pest management guidelines for specific recommendations.

[3] Flonicamid 50WG reduces the numbers of aphids which may carry viruses, plant diseases or plant pathogens.

ROOT VEGETABLES (EXCEPT SUGAR BEETS) (3 DAY PHI) INCLUDING:

Beet, garden; Burdock, edible; Carrot; Celeriac; Chervil, turnip-rooted; Chicory; Ginseng; Horseradish; Parsley, turnip-rooted; Parsnip; Radish; Radish, oriental; Rutabaga; Salsify: Salsify, black; Salsify, Spanish; Skirret; Turnip.

PESTS	Rate of Application		COMMENTS[1, 2, 3]
	Ounces Flonicamid 50WG/Acre	Lbs. Active Ingredient/Acre	
Aphids and Plant Bugs	2.0 to 2.8	0.062 to 0.089	Begin applications before populations begin to build and before damage is evident, according to local pest management guidelines. Use LOWER RATE for building populations; use HIGHER RATE for greater populations and/or dense foliage. Rapidly growing plants may need retreatment. Scout fields often and retreat as necessary to maintain populations below damaging levels.
Greenhouse Whitefly	2.8	0.089	Apply when adult whiteflies first appear. Do not allow population to increase unchecked before making first application. Application provides SUPPRESSION only. For control, apply in combination with other effective products labeled for use on these listed crops. Scout fields often and retreat as necessary to maintain populations below damaging levels.

[1]Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 10 gallons per acre when applied by ground; use a minimum of 3 gallons per acre by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz/ acre Flonicamid 50WG (0.089 lbs. ai/acre) per application; do not apply more than 8.4 oz/ acre Flonicamid 50WG (0.267 lbs. ai/acre) per season. Do not apply more than 3 applications at the 2.8 oz/acre Flonicamid 50WG rate per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGHER RATE.

[2] Scout fields, before aphid flights begin, at intervals and in locations sufficient to provide representative information on population development. Consult local pest management guidelines for correct procedures. Foliar application of Flonicamid 50WG should begin when Green Peach aphid numbers reach 5 per 100 leaves, 1 winged aphid per plant or the observation of wingless aphids; consult local pest management guidelines for specific recommendations.

[3] Flonicamid 50WG reduces the numbers of aphids which may carry viruses, plant diseases or plant pathogens.

POME FRUIT CROP GROUP 11-10 (21 DAY PHI) INCLUDING:

Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these.

PESTS	Rate of Application		COMMENTS[1]
	Ounces Flonicamid 50WG/Acre	Lbs. Active Ingredient/Acre	
Aphids and Plant Bugs	2.0 to 2.8	0.062 to 0.089	Begin applications before populations begin to build and before damage is evident, according to local pest management guidelines. Use LOWER RATE for building populations and use HIGHER RATE for greater populations and/or dense foliage. Scout trees often during green tip through pink growth stages and post-bloom and retreat as necessary to maintain populations below damaging levels.

[1]Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 50 gallons per acre when applied by ground, preferably air-blast; use a minimum of 10 gallons per acre by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz/acre Flonicamid 50WG (0.089 lbs. ai/acre) per application; do not apply more than 8.4 oz/ acre Flonicamid 50WG (0.267 lbs. ai/acre) per season. Do not apply more than 3 applications at the 2.8 oz/acre Flonicamid 50WG rate per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGHER RATE.

STONE FRUIT CROP GROUP 12-12 (14 DAY PHI) INCLUDING:

Apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these.

PESTS	Rate of Application		COMMENTS[1]
	Ounces Flonicamid 50WG/Acre	Lbs. Active Ingredient/Acre	
Aphids and Plant Bugs	2.0 to 2.8	0.062 to 0.089	Begin applications before populations begin to build and before damage is evident, according to local pest management guidelines. Use LOWER RATE for building populations and use HIGHER RATE for greater populations and/or dense foliage. Scout trees often and retreat as necessary to maintain populations below damaging levels.

[1]Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 50 gallons per acre when applied by ground, preferably air-blast; use a minimum of 10 gallons per acre by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz/ acre Flonicamid 50WG (0.089 lbs. ai/ acre) per application; do not apply more than 8.4 oz/ acre Flonicamid 50WG (0.267 lbs. ai/ acre) per season. Do not apply more than 3 applications at the 2.8 oz/acre Flonicamid 50WG rate per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGHER RATE.

