

Yolo County Department of Agriculture
70 Cottonwood St.
Woodland, CA 95695
Phone 530-666-8140
Fax 530-662-6094

**PRE-QUARANTINE TREATMENT COMPLIANCE AGREEMENT FOR
ORIENTAL FRUIT FLY**

This agreement is entered into voluntarily and with the express purpose of meeting potential future Oriental fruit fly quarantine shipping requirements. This agreement meets California Department of Food and Agriculture (CDFA) and United States Department of Food and Agriculture (USDA) requirements for moving Oriental fruit fly host material off a property within a quarantine area. This agreement is strictly a voluntary, precautionary measure designed to help ensure the continued uninterrupted movement of Oriental fruit fly host material in the event the current Oriental fruit fly quarantine area is expanded to include the locations listed in this agreement. CDFA and USDA procedures must be followed for these treatments to be considered as valid quarantine compliance treatments.

THIS COMPLIANCE AGREEMENT WILL BE VOIDED IF THE CURRENT ORIENTAL FRUIT FLY QUARANTINE IS EXPANDED AND THE PROPERTIES LISTED IN THIS AGREEMENT ARE INCLUDED IN THE EXPANSION. IF THIS OCCURS, A NEW QUARANTINE COMPLIANCE AGREEMENT MUST BE ESTABLISHED WITH CDFA TO VALIDATE ALL PREVIOUS AND FURTHER PESTICIDE TREATMENTS.

NAME AND MAILING ADDRESS:	FIELD LOCATION:
OPERATOR IDENTIFICATION NUMBER:	SITE IDENTIFICATION NUMBER(S):

APPLICABLE AUTHORITY SECTIONS:

California Food and Agricultural Code Sections 5023 (General Inspection Authority) and 5705a&b (Compliance Agreement Authority)

The following requirements must be met to maintain compliance with this agreement.

1. Submit a Notice of Intent (NOI) to the Yolo County Department of Agriculture, Weights and Measures at least 24 hours prior to conducting any pesticide application pursuant to this agreement. Notify in person, by FAX 530-662-6094 or by phone 530-666-8142.
2. Follow CDFA and USDA pre-harvest treatment protocol found at:
https://www.cdfa.ca.gov/plant/PE/InteriorExclusion/current_preharvest_treatment.html
In addition, the Pre-harvest Treatment Schedule can be found at:
https://www.cdfa.ca.gov/plant/PE/InteriorExclusion/current_preharvest_treatment_schedules.html
3. Allow County Agricultural Inspectors on site to observe and verify that treatment protocol is followed. This includes inspecting the mix/load process, and as well as the entire application, at the inspector's discretion.
4. To help ensure uniformity related to verifying applications pursuant to this agreement, CDFA staff may not substitute for County Agricultural Inspectors.
5. Pay an hourly rate of \$118.00 to the County Agricultural Department, when treatment verifications are performed. Treatment verification by County Inspectors is performed solely for the benefit of the grower, and therefore the cost should be borne by the grower. Travel time (portal to portal) must be included. (Yolo County Master Fee <http://www.yolocounty.org/home/showdocument?id=43723>)
6. Re-apply any treatment if one-half inch of rain falls within 24-hours after its completion. (Upon request, the 24-hour NOI may be waived for re-applications.) Rainfall data will be obtained from the National Weather Service.
7. Submit pesticide use reports to the Yolo County Department of Agriculture, Weights and Measures within seven days after completion of each pesticide application. In the event that a quarantine is established in the area, the use report will serve as a record to certify that the applications were made. If a pest control business applies the pesticide for you, they will submit this report and give you a copy for your records.
8. Additional Instructions: _____

This agreement becomes effective upon signature of both parties and shall remain in effect until cancelled by either party with thirty days written notice to the address designated for each party appearing below. The County Agricultural Commissioner may immediately cancel this agreement for cause, including, but not limited to, the failure to follow the procedures outlined above.

I understand the above requirements and I must follow them to maintain compliance with this agreement.

