

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 13 2000

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

John J. Jachetta, PhD
Regulatory Manager
Regulatory Success-Americas
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

Subject: NAF-371 (A.I. SPINOSAD)
Amendment - Add Stone Fruits, Cucurbits, Succulent Beans and Peas,
Sweet Corn, Tuberous and Corm Vegetables
EPA Registration No. 62719-314
Your submission dated October 25, 1999

Dear: Dr. Jachetta:

The amendment referred to above, submitted in connection with registration under section 3 (c)(7)(B) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable, subject to the comments listed below.

1. Please delete the statement "No unpleasant odor" from your label. This is a subjective statement and may not apply to all individuals.
2. Change the phrase "Stops certain insects..." to read "Controls...".
3. Delete the phrases "New active ingredient" and "New mode of action" from the label. This product has been registered since January 29, 1999 and the formula has not changed since that time.
4. Delete the phrase "Allows predatory insects to work for you." Vague or non-specific terms implying unstated benefits are not acceptable. We will allow the predatory statement on the back panel provided it is revised to read "The active ingredient in NAF-371 does not significantly impact predatory beneficial insects....etc."
5. Since the product is for residential use, change turf to lawn(s) throughout the label.
6. Under "Mixing and Application" add: "Do not use kitchen utensils for measuring. Keep measuring utensils with product and away from children."

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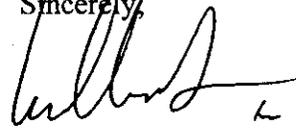
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7. Under "Environmental Hazards", add: "Do not put product or rinse water down drain."

A stamped copy of the label is enclosed for your records. If you have any questions, please call Dr. William Sproat of my team at 703-308-8587.

Sincerely,



George T. LaRocca
Product Manager 13
Insecticide Branch
Registration Division (7505C)

)
Enclosure

NAF-371

FOR RESIDENTIAL USE IN HOME GARDENS, TURF AND ORNAMENTALS USE ONLY

For control of foliage feeding worms (caterpillars) and other listed pests in:

- Fruiting vegetables, such as tomato, pepper 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 fruit, such as peaches, plums, cherries, nectarines, prunes and apricots
- Apple and citrus trees
- Turfgrass
- Outdoor herbaceous and woody ornamentals
- Fire ant control in ornamentals and other outdoor areas

See "Crop Home Garden and Turf and Ornamental Treatment Recommendations" table-~~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 guesswork
- and/or
- CONCENTRATE
- and/or
- 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 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

ACCEPTED
 WITH COMMENTS
 In EPA Label Book

APR 13 2000

Under the State of Florida
 Executive Order
 as amended by
 registered under
 62719-314

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Environmental Hazards

This product is highly toxic to ~~aquatic invertebrates molluscs~~. This product is highly toxic to bees exposed to direct spray on blooming crops or other vegetation. Avoid use when bees are actively foraging. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.

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 on apple and citrus trees and vegetables in home gardens, turf 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.

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

Disposal: Securely wrap original container in several layers of newspaper and discard in trash.

NAF-371 **[Optional statements:** Naturalyte* insect control / insect control product / Naturalyte* insect control, a fermentation-derived insect control product] is intended for control of worms (caterpillars) and other listed insects. Spinosad, the active ingredient in NAF-371 works to preserve 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.

How to Apply ~~Mixing and Application~~ (Shake Well Before Use)

NAF-371 may be applied with trigger sprayer, hand-held, backpack, or hose-end sprayers. Use a hose-end sprayer ~~which that~~ can be adjusted to provide a dilution ratio of about ~~1.65-2.0~~ fl oz (~~3-1/3-4~~ Tbs) of product per gallon of spray.

Mixing ~~(Shake Well Before Use)~~

Add the required amount of NAF-371 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 3.0 gallon of spray for 1,000 sq ft of area.