TREE NUTS (40 DAY PHI) INCLUDING:

African nut-tree; Almond; Beechnut; Brazil nut; Brazilian pine; Bunya; Bur oak; Butternut; Cajou nut; Candlenut; Cashew; Chestnut; Chinquapin; Coconut; Coquito nut; Dika nut; Ginkgo; Guiana chestnut; Hazelnut; Heartnut; Hickory nut; Japanese horse-chestnut; Macadamia nut; Mongongo nut; Monkey-pot; Monkey puzzle nut; Okari nut; Pachira nut; Peach palm nut; Pecan; Pequi; Pili nut; Pine nut; Pistachio; Sapucaia nut; Tropical almond; Walnut, black; Walnut, English; Yellowhorn

PESTS	Rate of Application		COMMENTS[1]
	Ounces Flonicamid 50WG/Acre	Lbs. Active Ingredient/Acre	
Aphids	2.0 to 2.8	0.062 to 0.089	Begin applications before populations begin to build and before damage is evident, according to local pest management guidelines. Use LOWER RATE for building populations and use HIGHER RATE for greater populations and/or dense foliage. Scout trees often and retreat as necessary to maintain populations below damaging levels.
Plant Bugs	2.8	0.089	Apply when bugs first appear. Do not allow population to increase unchecked before making first application. Application provides SUPPRESSION only. For control, apply in combination with other effective products labeled for use on these listed crops. Scout trees often and retreat as necessary to maintain populations below damaging levels.

[1]Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 50 gallons per acre when applied by ground, preferably air-blast; use a minimum of 10 gallons per acre by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz/acre Flonicamid 50WG (0.089 lbs. ai/acre) per application; do not apply more than 8.4 oz/ acre Flonicamid 50WG (0.267 lbs. ai/acre) per season. Do not apply more than 3 applications at the 2.8 oz./acre Flonicamid 50WG rate per season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGHER RATE.

CITRUS FRUIT GROUP (14-DAY PHI) INCLUDING:

Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliate orange; uniq fruit; cultivars, varieties, and/or hybrids of these

PESTS	Rate of Application		COMMENTS[1]
	Ounces Flonicamid 50WG/Acre	Lbs. Active Ingredient/Acre	
Asian Citrus Psyllid	4.28 to 5.7	0.133 – 0.178	Begin applications before populations begin to build and before damage is evident, according to local pest management guidelines. Use the LOWER RATE for building populations and use the HIGHER RATE for greater populations and/or dense foliage. Scout trees often and retreat as necessary to maintain populations below damaging levels. For optimum performance, include an adjuvant.
Aphids	2.8	0.089	Begin applications before populations begin to build and before damage is evident, according to local pest management guidelines. Scout trees often and retreat as necessary to maintain populations below damaging levels.

[1]Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 50 gallons per acre when applied by ground, preferably air-blast; use a minimum of 10 gallons per acre by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Spray adjuvants may improve coverage. Only use adjuvants known to be safe on citrus crops. Do not apply more than 3 applications at the 2.8 oz./acre Flonicamid 50WG rate per year. Do not apply more than 2 applications at the 4.28 oz./acre Flonicamid 50WG rate per year. Do not apply more than 1 application at the 5.7 oz./acre Beleaf 50SG rate per year. Do not apply more than a total of 8.4 oz/ acre Flonicamid 50WG (0.267 lbs. ai/acre) per year. Allow a minimum of 7 days between applications.

GREENHOUSE CUCUMBERS – FOLIAR APPLICATION (0 DAY PHI)

