

71512-9

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

JAN 29 2007

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Greg Leyes, Ph.D.
ISK Biosciences
7470 Auburn Road Suite A
Concord, Ohio 44077

Dear Dr. Leyes:
Subject: Flonicamid 50WG
EPA Reg. No. 71512-9
Submission dated 9/8/06

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments listed below. One copy of the finished labeling must be submitted prior to releasing the product for shipment.

Revise the first paragraph under general information to include head and stem brassica and mustard greens.

Delete the following sentence under the heading Resistance Management as it is an enhanced efficacy claim:

No known resistance has developed to Flonicamid 50WG..

Revise the table on Maximum Season Use and Pre-Harvest Intervals so that it uses the same headings as the application rate tables.

In the section on Spray Equipment Clean-out, delete the following:
"...using the following procedure."

Restore the spray drift language about aquatic areas that was on the label stamped accepted with comments dated April 12, 2006.

In the Rate Conversion Chart of Flonicamid 50WG on page 6, verify the treated acres for the 1.7 ounces application rate and revise if needed.

Revise the first sentence of the tank mix directions in accordance with PR Notice 82-1 as follows:

This product 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.

Delete from the directions for use tables the following language, wherever it appears, as it permits misuse:

"...such as, but not limited to..."

In the section on head and stem brassica and mustard greens, revise the first sentence to read as follows:

Includes mustard greens and all members of crop subgroup 5A: broccoli, Chinese broccoli, Brussels sprouts, cabbage, Chinese cabbage (napa), Chinese mustard cabbage, cauliflower, cavalo broccoli, kohlrabi.

In the section on cotton, revise the second sentence in the comments column to read as follows:

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.

In the section on cotton, revise the second to the last sentence in footnote 1 to read as follows:

Do not apply more than 3 applications at the 2.8 oz/acre flonicamid 50WG rate per season.

In the section on fruiting vegetables (except cucurbits), revise the third to the last sentence in footnote 1 to read as follows:

Do not apply more than 3 applications at the 2.8 oz/acre flonicamid 50WG rate per season.

The directions for use on cucurbit vegetables are confusing in that it states that it includes all members of crop group 9 but the list of crops excludes some members of crop group 9. Clarify the directions for use on cucurbit vegetables so that all members of crop group 9 are listed or revise the directions to read "includes the following members of crop group 9."

In the directions for use on stone fruit, "prune" must be listed as "fresh prune."

The directions for use on leafy vegetables (except brassica) are confusing in that it states that it includes all members of crop group 4 but the list of crops excludes some members of crop group 4. Clarify the directions for use on leafy vegetables (except brassica) so that all members of crop group 4 are listed or revise the directions to read "includes the following members of crop group 4."

In the section on potato, revise the 4th sentence in the comments column for greenhouse whitefly to read as follows:

Apply in combination with other products labeled for target insect control on potatoes.

Revise the warranty statements as follows:

...Warranty: To the extent consistent with applicable law, ISK Biosciences makes no warranty,...Use of Product:... The use of this product being beyond the control of the manufacturer, no guarantee, express or implied, is made as to the effects of such or the results to be obtained if not used in accordance with label directions. Damages: To the extent consistent with applicable law, buyer's or user's exclusive remedy....

If you have questions, please call Ann Sibold at 703 305-6502.

Sincerely,



Richard Gebken
Product Manager 10
Insecticide Branch
Registration Division (7505P)



GROUP

9C

INSECTICIDE

Flonicamid 50WG

EPA Reg. No. 71512-9 EPA Est. 049036-JP-001

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. You may also contact 1- 888-484-7546 for emergency medical treatment information.

For Emergency Assistance Call: ISK (888) 484-7546.

See other panels for additional precautionary statements.

Net Contents: 5 lbs.

ISK Biosciences Corporation

7470 Auburn Road, Suite A

Concord, Ohio 44077

ACCEPTED
with COMMENTS
In EPA Letter Dated:

JAN 29 2007

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.

71512-9

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PRECAUTIONARY STATEMENTS

Hazards to Humans (& Domestic Animals)

Warning

Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through the skin. Avoid contact with skin. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Avoid breathing dust or spray mist. Wash 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.