Print:

Grower Name: _____ Title: _____

Grower Signature: _____ Date: _____

Print:

County Official Name: _____ Title: _____

County Official Signature: _____ Date: _____

(10/20/2010)

Pre-Harvest Bait Treatments

I. Standard Pre-Harvest Bait Treatment Protocol

(In warmer months harvest can begin after a minimum of four treatments within a minimum of thirty days)

- A. Obtain Project required paperwork
 1. QC Master Permit 1321 Compliance Agreement
 2. Regulatory Treatment Agreement
 3. SLN (only if using Aquamul Malathion 8)
- B. Look at Pre-Harvest Treatment Schedule to determine when to begin Pre-Harvest bait treatments
- C. Aquamul Malathion 8 with Nu-Lure Insect Bait
 1. Treat every 6 to 14 days until harvest is complete
 - a. Every 6-10 days requires a minimum of 4 treatments for a thirty day treatment cycle
 - b. Every 11-14 days requires a minimum of 4 treatments which results in a 33-36 day treatment cycle
 - c. May alternate treatment intervals to decrease or increase the number of required treatments
 - i. Never less than 4 treatments
 - ii. Never less than a 30 day treatment cycle
 2. May use GF-120 Naturalyte for last Aquamul Malathion 8 treatment to shorten pre-harvest interval
 3. When required number of treatments are completed
 - a. Obtain Project issued Certificate of Quarantine Compliance
 - b. Must continue treatments if harvest is not completed by the end date listed on the Certificate of Quarantine Compliance
- D. GF-120 Naturalyte
 1. Treat every 7 to 10 days until harvest is complete
 - a. Every 7-10 days requires a minimum of 4 treatments
 - b. May alternate treatment intervals to decrease or increase the number of required treatments
 - i. Never less than 4 treatments
 - ii. Never less than a 30 day treatment cycle
 2. When required number of treatments are completed
 - a. Obtain Project issued Certificate of Quarantine Compliance
 - b. Must continue treatments if harvest is not completed by the end date listed on Certificate of Quarantine Compliance
- E. Maintain your treatment schedule
 1. The Project will extend a treatment interval due to inclement weather
 2. The Project will not extend a treatment interval due to grower negligence or equipment failure
 - a. For Aquamul Malathion 8, all previous treatments are voided if the grower exceeds the 14 day interval period between treatments
 - b. For GF-120 Naturalyte, all previous treatments are voided if the grower exceeds the 10 day interval period between treatments

Regulatory Treatment Record

Fill in all blanks and print clearly. Use Only Blue Ink

Indicate any discrepancies between actual and presented data

Grower Name:

Grove Address:

Contact Name:

Grove Management

SiteID No:

Block No:

Agreement No:

Treatment Date:

Next Treatment Date

Contact Phone No

Zone No:

Cross Street:

Thomas Bros. Info:

Longitude

Latitude

Treatment No.

Treatment Type

Schedule

Days

Chemical Name:

First Treatment Date:

Trade Name

Previous Treatment Date

EPA No.

Under Section 18:

SLN Signed:

Chemical Amt:

Oz.

Lure Amt:

Oz.

Water Amt:

Gal.

Total Trees:

Total Acres:

Treatment Interval

Days

Treatment Start Time

Treatment End Time

Crop Type:

Applicator Name:

Crop Variety:

Applicator License No

Remarks:

Officer Name:

Bait treatment with Malathion or Spinosad for Regulatory Pre-Harvest Treatment

For 100 trees/acre grove @ 20' x 20' spacing, approximately 50-60 trees will be sprayed:

X	X	X	X	X	X	X	X	X	X
X				X				X	X
X		X				X			X
X				X				X	X
X		X				X			X
X				X				X	X
X		X				X			X
X				X				X	X
X		X				X			X
X	X	X	X	X	X	X	X	X	X

All perimeter trees sprayed.

Inside the grove, every other tree of every other row needs to be sprayed.

Same principle can apply to row crops. First and last plant of every row and approximately every 20 feet of outer perimeter rows needs to be sprayed. Within field, spray approximately every 20-40 feet of every 6th row (depending on row spacing).

