March 02, 2005

Mr. A. Sterett Robertson, Regulatory Manager Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268

Subject:

Amendment: Change formulation, Revise Confidential Statement of Formula (CSF) and label,

Add "OMRI logo, etc.

NAF-371 (Spinosad 0.5% SC.) EPA Reg. No. 62719-314

Your submissions dated July 22 and December 20, 2004

Dear Mr. Robertson:

We have reviewed the above referenced submissions, in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended. The amended basic CSF dated 6/25/2004 is acceptable and supercedes any previously accepted ones, and we have placed a copy in our record for the subject product. The label is acceptable subject to the following comments:

- Delete the "OMRI" logo and any related statements throughout the labeling. You may re-submit this amendment after OMRI authorizes use of their logo.
- Under "Mixing and Application" Page 4/Paragraph #2, delete the phrase ... "to plant foliage to point of runoff" and replace with ... "to both upper and lower surfaces of plant foliage".
- Under "tropical tree fruits" Page 6/1st column, last row, delete the phrase "including but not limited to". You may list only tropical fruits for which tolerances have been established.
- On page 4, delete the statement "Spinosad the active ingredient in naturally occurring soil organism". Statements relative to product composition and indirectly implying safety of the product are not acceptable. This was stated in our previous letter (dated May 26, 1999) to you.

	CONCURR	ENCES		
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Other Comments:

• Upon completion, submit to the Agency, the data on storage stability testing, conducted concurrently with the corrosion characteristics study at 0, 3, 6, 9 and 12 months after warehouse storage.

Submit the new analytical method for the determination of the three active ingredients in the end-use product to the EPA Analytical Laboratory, Ft. Meade, MD.

Enclosed, please find a copy of the stamped label for your records. If you have any questions concerning this action, contact Dr. B. A. Akinlosotu at (703) 605-0653.

Singerely,

George T. LaRocca, Product Manager 13 Insecticide Branch

Registration Division (7505C)

enclosure:

Spinosad 0.5% SC

Insect Control Product

FOR RESIDENTIAL USE IN HOME GARDENS, LAWN AND ORNAMENTALS For control of foliage feeding worms (caterpillars), thrips and other listed pests in:

- Fruiting vegetables, such as tomato, pepper, okra and eggplant
- Cucurbits such as cantaloupe and honeydew
- Cole crops (Brassica), such as broccoli, cabbage and cauliflower
- Leafy vegetables, such as lettuce, spinach and celery
- Tuberous vegetables, such as potatoes, sweet potatoes, yams, Jerusalem artichoke Chinese artichoke and cassava
- Stone fruits, such as peaches, plums, cherries, nectarines, prunes and apricots
- Apple and other pome fruits, such as pears, crabapples, mayhaw and quince
- Bushberries and caneberries, such as blueberry, blackberry and raspberry
- Citrus trees, such as oranges, grapefruit, lemons, limes, and tangerines
- Succulent beans and peas, such as lima bean, snap bean and blackeyed pea
- Tropical tree fruits, such as avocado, mango, star apple and papaya
- Tree nuts, such as pecans, almonds, cashew and walnuts
- Sweet corn and popcorn
- Asparagus
- Grape
- Leafy and dried herbs
- Strawberry
- Lawns
- Outdoor herbaceous and woody ornamentals
- Fire ant control in lawns, ornamentals, home gardens, and other outdoor areas

See Home Garden and Lawn and Ornamental Treatment Recommendations tables in Directions for Use for a complete listing of crops and use sites.

[Editor's note: Graphic devices illustrating plants which may be treated and/or pests which attack crops and/or predatory beneficials and/or natural enemies which may be used in conjunction with the below listed statements.]