PESTS	Rate of Application	COMMENTS[1]
Aphids Plant Bugs	2.8 – 4.28 oz per acre or 0.065 – 0.1 oz per 1000 sq ft or 1.85 – 2.85 gm per 1000 sq ft	Begin applications before populations begin to build and before damage is evident, according to local pest management guidelines. Use LOWER RATE for building populations and use HIGHER RATE for greater populations and/or dense foliage. Rapidly growing plants may need retreatment. Check plants often and retreate as necessary to maintain populations below damaging levels.
Greenhouse Whitefly	4.28 oz per acre or 0.1 oz per 1000 sq ft or 2.85 gm per 1000 sq ft	Apply when adult whiteflies first appear. Do not allow population to increase unchecked before making the first application. Application provides SUPPRESSION only. Apply in combination with other effective products for control. Check plants often and retreat as necessary to maintain populations below damaging levels.
Thorough spray coverage is essential for optimum control. Apply in sufficient water to ensure good coverage. Use a minimum of 10 gallons per acre (0.25 gallons per 1000 sq ft). Finished spray volume should be increased under extreme pest populations or dense plant foliage but do not exceed the point of runoff. Do not apply more than 4.28 oz per acre (0.1 oz per 1000 sq ft) Flonicamid 50WG per application. Do not make more than 2 applications at 4.28 oz per acre (0.1 oz per 1000 sq ft) Flonicamid 50WG per crop season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGHER RATE. Flonicamid 50WG reduces the numbers of aphids that may carry viruses, plant diseases or plant pathogens.		

GREENHOUSE CUCUMBERS – APPLICATION TO SOIL OR GROWTH MEDIA (0 DAY PHI)

PESTS	Rate of Application	COMMENTS[1]
Aphids Plant Bugs Greenhouse Whitefly	4.28 oz / acre or 2.8 gm / 1000 sq ft or 12.5 gm / 1000 plants (based on planting density of 1 plant per 4.5 sq ft or 2.4 plants per sq meter).	Begin applications before populations begin to build and before damage is evident, according to local pest management guidelines. Apply using a drench by hand, drip irrigation, or with motorized calibrated irrigation equipment to the base of the plants. See the Chemigation Section of this label for additional information.

[1] Use a minimum of 25 gallons per 1000 plants but, do not exceed the holding capacity of soil or growth media. Do not apply more than 4.28 oz per acre (0.44 oz per 1000 plants based on 1 plant per 4.5 sq ft or 9712 plants per acre) Flonicamid 50WG per application. Do not make more than 2 applications at 4.28 oz per acre (0.44 oz per 1000 plants based on 1 plant per 4.5 sq ft or 9712 plants per acre) Flonicamid 50WG per crop season. Allow a minimum of 7 days between applications.
[2] Flonicamid 50WG reduces the numbers of aphids that may carry viruses, plant diseases or plant pathogens.
[3] Many varieties have been tested for tolerance to Flonicamid and show good crop safety. To assure the greatest crop safety under a wide range of conditions, treating a few plants before applying to the whole greenhouse is recommended.

LOW GROWING BERRY (0 DAY PHI) INCLUDING:

Bearberry; bilberry; blueberry, lowbush; cloudberry; cranberry; lingonberry; muntries; partridgeberry; strawberry; cultivars, varieties, and/or hybrids of these

PESTS	Rate of Application		COMMENTS[1]
	Ounces Flonicamid 50WG/Acre	Lbs. Active Ingredient/Acre	
Aphids and Plant Bugs (*Lygus spp.)* *Strawberry Aphid*	2.8	0.089	Apply when Aphids or Lygus first appear in the field and before populations reach high levels. Flonicamid will stop Aphid and Lygus feeding rapidly but it may take several days to see a reduction in Aphid and Lygus numbers. Reapply when new insects are detected. Two sequential applications of Flonicamid result in better Aphid and Lygus control than a single application. Do not make more than two applications of Flonicamid without rotating to an insecticide with a different mode of action.

[1]Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 50 gallons per acre when applied by ground; use a minimum of 10 gallons per acres by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Spray adjuvants may improve coverage but do not use binder or sticker-type surfactants. Only use adjuvants known to be safe on strawberries. Do not apply more than 2.8 oz./ per acre Flonicamid 50WG (0.089 lbs. ai per acre) per application; do not apply more than 8.4 oz./ per acre Flonicamid 50WG (0.267 lbs. ai per acre) per year. Do not apply more than 3 applications per year. Allow a minimum of 7 days between applications.

