



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460-0001

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

March 14, 2013

Ms. Jill C. Holihan Product Registration and Regulatory Affairs Manager FMC Corporation 1735 Market Street Philadelphia, PA 19103-7501

Subject:

Amended Labeling; Addition of Clarification Language to "Ornamental Applications" Rate Table

Flonicamid 50SG Insecticide, EPA Reg. No. 279-3287

Your Submission Dated August 13, 2012

Dear Ms. Holihan:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable.

A copy of your label stamped "Accepted" is enclosed for your records. If you have any questions, please contact Mr. Carmen J. Rodia, Jr. at (703) 306-0327 or via e-mail at <u>Rodia.Carmen@epa.gov</u>.

Sincerely yours,

Richard J. Gebken Product Manager (10)

Insecticide Branch

Registration Division (7504P)

Enclosure: 000279-03287 D470470

Label Stamped "Accepted," dated March 14, 2013

# Flonicamid 50SG Insecticide

For Pest Control Operators and Commercial Use Only.

For control of phytophagous greenhouses, nurseries and landscapes.

EPA Reg. No. 279-3287	EPA Est.
Active Ingredient:	By Wt.
Flonicamid	50.0%
Other Ingredients:	50.0%
	<del>100.0%</del>

## KEEP OUT OF REACH OF CHILDREN CAUTION

See other panels for additional precautionary information.

March 14, 2013 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under:

EPA. Reg, No: 279-3287



**FMC Corporation** Agricultural Products Group 1735 Market Street Philadelphia PA 19103

	FIRST AID
If swallowed	Call 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 on skin or clothing	Take off contaminated clothing.
ii on oluli o, olouliig	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
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.
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
HOT	TLINE NUMBER
control center or doctor	ner or label with you when calling a poison , or going for treatment. You may also for Emergency Assistance:
NOTE	TO PHYSICIAN
Treatment is otherwise b	ov controlled removal of exposure followed

### PRECAUTIONARY STATEMENTS Hazards to Humans (and Domestic Animals)

For Information Regarding the Use of this Product Call 1-800-

321-1FMC (1362).

Harmful if swallowed, inhaled or absorbed through skin. Cause moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly vith soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

by symptomatic and supportive care.

Long-sleeved shirt Long pants Waterproof gloves

Shoes plus socks

Pesticide User Safety Requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **User Safety Recommendations**

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing

Remove FPE 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**

Do not apply directly to water, or to areus 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 washwaters or rinsate.

#### Physical and Chemical Hazards

Do not spray where electrical short circuits might result, such as wall outlets, conduit, switch boxes, or motor housings.

#### STORAGE AND DISPOSAL

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

Storage: Store in original container only, preferably in a locked storage area. Do not store in a manner where cross contamination with other pesticides, fertilizer, food or feed could occur. Keep out of reach of children and animals. Store in a cool, dry place and avoid excess heat. Carefully open container. After partial use, close tightly. In case of spill, avoid contact isolate area and keep out animals and unprotected persons. Confine spills. Call FMC (800) 331-3146.

To confine spill if liquid dike surrounding area or absorb with sand, cat litter, or commercial clay. If dry material 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. Emptied foil pouch may retain product residue. Observe all labeled safeguards until containers are destroyed. Do not reuse foil pouch.

Container Disposal: Triple rinse container, then offer for recycling or reconditioning, or puncture and 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.

Dispose of empty foil pouch in a sanitary landfill, or by incineration,

Dispose of empty foil pouch in a sanitary landfill, or by incineration, if allowed by state and local authorities. If burned, stay out of smoke

#### DIRECTIONS FOR USE

is a violation of Federal law to use this product in a manner aconsistent with its labeling. Do not apply this product in a way that vill contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. Not for esidential use by homeowners. 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), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: long-sleeved shirt and long pants, shoes plus socks, and waterproof gloves.

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Do not allow children or pets to go into treated areas or to contact treated surfaces until spray has dried.

Indoor (Interiorscapes) Use Precautions: The use of this product in interiorscapes is limited to use on ornamental plant materials managed by professional and grown within common areas of commercial, industrial, and institutional buildings compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to spray tank. Apply only in well-ventilated areas. Do not apply when occupants are present in the immediate area. Cover fish tanks prior to application. Apply to ornamental plants only. Do not apply to food crops.