[Editor's note: Additional Statements for Use as Sale Copy]

and/or

Liquid concentrate

and/or

Easy to use

and/or

User friendly

and/or

No quesswork

and/or

CONCENTRATE

and/or

ACCEPTED with COMMENTS In EPA Letter Dated:

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

Makes up to __ gallons of spray [Editor's note: dilution rate is 2.0 fl oz/gal] and/or For vegetables, apples, and citrus trees and/or Controls worms (caterpillars) and/or Kills worms (caterpillars) and/or Controls citrus leafminers and/or Controls Colorado potato beetle and/or Kills Colorado potato beetle and/or Controls certain insects in vegetable gardens and/or Controls certain insects in the garden and/or Controls certain insects in vegetable gardens and/or For vegetables and/or No odor water-based formula and/or Water-based formula and/or Contains spinosad and/or Do-it-yourself home garden insect control and/or Leaves no oily residue and/or Kills certain home garden insect pests and/or Short post-harvest interval and/or Pick apples 7 days after spraying

Trademark of Dow AgroSciences

Contains [trademark] Naturalyte® insect control †

A [trademark] Naturalyte® insect control product

Contains 0.04 lb of active ingredient per gallon.

U.S. Patent No. 5,362,634 and 5,496,931

[†] [Editor's note : The trademark "Naturalyte" cannot be used in product labels which contain use patterns for professional turf or ornamental markets.]

Net Contents







Listed by the Organic Materials Review Institute (OMRI) for use in organic production.

Keep Out of Reach of Children

Refer to back/side panel for Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. [Editor's note: Supplemental distributor may substitute an appropriate "In Case of Emergency" statement.]

Shake Well Before Use -- Avoid Freezing

EPA Registration No. 62719-314	EPA Est.
Trademark of Dow AgroSciences LLC Dow AgroSciences LLC • Indianapolis, IN 46268 U.S.A.	



(back/side panel)

Precautionary Statements

Environmental Hazards

This product is toxic to bees exposed to treatment for 3 hours following treatment. Do not apply this pesticide to blooming, pollen-shedding or nectar-producing parts of plants if bees may forage on the plants during this time period. This product is toxic to aquatic invertebrates. Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters or rinsate. Do not put product or rinse water down drain.

Physical or Chemical Hazards

Combustible. Do not use or store near heat or open flame

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

For residential use in home gardens, lawn and ornamentals. Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.

Storage and Disposal

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

Pesticide Storage: Store in original container only in secure or locked storage area.

Pesticide Disposal: If empty: Do not reuse this container. Place in trash or offer for recycling if available.

If partly filled: Call your local solid waste agency or 1-800-992-5994 for disposal instructions. Never place unused product down any indoor or outdoor drain.

Spinosad 0.5% SC [Optional statements: Naturalyte⁹ insect control / insect control product / Naturalyte⁹ insect control, a fermentation-derived insect control product] is intended for control of worms (caterpillars) and other listed insects. Spinosad, the active ingredient in Spinosad 0.5% SC, is biologically derived from the fermentation of *Saccharopolyspora spinosa*, a naturally occurring soil organism. Spinosad does not significantly impact predatory beneficial insects, predatory mites, and spiders while controlling target pests. Susceptible insect pests may be observed on plants up to several hours after treatment, but will have ceased active feeding before being killed. Spinosad is classified as an organic substance by the USDA National Organic Standards Board.

Mixing and Application (Shake Well Before Use)

Spinosad 0.5% SC may be applied with trigger sprayer, hand-held, backpack, or hose-end sprayers. Use a hose-end sprayer that can be adjusted to provide a dilution ratio of about 2 fl oz of Spinosad 0.5% SC (4 Tbs) per gallon of spray.

Add the required amount of Spinosad 0.5% SC to the recommended amount of water, mix thoroughly, and apply uniformly to plant foliage to point of runoff. It is recommended to mix only as much spray as needed for a single treatment. In vegetable gardens it is recommended to use not more than 3 gallons of spray for 1000 sq ft of area. Do not use kitchen utensils for measuring. Keep measuring utensils with product and away from children.