RAPESEED, CANOLA VARIETIES ONLY (7 DAY PHI) INCLUDING:

Borage; crambe,; cuphea; echium; flax seed; gold of pleasure; hare's ear mustard; lesquerella; lunaria; meadowfoam; milkweed; mustard seed; oil radish; poppy seed; rapeseed; sesame; sweet rocket; cultivars, varieties, and/or hybrids of these

PESTS	Rate of Application		COMMENTS[1]
	Ounces Flonicamid 50WG/Acre	Lbs. Active Ingredient/Acre	
Aphids and Plant Bugs (*Lygus spp.)* *Cabbage Aphid* *Green Peach Aphid* *Turnip Aphid*	2.8	0.089	Apply when Aphids or Lygus first appear in the field and before populations reach high levels. Flonicamid will stop Aphid and Lygus feeding rapidly but it may take several days to see a reduction in Aphid or Lygus numbers. Reapply when new insects are detected. Two sequential applications of Flonicamid result in better Aphid and Lygus control than a single application. Do not make more than two applications of Flonicamid without rotating to an insecticide with a different mode of action.

[1]Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 10 gallons per acre when applied by ground; use a minimum of 3 gallons per acre by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Spray adjuvants may improve coverage but do not use binder or sticker-type surfactants. Only use adjuvants known to be safe on canola. Do not apply more than 2.8 oz./ per acre Flonicamid 50WG (0.089 lbs. ai per acre) per application; do not apply more than 8.4 oz./ per acre Flonicamid 50WG (0.267 lbs. ai per acre) per year. Do not apply more than 3 applications per year. Allow a minimum of 7 days between applications.

GREENHOUSE TOMATOES – FOLIAR APPLICATION (0 DAY PHI)

PESTS	Rate of Application	COMMENTS[1]
Aphids Plant Bugs Tomato Psyllid	2.8 – 4.28 oz per acre or 0.065 – 0.1 oz per 1000 sq ft or 1.85 – 2.85 gm per 1000 sq ft	Begin applications before populations begin to build and before damage is evident, according to local pest management guidelines. Use LOWER RATE for building populations and use HIGHER RATE for greater populations and/or dense foliage. Rapidly growing plants may need retreatment. Check plants often and retreat as necessary to maintain populations below damaging levels.
Greenhouse Whitefly	4.28 oz per acre or 0.1 oz per 1000 sq ft or 2.85 gm per 1000 sq ft	Apply when adult whiteflies first appear. Do not allow population to increase unchecked before making the first application. Application provides SUPPRESSION only. Apply in combination with other effective products for control. Check plants often and retreat as necessary to maintain populations below damaging levels.

Thorough spray coverage is essential for optimum control. Apply in sufficient water to ensure good coverage. Use a minimum of 10 gallons per acre (0.25 gallons per 1000 sq ft). Finished spray volume should be increased under extreme pest populations or dense plant foliage but do not exceed the point of runoff. Do not apply more than 4.28 oz per acre (0.1 oz per 1000 sq ft) Flonicamid 50WG per application. Do not make more than 2 applications at 4.28 oz per acre (0.1 oz per 1000 sq ft) Flonicamid 50WG per crop season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGHER RATE.
[1]Flonicamid 50WG reduces the numbers of aphids that may carry viruses, plant diseases or plant pathogens.

GREENHOUSE PEPPERS – FOLIAR APPLICATION (0 DAY PHI)

PESTS	Rate of Application	COMMENTS[1]
Aphids Plant Bugs	2.8 – 4.28 oz per acre or 0.065 – 0.1 oz per 1000 sq ft or 1.85 – 2.85 gm per 1000 sq ft	Begin applications before populations begin to build and before damage is evident, according to local pest management guidelines. Use LOWER RATE for building populations and use HIGHER RATE for greater populations and/or dense foliage. Rapidly growing plants may need retreatment. Check plants often and retreate as necessary to maintain populations below damaging levels.
Whiteflies Thrips	4.28 oz per acre or 0.1 oz per 1000 sq ft or 2.85 gm per 1000 sq ft	Apply when whiteflies or thrips first appear. Do not allow population to increase unchecked before making the first application. Apply in combination with other effective products for control. Check plants often and retreat as necessary to maintain populations below damaging levels.

Thorough spray coverage is essential for optimum control. Apply in sufficient water to ensure good coverage. Use a minimum of 10 gallons per acre (0.25 gallons per 1000 sq ft). Finished spray volume should be increased under extreme pest populations or dense plant foliage but do not exceed the point of runoff. Do not apply more than 4.28 oz per acre (0.1 oz per 1000 sq ft) Flonicamid 50WG per application. Do not make more than 2 applications at 4.28 oz per acre (0.1 oz per 1000 sq ft) Flonicamid 50WG per crop season. Allow a minimum of 7 days between applications. If identification of aphid species has not been confirmed, use HIGHER RATE.