Outdoor Use Precautions: Wear a long-sleeved shirt and long pants when spraying. Spray with the wind to your back. Do not spray on windy days. If clothes become wet from spray during use, remove clothing after spraying, wash affected body areas thoroughly with soap and water, and launder clothing before wearing again. Do not apply this product through any type of irrigation system.

#### GENERAL INFORMATION

Flonicamid 50SG Insecticide is a water dispersible granular formation containg 8 ounces of flonicamid per pound.

It is to be used for pest control of ornamental plants in greenhouses, interiorscapes, nurseries and landscape ornamentals.

This product stops insect feeding within 30 minutes, but insects may remain on plants for up to 5 days. This product gives excellent residual control.

#### **Use Restrictions**

Do not apply to food crops (fruits, nuts or vegetables).

Do not apply to home gardens, home greenhouses or in residential settings.

Do not apply this product through any type of irrigation system.

Do not allow children or pets to go into treated areas or to contact treated surfaces until spray has dried.

The use of this product in interiorscapes is limited to use on ornamental plant materials managed by professionals and grown within common areas of commercial, industrial and institutional buildings.

Mixing Instructions

Thoroughly wash out spray equipment before using this product. Use a calibrated measuring device to measure the required amount of this product. When diluting, first add approximately half of the water to the spray tank, then add the required quantity of this product while agitating. Then fill the remainder of the tank with water and continue agitating until thoroughly mixed. Occasionally agitate sprayer during use to assure even coverage. Shake or re-agitate sprayer before use if application is interrupted. Do not apply this product through any type of irrigation system.

Mixing Instructions (For Individual Packets)

Thoroughly wash out spray equipment before using this product. Use a calibrated measuring clevice to measure the required amount of this product. When diluting, first add approximately half of the water to the spray tank, then open individual packet(s) and add the required quantity of packets while agitating. Do not add the packet to the spray tank. The packet is not water soluble. Then fill the remainder of the tank with water and continue agitating until thoroughly mixed. Occasionally agitate sprayer during use to assure even coverage. Shake or re-agitate sprayer before use if application is interrupted. Do not apply this product through any type of irrigation system.

## IF SPRAY SCREENS ARE USED THEY SHOULD BE 50 MESH OR LARGER.

#### Tank Mixing Instructions

When tank mixing this product with other pesticides, observe all precautions and limitations on each separate label. The physical compatibility of this product may vary with different sources of pesticide products, and local cultural practices. Any tank mixture which has not been previously tested should be prepared on a small scale.

Using a jar that is able to contain a minimum of a quart, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid

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flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If

If mixture is physically compatible, add 1/2 of the required amount of water to the mix tank. Start the agitator before adding any tank mix partners. Add products in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables), liquid flowables, liquids, and emulsifiable concentrates.

Always allow each tank partner to become fully dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all of the mixture has been applied.

Note: If using this product in tank mixtures, all products in water-soluble packaging should be added to the tank before any other tank mix partner, including this product. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank.

If using this product in a tank mixture, observe all directions for use, plants/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank mix product label. No label dosage rate should be exceeded, and the most restrictive label precautions and limitations should be followed. This product should not be mixed with any product which prohibits such mixing.

Do not allow tank mix to stand overnight

#### ORNAMENTAL APPLICATIONS

Uses in greenhouses and nurseries are covered by the requirements of the Worker Protection Standard, 40 CFR part 170. See specific instructions on this label for protective clothing and other requirements under that Standard.

Also for use on herrbacious and woody ornamental plants, annuals, and perennials.

Apply this product at a rate of 0.7 to 4.3 oz (20 to 120 grams) product per 100 galkens (see table below for pest specific rates and comments). Treat when insects first appear. Use the high rate for heavy infestations. A surfactant may be used as necessary at labeled surfactant concentrations. Repeat applications every 7-28 days as necessary depending on pest response and watering practices. For improved knockdown of heavy infestations, apply as a tank mix with a pyrethroid or other fast acting material.