	Amount of Spinosad 0.5% SC to Use per Pint, Quart or Gallon of Spray		
Unit of Measure [†]	Per Pint (16 fl oz) of Spray	Per Quart (32 fl oz) of Spray	Per Gallon (128 fl oz) of Spray
Fluid Ounces (fl oz)	0.25 fl oz	0.5 fl oz	2.0 fl oz
Milliliters (ml)	7.5 mi	15 ml	60 ml
Tablespoons (Tbs)	1/2 Tbs	1 Tbs	4 Tbs
Teaspoons (tsp)	1 1/2 tsp	3 tsp	12 tsp

[†] Conversion factors: 1 fl oz = 30 ml = 2 tablespoons (Tbs) = 6 teaspoons (tsp) (1 teaspoon = 1/3 tablespoon)

When to Apply

Apply when listed pests are present. Repeat applications may be made as indicated in the Home Garden Treatment Recommendations table. See your state extension service recommendations for treatment guidelines in your area.

Home Garden Treatment Recommendations

Crops	Pests Controlled	Maximum Number of Applications per Season	Minimum Days to Wait before Reapplying	Minimum Days to Wait from Last Application to Harvest
apple and other pome fruits including, but not limited to: pears, crabapples, mayhaw and quince	codling moth leafminers leafrollers Oriental fruit moth tufted apple budmoth	6	10	7
asparagus (post-harvest to protect ferns)	asparagus beetles	4	7	60
bushberries and caneberries, including, but not limited to: blueberry, blackberry, raspberry, loganberry, currant, gooseberry, huckleberry, elderberry, juneberry, lingonberry, and salal	armyworms fireworms fruitworms leafrollers loopers thrips fruitfly (suppression)	6	6	3
citrus trees, including, but not limited to: oranges, grapefruit, lemons, limes, and tangerines (to prevent fruit scaring from thrips, treat when fruit is marble size)	leafminers katydids thrips worms (caterpillars)	6	6	1
cole crops (Brassica vegetables), including, but not limited to: broccoli, Chinese broccoli, broccoli raab, brussels sprouts, cabbage, Chinese cabbage (bok choy), Chinese cabbage (napa), cauliflower, cavalo, collards, kale, kohlrabi, mizuna, mustard greens, mustard	cabbage looper diamondback moth imported cabbage worm leafminers worms	6	4	1

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spinach, Chinese mustard cabbage (gai choy) and rape greens				
cucurbits, including, but not limited to: cucumber, summer and winter squash, muskmelons (cantaloupe, honeydew, etc.), pumpkin, edible gourds and watermelon	leafminers thrips worms (caterpillars)	6	5	all except cucumber, 3 cucumber, 1
fruiting vegetables, including, but not limited to: eggplant, ground cherry, okra, pepino, pepper, tomatillo, and tomato	Colorado potato beetle leafminers thrips worms (caterpillars)	6	4	1
grape	leafrollers thrips worms (berry moth)	6	5	7
leafy and dried herbs	leafminers thrips worms (caterpillars)	5	7	1
leafy vegetables, including, but not limited to: head and leaf lettuce, celery, arugula, chervil, edible chrysanthemum, corn salad, cress, dandelion, dock, endive, fennel, parsley, garden purslane, radicchio, rhubarb, spinach, and Swiss chard	leafminers worms (caterpillars)	6	4	1
stone fruits, including, but not limited to: peaches, plums, cherries, nectarines, prunes, and apricots	borers fruit flies leafminers leafrollers thrips worms (caterpillars)	6	7	cherry, plum and prune, 7 peach, nectarine and apricot, 14
strawberry	armyworms leafrollers thrips	6	5	1
succulent beans and peas, including, but not limited to: lima bean, snap bean, blackeyed pea, garden pea, garbanzo bean, and snow pea	borers leafminers thrips worms (caterpillars)	6	5	3
sweet corn and popcorn (for earworms, treat silk frequently as it grows)	com borers worms (caterpillars), including earworm	6	3	1
tree nuts, including, but not limited to: pecans, almonds, cashew, chestnut, macadamia, pistachio, and walnuts	leafrollers navel orangeworms peach twig borer shuckworms webworms husk fly (suppression)	5	7	14
tropical tree fruits, including, but not limited to: atemoya, avocado, sapote, cherimoya, custard apple, guava, longan, lychee, mango, papaya, passionfruit, rambutan,	suppression of worms or caterpillars, thrips, and katydids	4	7	1