[1]Flonicamid 50WG reduces the numbers of aphids that may carry viruses, plant diseases or plant pathogens.

ALFALFA GROWN FOR SEED WEST OF THE ROCKIES
(14 DAY PHI for SEED)

PESTS	Rate of Application		COMMENTS[1, 2]
	Ounces Flonicamid 50WG/Acre	Lbs. Active Ingredient/Acre	
Aphids and Plant Bugs	2.8	0.089	Begin applications before populations begin to build and before damage is evident, according to local pest management guidelines. Scout fields often and retreat as necessary to maintain populations below damaging levels. Rapidly growing plants may need retreatment.

[1]Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 20 gallons per acre when applied by ground; use a minimum of 10 gallons per acre by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz/ acre Flonicamid 50WG (0.089 lbs. ai per acre) per application; do not apply more than 5.6 oz/ acre Flonicamid 50WG (0.18 lbs. ai/acre) per season. Do not apply more than 2 applications at the 2.8 oz/acre Flonicamid 50WG rate per season. Allow a minimum of 7 days between applications.
[2] Flonicamid 50WG reduces the numbers of aphids which may carry viruses, plant diseases or plant pathogens.

Restrictions:
Forage and hay from alfalfa grown for seed may be utilized after application of Flonicamid 50WG Insecticide only as indicated below.
Alfalfa grown for seed – Do not allow foraging of fields within 14 days of the last application. Do not harvest for hay within 62 days of the last application.

MINT: Spearmint, Peppermint (7 DAY PHI)

PESTS	Rate of Application		COMMENTS[1, 2]
	Ounces Flonicamid 50WG/Acre	Lbs. Active Ingredient/Acre	
Aphids	2.0 to 2.8	0.062 to 0.089	Begin applications before populations begin to build and before damage is evident, according to local pest management guidelines. Use LOWER RATE for building populations and use HIGHER RATE for greater populations and/or dense foliage. Scout fields often and retreat as necessary to maintain populations below damaging levels. Rapidly growing plants may need retreatment.

[1]Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 20 gallons per acre when applied by ground; use a minimum of 10 gallons per acre by air. Finished spray volumes should be increased under extreme pest populations or dense plant foliage. Do not apply more than 2.8 oz/ acre Flonicamid 50WG (0.089 lbs. ai per acre) per application; do not apply more than 8.4 oz/ acre Flonicamid 50WG (0.267 lbs. ai/acre) per season. Do not apply more than 3 applications at the 2.8 oz/acre Flonicamid 50WG rate per season. Allow a minimum of 14 days between applications. If identification of aphid species has not been confirmed, use HIGHER RATE.

[2] Flonicamid 50WG reduces the numbers of aphids which may carry viruses, plant diseases or plant pathogens.

WARRANTY AND LIMITATION OF DAMAGES

ISK Biosciences warrants to those persons lawfully acquiring title to this product that at the time of the first sale of this product by ISK Biosciences this product conformed to it chemical description and that it was reasonably fit for the purposes stated on the product label when used both in accordance with the Directions for Use appearing on the product label and under normal conditions of use. To the extent not inconsistent with applicable law, buyers and users of this product assume the risk of all loss or damage from use or handling of this product that results from their failure to read and comply with the Directions for Use of this product which appear on the product label. To the extent not inconsistent with applicable law, and except as provided elsewhere in a writing containing an express reference to this WARRANTY AND LIMITATION OF DAMAGES, ISK BIOSCIENCES MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTY, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY, AND NO AGENT OF ISK BIOSCIENCES IS AUTHORIZED TO DO SO. Unless expressly prohibited by state law, the liability of ISK Biosciences for any breach of warranty shall not exceed the purchase price of the product as to which a claim is made. To the extent not inconsistent with applicable law, buyers and users of this product are responsible for all loss or damage from use or handling of this product which results from conditions beyond the control of ISK Biosciences including, but not limited to, incompatibility with other products unless otherwise expressly provided in the Directions for Use of this product, weather conditions, cultural practices, moisture conditions or other environmental conditions outside of the ranges that are generally recognized as being conducive to good agricultural and/or horticultural practices.