Pests	Product Rate per 100 gallons	Active Ingredient Rate per 100 gallons	Comments
Aphids such as: Acyrthosiphon species Aphis species Dactynotus species Green Peach Myzus Macrosiphon species Rhopalosiphum Species	1-3 Packets (20 to 60 grams)* (0.7 to 2.1 oz) (0.045 to 0.134 lb)	0.022 to 0.067 lb ai (10 to 30 grams ai) (0.35 to 1.05 oz ai)	Re-apply every 7 to 28 days as necessary
Thrips' such as: Western Flower Thrips Frankliniella occidentalis Thrips species	3-4 Packets¹ (60 to 80 grams)* (2.1 to 2.9oz) (0.134 to 0.180 lb)	0.067 to 0090 lb ai (30 to 40 grams ai) (1.05 to 1.45 oz ai)	Re-apply every 7 to 28 days as necessary
Whiteflies such as: Greenhouse Whitefly Trialeurodes vaporariorum Sweet Potalo Whitefly Bermisia labaci	4-6 Packets¹ (80 to 120 grams)* (2.9 to 4.3 oz) (0.180 to 0.268 lb)	0.090 to 0.134 lb ai (40 to 60 grams ai) (1.45 to 2.15 oz ai)	Re-apply every 7 to 28 days as necessary
Leafhoppers Mealybugs Plant Bugs Scale Stinkbugs	3-6 Packets 1 (60 to 120 grams)* (2.1 to 4.3 oz) (0.134 to 0.268 lb)	0.067 to 0.134 lb ai (30 to 60 grams ai) (1.05 to 2.15 oz ai)	Re-apply every 7 to 28 days as necessary

\*One capful equals 20 grams

<sup>1</sup>Each packet contains 0.7 oz ((20 grams) of product

<sup>2</sup>Thrips suppression on flowers. Best management achived with application on foliage when insects first appear.

<sup>3</sup>Suppression of silverleaf whitefly. It is highly recommended to rotate or tank mix with a product of a different chemical class to achieve optimal whitefly management.

Flonicamio 50\$G has demonstrated excellent safety on most plants; even so, all varieties of plants have not been fully tested. When

treating large numbers of plants of a single variety, or when first treating material not previously tested, spray a few plants and observe for phytotoxicity prior to full scale application. Wait 5-7 days after treatment to evaluate trial results.

Certain pansy cultivars have exhibited sensitivity to flonicamid. Prior to use on pansy, apply flonicamid at the appropriate use rate to a small portion of the pansy crop (about 10 units per cultivar) and visually assess impact 7 to 10 days after application.

Recommended Volumes of Spray Solution Per Acre for Ornamental Plants Based on Height

Plant Height	Volume per acre
Up to 1ft	Up to 25 gal
1ft - 2 ft	50 gal
2 ft - 4 ft	100 gal

#### RESISTANCE MANAGEMENT

Treatment may not be effective if tolerant strains develop. To reduce the potential for developing pest resistance to this product, alternate with insecticides from different classes of chemicals with different modes of action. Do not apply more than 0.267 lbs a.i. per acre per season.

Do not apply this product more than (2) times consecutively before rotating to another chemistry. No minimum interval is needed between the second application of this product and an application of another insecticide from a different resistance management group. However, allow at least a one (1) week interval between the application of an alternate insecticide and a third application of Flonicamid 50SG Insecticide. For greenhouse use, do not exceed 16 applications per crop or year, whichever is shorter.

## Conditions of Sale and Limitation of Warranty and Liability:

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions beyond t he control or FMC or Seller. All such risks shall be assumed by Buyer and User, and to the extent consistent with applicable law, Buyer and User agree to hold FMC and Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the Directions for Use when used in accordance with the directions under normal conditions of use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FMC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE SELECTION, PURCHASIE, OR USE OF THIS PRODUCT. To the extent consistent with applicable law, any warranties, express or implied, having been made are inapplicable if this product has been used contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to (or beyond the control of) seller or FMC, and buyer assumes the risk of any such use.

To the extent consistent with applicable law, FMC or seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this produxt. To THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF FMC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE PRODUCT.

This Conditions of Sale and Limitation of Warranty and Liability may not be amended by any oral or written agreement.

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