NOTE:

A large spray droplet size of 4000 to 6000 μ (4-6 mm) is recommended to optimize length of bait attractance. Fruit flies can detect the bait from several yards away. On ground applications spot or strip, spray several areas on the inner canopy of fruiting plants. Avoid weather conditions that could result in drift to nontarget areas. Direct spray application to bottoms of leaves inside the foliage canopy to reduce direct exposure to sun and rain.

Pesticide Rates, Re-entry and Pre-harvest Interval Table

Pesticides	Commodities	Re-entry Interval (REI)	Pre-harvest Interval (PHI)	Remarks
Malathion 8 Aquamul EPA # 34704-474 Add Protein Bait Water should be buffered to near 7.0 pH when mixing with Malathion pesticides Do Not use on Apples, Pears, Persimmons, Plums or Pomegranates! Ground or Aerial application	Blackberries, Blueberries, Boysenberries, Currants, Dewberries, Gooseberries, Loganberries, Mangos, Melons (other than Watermelons), Papayas, Pumpkins, Raspberries, Squash (winter), Tomatoes, Watermelons	12 hours	1 day	Per Label/SLN
	Guavas	12 hours	2 days	Per Label/SLN
	Cherries, Eggplant, Passion Fruit, Peppers, Strawberries	12 hours	3 days	Per Label/SLN
	Figs	12 hours	5 days	Per Label/SLN
	Apricots	12 hours	6 days	Per Label/SLN
	Grapefruit, Lemons, Limes, Oranges, Tangerines, Tangelos	12 hours	7 days	Per Label/SLN
	Cucumbers, Squash (summer)	24 hours	1 day	Per Label/SLN
	Grapes	24 hours (72 hours for girdling and tying)	3 days	Per Label/SLN
	Nectarines, Peaches, Walnuts	24 hours	7 days	Per Label/SLN
	Avocados, Kumquats	48 hours	7 days	Per Label/SLN
GF 120 NF, Naturalyte (organic Spinosad) EPA #62719-498 Bait pre-mixed Ground or Aerial application	All Commerical Fruit per Section 3 – including commodities such as Apples, Pears, Plums, Persimmons, and Pomegranates not listed on the Malathion label or SLN	4 hours	4 hours	Per Label (no SLN required)
<ol style="list-style-type: none"> Application interval for Malathion is between 6 to 14 days. Spinosad application interval is between 7-10 days. If treatment is interrupted by breakdowns or other factors, the entire zone may be treated within 24 hours to preserve the scheduled interval. Do not treat when there is 50% or more chance of receiving significant rainfall. 0.5 inches of rain within 24 hours of a treatment nullifies the treatment. SLN must be in possession of applicator and supervisory personnel responsible for conducting treatment at the treatment site. Spinosad may be substituted for last Malathion treatment to achieve 24 hour PHI and commence harvesting without the longer PHI for Malathion. <p>Pesticide Rates: Malathion 8 Aquamul formulation: Use 2.8 ounces per acre plus Nu-Lure Insect Bait (Miller Co.) CA Reg. No. 72-50012-AA -- of 9.6 ounces per acre. Note: The Malathion 8 Aquamul rate is the minimum effective dose, which is much less than the label rate – determined by a research committee during previous exotic fruit fly quarantines in California.</p> <p>Spinosad formulation: Aerial – use 20 oz. of product mixed with 30 oz of water per acre. (1:1.5 ratio) Ground – use 20 oz of product mixed with 20, 40, 60, or 80 oz of water per acre. (1:1, 1:2, 1:3, or 1:4 ratio)</p>				

Supplemental Labeling



product file

Dow AgroSciences LLC

9330 Zionsville Road

Indianapolis, IN 46268-1054 USA

GF-120 NF Naturalyte[®] Fruit Fly Bait

EPA Reg. No. 62719-498

For selective attractance and control of multiple species of tephritid fruit flies infesting any tree, fruit, nut, vine, vegetable or food crop and ornamentals, and on non-crop vegetation which may serve as resting sites for adult flies.

ATTENTION

- It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
- This labeling must be in the possession of the user at the time of application.
- Read the label affixed to the container for GF-120 NF Naturalyte[®] Fruit Fly Bait insecticidal bait before applying. Carefully follow all precautionary statements and applicable use directions.
- Use of GF-120 NF according to this supplemental labeling is subject to all use precautions and limitations imposed by the label affixed to the container for GF-120 NF.