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STORAGE AND DISPOSAL

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

Pesticide Storage

Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. 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 Completely empty container into application equipment. Then dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

GENERAL INFORMATION

Fonicamid 50WG is a 50 percent water dispersible granular formulation of the insecticide fonicamid. Fonicamid 50WG provides control of a variety of aphid and plant bug pests and suppression of some non-aphid pests in cotton, cucurbit vegetables, fruiting vegetables and leafy vegetables (excluding Brassica), potato, pome fruit and stone fruit.

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 guideline. Refer to local Cooperative Extension Guidelines and/or time applications for scouting results. Thorough plant coverage is essential for good performance.

Mode of Action. Fonicamid 50WG is a member of the pyridinecarboxamide class of chemistry. Fonicamid 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. Fonicamid 50WG is effective for strategic use in programs that attempt to minimize pest resistance. Fonicamid 50WG is a Group 9C (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 Fonicamid 50WG and other labeled insecticides that have a different mode of action and/or control insects not controlled by Fonicamid 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 Fonicamid 50WG in programs that seek to minimize the occurrence of pest resistance. No known resistance has developed to Fonicamid 50WG.

Use Restrictions

Do not use this product in greenhouses.

Do not use this product in home gardens.

Crop Rotation Restrictions

Following application of Fonicamid 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 Fonicamid 50WG.

Maximum Seasonal Use and Pre-Harvest Intervals

Crop	Maximum Seasonal Total (pounds active ingredient/Acre)	PHI Days
Brassica Vegetables	0.267	0
Cotton	0.267	30
Cucurbit Vegetables	0.267	0
Fruiting Vegetables	0.267	0
Leafy Vegetables	0.267	0
Potato	0.267	7
Pome Fruit	0.267	21
Stone Fruit	0.267	14

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Mixing and Loading Instructions

Ensure the spray system is clean and free of residues from previous applications. Fill the spray tank 1/2 full with clean water. Ensure the agitation system is 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.

Avoid the overnight storage of Flonicamid 50WG spray mixtures.

Premixing Flonicamid 50WG solutions in nurse tanks is not recommended. Prepare no more spray mixture than is needed for the immediate application.

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

Tank Mixtures

Flonicamid 50WG may be tank mixed with products approved for use on the crops listed on this label. 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, the sprayer must be thoroughly cleaned using the following procedure. 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 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

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, or hand move irrigation systems. Do not apply this product through any other type of irrigation system. Do not connect any irrigation system 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.

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

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The following tables list various insect species, which are either effectively controlled or suppressed¹ 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	<i>Aphis pomi</i>
Black bean Aphid	<i>Aphis fabae</i>
Black Cherry Aphid	<i>Myzus cerasi</i>
Cabbage Aphid	<i>Brevicoryne brassicae</i>
Cotton / Melon Aphid	<i>Aphis gossypii</i>
Cowpea Aphid	<i>Aphis craccivora</i>
English Grain Aphid	<i>Sitobion avenae</i>
Green Peach Aphid	<i>Myzus persicae</i>
Greenbug	<i>Schizaphis graminum</i>
Leaf Curl Plum Aphid	<i>Brachycaudis helichrysi</i>
Mealy Plum Aphid	<i>Hyalopterus pruni</i>
Foxglove Aphid	<i>Aulocorthum solani</i>
Pea Aphid	<i>Acyrtosiphon pisum</i>
Potato Aphid	<i>Macrosiphum euphorbiae</i>
Rosy Apple Aphid	<i>Dysaphis plantaginea</i>
Spiraea Aphid	<i>Aphis spiraeicola</i>
Turnip Aphid	<i>Lipaphis erysimi</i>
Woolly Apple Aphid	<i>Eriosoma lanigerum</i>
Red Lettuce Aphid	<i>Nasanovia ribis-nigri</i>

Non-Aphid Insect Pests

Common Name	Scientific Name
Cotton Fleahopper	<i>Pseudatomoscelis seriatus</i>
Greenhouse Whitefly	<i>Trialeurodes vaporariorum</i>
Tarnished Plant Bug	<i>Lygus lineolaris</i>
Western Plant Bug	<i>Lygus hesperus</i>