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sapodilla, star apple, starfruit, and wax jambu				
tuberous and corm vegetables, including, but not limited to: potatoes, sweet potatoes, yams, Jerusalem artichoke, Chinese artichoke, Cassava, chayote root, ginger, and tumeric	Colorado potato beetle com borers leafminers thrips worms (caterpillars)	6	7	7
all crops listed in this table	fire ants	See application	directions in fo	llowing table

Lawn and Ornamental Recommendations

Use Site	Pests Controlled	Comments
lawns	worms, including small (<3/4") armyworm, and sod webworm cat fleas (suppression only)	Mix the amount of Spinosad 0.5% SC recommended per gallon of spray and uniformly apply a minimum of 3 gallons of spray per 1000 sq ft of area. Delay watering or mowing for 12 to 24 hours after application. Armyworms: For best results, apply in early morning or late afternoon. Cat fleas: Apply early or late in the day since control requires contact with dilute spray before drying. Thorough coverage is necessary. Reapply in 7 to 14 days to control adults that have emerged from pupae present at time of initial treatment.
outdoor omamentals (herbaceous and woody plants)	gall midges leaf feeding beetles leafminers sawfly larvae spider mites [†] thrips worms, including loopers, webworms, bagworms, gypsy moth, and tent caterpillars	Mix the amount of Spinosad 0.5% SC recommended per pint, quart or gallon of spray and uniformly spray foliage to point of runoff. Uniform coverage of upper and lower leaf surfaces is essential for effective insect control.
lawns, ornamentals, home gardens (see listed crops in previous table) and other outdoor areas	fire ants	Individual Fire Ant Mounds: Mix the amount of Spinosad 0.5% SC recommended per gallon of spray and use a sprinkler can or similar device to apply the diluted spray as a mound drench, using 1 to 2 gallons per mound. Do not use pressurized sprays. Apply about 10% of the spray volume around the perimeter of the mound and the remainder directly to the mound. Do not disturb fire ant mound prior to application. If possible, apply following recent rainfall. For best results apply when weather is cool, 65 to 85°F, or in early morning or late evening.

[†]Apply when spider mites are first observed prior to webbing and before mite populations have become severe. Reapply after 7 to 10 days (3 to 5 days in greenhouses and structures that can be altered to be closed or open) to contact newly hatched nymphs and repeat until infestation is managed. **Uniform coverage of both upper and lower leaf surfaces is critical.** Addition of a nonionic spray adjuvant at 0.1% v/v has been shown to enhance control of spider mites (follow surfactant manufacturer's label



recommendations).

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

The registrant acknowledges that this product may be misbranded if one or more of its ingredients, active and/or inert, is reclassified as non-organic and/or removed from the United States Department of Agriculture (USDA) National List of approved substances for use in organic production and handling. If one or more of the ingredients in this pesticide product are so reclassified and/or removed (delisted) from the National List, the registrant will take appropriate remedial measures with respect to the labeling for this product.

Warranty Disclaimer

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. SELLER MAKES NO OTHER EXPRESS NOR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tomadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Seller. All such risks shall be assumed by Buyer.

Limitation of Remedies

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Seller's election, one of the following:

- 1. Refund of purchase price paid by buyer or user for product bought, or
- 2. Replacement of amount of product used.

Seller shall not be liable for losses or damages resulting from handling or use of this product unless Seller is promptly notified of such loss or damage in writing. In no case shall Seller be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use, and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of the Seller or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.