Directions for Use

GF-120 NF Naturalyte Fruit Fly Bait attracts and controls multiple species of tephritid fruit flies infesting any tree, fruit, nut, vine, vegetable or food crop and ornamentals, and on non-crop vegetation which may serve as resting sites for adult flies. Aerial or ground applications in production agriculture or directed ground applications to individual plants are permitted. Do not make aerial applications in immediate proximity of residential, commercial, government, institutional or other structures where people may be present including, but not limited to, homes, apartments, offices, churches, schools, and businesses. Aerial applicators should evaluate conditions existing at the time of application and make appropriate adjustments to reduce drift. In urban areas, however, use is limited to directed ground applications.

Refer to product label for General Use Precautions.

Preparation for Use

Mixing - GF-120 NF Naturalyte Fruit Fly Bait is a bait concentrate that should be diluted with water. The most effective dilution for aerial and most other applications is a 1:1.5 (GF-120 NF:water) dilution (e.g., to make 10 liters of spray solution, add 6 liters of water to 4 liters of GF-120 NF). For ground applications and applications in low relative humidity, dilutions of up to 1:5 (GF-120 NF:water) can be made. First add water (one-half of the volume to be mixed) to the spray tank or premixing tank and start the agitation system. Then add the full amount of GF-120 NF followed by an equal amount of water. If a full container of GF-120 NF is used, the empty container should then be triple rinsed by filling it one-third full with water, shaking well and adding the rinsate to the spray tank. Repeat two more times so the container is triple rinsed and then complete filling the spray tank until the proper dilution is obtained. Constant agitation of the spray solution is recommended to ensure uniformity of spray mixture. Allow agitation system to operate for at least 5 minutes before applying. Once diluted, GF-120 NF should be used within 24 hours. Concentrated GF-120 NF will not settle and does not need to be shaken before mixing.

Application

Proper application techniques help ensure adequate coverage and correct dosage necessary to obtain optimum control of insect pests. A large spray droplet size of 4000 to 6000 μ (4-6 mm) is recommended

LABELING ACCEPTABLE

STATE OF CALIFORNIA
DEPARTMENT OF PESTICIDE REGULATION
PESTICIDE REGISTRATION

Date: 8/16/06 Reviewer: [Signature]
Reg. No. 62719-498-AA

RECEIVED

AUG - 4 2006

BY PEST/REGISTRATION
ID# _____

to optimize length of bait attractance. Fruit flies can detect the bait from several yards away. When aerially applying use ULV applications but with coarse nozzles that will produce the desired droplet size and target 20 to 80 droplets per square meter. By ground, spot or strip spray several areas on the inner canopy of fruiting plants. Avoid weather conditions that could result in drift to nontarget areas. Direct spray application to bottoms of leaves and leaves inside the foliage canopy to reduce direct exposure to sun and rain. This product resists wash off, but will lose effectiveness if exposed to rain and overhead irrigation. When possible, potential for rain or irrigation schedules should be considered when planning applications. Begin applications as soon as monitoring traps indicate flies are present or 2 to 3 weeks before fruit begins to ripen. Repeat applications every 7 to 14 days, shortening the application interval during rainy periods and as fruit ripens. Remove fruit as soon as ripe, particularly any overly ripe fruit on the tree or ground.

Pests and Application Rates:

Pests Controlled or Suppressed	Amount of Undiluted GF-120 NF Spray Solution ¹			
	Broadcast Application		Spot Spray of Individual Plants	
	fl oz/acre	liters/hectare	fl oz/tree	ml/tree
tephritid fruit flies (including but not limited to: apple maggot Caribbean fruit fly cherry fruit fly Mediterranean fruit fly melon fly Mexican fruit fly olive fly Oriental fruit fly walnut husk fly	10 - 20	0.8 - 1.6	1 - 3	30 - 90

¹Choose rate based on pest pressure and amount of foliage needed to cover.