Rate Conversion Chart for Flonicamid 50WG

Ounces Flonicamid 50WG/A	Pounds Flonicamid 50WG / A	Pounds A/A	Treated Acres / Pound Flonicamid 50WG
1.4	0.088	0.044	11.4
1.7	0.11	0.054	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

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HEAD AND STEM BRASSICA AND MUSTARD GREENS (0 DAY PHI)

Includes all members of Crop Subgroup 5A such as, but not limited to:

Broccoli, Chinese broccoli, Brussels sprouts, Cabbage, Chinese cabbage (napa), Chinese mustard cabbage, Cauliflower, Cavalo broccoli, Kohlrabi, Mustard 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. Apply in combination with other effective products for control. Scout fields often and retreat as necessary to maintain populations below damaging levels.

¹Thorough 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

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COTTON (30 DAY PHI)

Pests	Rate of Application		Comments ¹
	Ounces Flonicamid 50WG/Acre	Pounds Active Ingredient/Acre	
Plant Plant Bugs and Fleahoppers	1.7 to 2.8	0.054 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 registered for target insect control. 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	

¹Thorough 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 year season. Allow a minimum of 7 days between applications.

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CUCURBIT VEGETABLES (0 DAY PHI)

Includes all members of Crop Group 9 such as, but not limited to:

Balsam apple, balsam pear bitter melon, Chayote, Chinese cucumber, Chinese waxgourd (Chinese preserving melon) ,, Cucumber , Gherkin , Gourd, edible (includes hyotan, cucuzza) hechima and Chinese okra), Muskmelon (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), Watermelon, Winter Squash (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash)

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. Apply in combination with other effective products for control. 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.			

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FRUITING VEGETABLES (EXCEPT CUCURBITS) (0 DAY PHI)

Includes all member of Crop Group 8 such as, but not limited to:

Eggplant, Groundcherry, Pepino, Pepper (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper), Tomatillo, Tomato.

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	Low Rate not recommended.	0.089	Apply when adult whiteflies first appear. Do not allow population to increase unchecked before making first application. Application provides SUPPRESSION only. Apply in combination with other effective products for control. 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 per year 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			

14/18

LEAFY VEGETABLES (EXCEPT BRASSICA) (0 DAY PHI)

Includes all members of Crop Group 4 such as, but not limited to:

Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (roquette), 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, Swiss chard, Vine spinach.

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. Apply in combination with other effective products for control. 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			

15/18

POTATO (7 DAY PHI)

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 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. Apply in combination with other effective products for control. Scout fields often and retreat as necessary to maintain populations below damaging levels.
<p>¹Thorough 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.</p> <p>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.</p> <p>³ Flonicamid 50WG reduces the numbers of aphids which may carry viruses, plant diseases or plant pathogens</p>			

POME FRUIT (21 DAY PHI)

Includes all members of Crop Group 11 such as, but not limited to:

Apple, Crabapple, Loquat, Mayhaw,
Pear, Oriental pear, Quince.

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.

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 (14 DAY PHI)

Includes all members of Crop Group 12 such as, but not limited to:

Apricot,; Cherry (sweet and tart), Nectarine , Peach, Plum , Chickasaw plum,; Damson plum , Japanese plum, Plumcot, Prune.

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.			

Dealers Must Sell in Original Packages Only.

Terms of Sale or Use: On purchase of this product buyer and user agree to the following conditions:

Warranty: ISK Biosciences Corporation makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Except as so warranted, the product is sold as is. Buyer and user assume all risk of use and/or handling and/or storage of this material when such use and/or handling and/or storage is contrary to label instructions.

Directions and Recommendations: Follow directions carefully. Timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller and are assumed by the buyer at his own risk.

Use of Product: ISK Biosciences Corporation's recommendations for the use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice.

Damages: Buyer's or user's exclusive remedy for damages for breach of warranty or negligence shall be limited to direct damages not exceeding the purchase price paid and shall not include incidental or consequential damages.