Unit of Measure †	Amount of NAF-371 to Use per Pint, Quart or Gallon of Spray		
	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)	0.2-0.25 fl oz	0.4-0.5 fl oz	1.65-2.0 fl oz
Milliliters (ml)	6-7.5 ml	12-15 ml	50-60 ml
Tablespoons (Tbs)	1/2 Tbs	3/4-1 Tbs	3-1/3-4 Tbs
Teaspoons (tsp)	1-1/2 tsp	2-3 tsp	10-12 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 "Crop Home Garden Treatment Recommendations" table.

Crop-Home Garden Treatment Recommendations Table

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 trees	leafminers leafrollers	6	28-10	7 days
Citrus trees, including, but not limited to: oranges, grapefruit, lemons, limes, and tangerines	worms (caterpillars) katydids thrips	6	6	1 day
Stone Fruit, including: peaches, plums, cherries, nectarines, prunes, and apricots	worms (caterpillars) borers leafminers leafrollers fruit flies	6	7	Cherry, plum and prune, 7 days Peach, nectarine and apricot, 14 days
Succulent Beans and Peas, including: but not limited to lima bean, snap bean, blackeyed pea, garden pea, garbanzo bean, and snow pea	worms (caterpillars) borers leafminers thrips	6	5	3 days
Cole Crops (Brassica Vegetables), including: broccoli, Chinese broccoli, broccoli raab, brussels sprouts, cabbage, Chinese cabbage (bok choy), Chinese cabbage (napa), cauliflower, cavalo, collards, kale, kohlrabi, mizuna, mustard greens, mustard spinach, Chinese mustard cabbage (gai choy) and rape greens	worms (caterpillars) leafminers	6	4	1 day
Fruiting Vegetables, including: eggplant, ground cherry, pepino, pepper, tomatillo, and tomato	worms (caterpillars) Colorado potato beetle thrips leafminers	6	4	1 day
Cucurbits, including but not limited to: cucumber, summer and winter squash, muskmelons (cantaloupe, honeydew, etc.), pumpkin, edible gourds and watermelon	worms (caterpillars) leafminers thrips	6	5	All except cucumber, 3 days Cucumber, 1 day
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	worms (caterpillars) leafminers	6	4	1 day

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<u>Sweet Corn</u>	<u>worms (caterpillars), including earworm corn borers</u>	<u>6</u>	<u>3</u>	<u>1 day</u>
<u>Tuberous and Corn Vegetables, including, but not limited to: potatoes, sweet potatoes, yams, Jerusalem artichoke, Chinese artichoke, Cassava, chayote root, ginger, and tumeric</u>	<u>worms (caterpillars) Colorado potato beetle corn borers leafminers thrips</u>	<u>6</u>	<u>7</u>	<u>7 days</u>

Turf and Ornamental Recommendations

<u>Use Site</u>	<u>Pests Controlled</u>	<u>Comments</u>
<u>Turfgrass</u>	<u>worms, including small (<3/4") armyworm, and sod webworm</u> <u>cat fleas (suppression only)</u>	<u>Mix the amount of NAF-371 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 12-24 hours after application.</u> <u>Armyworms: For best results, apply in early morning or late afternoon.</u> <u>Cat Fleas: Apply early or late in the day since control requires contact with dilute spray before drying. Thorough coverage is necessary. Reapply in 7-14 days to control adults that have emerged from pupae present at time of initial treatment.</u>
<u>Outdoor Ornamentals (herbaceous and woody plants)</u>	<u>worms, including loopers, webworms, bagworms, and tent caterpillars</u> <u>gall midges</u> <u>leafminers</u> <u>leaf feeding beetles</u> <u>sawfly larvae</u> <u>thrips</u>	<u>Mix the amount of NAF-371 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.</u>
<u>Turfgrass, Ornamentals and other Outdoor Areas</u>	<u>Fire ants</u>	<u>Individual Fire Ant Mounds: Mix the amount of NAF-371 recommended per gallon of spray and use a sprinkler can or similar device to apply the diluted spray as a mound drench, using 1-2 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.</u>

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 OR 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

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(including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, 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" above 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.

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 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. Lack of performance, or other unintended consequences may occur due to such factors as use of the product contrary to label instructions (including adverse conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as extreme weather conditions), 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.

EPA-accepted: __/__/__