Amount of Final Spray Solution for Different Rates and Dilution Ratios:

Dilution Ratio GF-120 NF:water	Rates of GF-120 NF per Acre				
	10 fl oz/acre	12 fl oz/acre	15 fl oz/acre	18 fl oz/acre	20 fl oz/acre
1:1.5	25	30	37.5	45	50
1:2	30	36	45	54	60
1:3	40	48	60	72	80
1:4	50	60	75	90	100
1:5	60	72	90	108	120

*Entries in the table are the amount of final diluted spray solution per acre

Restrictions:

- **Chemigation:** Do not apply through any type of irrigation equipment.

®Trademark of Dow AgroSciences LLC

R188-001

Approved: 06/05/08

Initial printing

(1:1) - GROUND Mix Rates for SPINOSAD Formulations

ACRES	WATER	SPINOSAD	BAIT	TOTAL PER ACRE (volume)
1	20 oz	20 oz	Already	40 oz
2	40 oz	40 oz	Added	80 oz
3	60 oz	60 oz		120 oz
4	80 oz	80 oz		1 gallon 32 oz
5	100 oz	100 oz		1 gallon 72 oz
6	120 oz	120 oz		1 gallons 112 oz
7	1 gallon 12 oz	1 gallon 12 oz		2 gallons 24 oz
8	1 gallon 32 oz	1 gallon 32 oz		2 gallons 64 oz
9	1 gallon 52 oz	1 gallon 52 oz		2 gallons 104 oz
10	1 gallon 72 oz	1 gallon 72 oz		3 gallons 16 oz
11	1 gallon 92 oz	1 gallon 92 oz		3 gallons 56 oz
12	1 gallon 112 oz	1 gallon 112 oz		3 gallons 96 oz
13	2 gallons 4 oz	2 gallons 4 oz		4 gallons 8 oz
14	2 gallons 24 oz	2 gallons 24 oz		4 gallons 48 oz
15	2 gallons 44 oz	2 gallons 44 oz		4 gallons 88 oz
16	2 gallons 64 oz	2 gallons 64 oz		5 gallons
17	2 gallons 84 oz	2 gallons 84 oz		5 gallons 40 oz
18	2 gallons 104 oz	2 gallons 104 oz		5 gallons 80 oz
19	2 gallons 124 oz	2 gallons 124 oz		5 gallons 120 oz
20	3 gallons 16 oz	3 gallons 16 oz		6 gallons 32 oz
30	4 gallons 88 oz	4 gallons 88 oz		9 gallons 48 oz
40	6 gallons 32 oz	6 gallons 32 oz		12 gallons 64 oz
50	7 gallons 104 oz	7 gallons 104 oz		15 gallons 80 oz
60	9 gallons 48 oz	9 gallons 48 oz		18 gallons 96 oz
70	10 gallons 120 oz	10 gallons 120 oz		21 gallons 112 oz
80	12 gallons 64 oz	12 gallons 64 oz		25 gallons
90	14 gallons 8 oz	14 gallon 8 oz		28 gallons 16 oz
100	15 gallons 80 oz	15 gallon 80 oz		31 gallons 32 oz

5 trees = 1.0 oz Spinosad
 10 trees = 2.0 oz Spinosad
 20 trees = 4.0 oz Spinosad
 30 trees = 6.0 oz Spinosad
 40 trees = 8.0 oz Spinosad
 50 trees = 10.0 oz Spinosad
 60 trees = 12.0 oz Spinosad
 70 trees = 14.0 oz Spinosad
 80 trees = 16.0 oz Spinosad
 90 trees = 18.0 oz Spinosad
 100 trees = 20.0 oz Spinosad

1/5 gallon = 26 oz
 1/4 gallon = 32 oz
 1/3 gallon = 43 oz
 1/2 gallon = 64 oz
 2/3 gallon = 86 oz
 4/5 gallon = 102 oz
 1 gallon = 128 oz

revised: 04/01/12

(1:2) - GROUND Mix Rates for SPINOSAD Formulations

ACRES	WATER	SPINOSAD	BAIT	TOTAL PER ACRE (volume)
1	40 oz	20 oz	Already	60 oz
2	80 oz	40 oz	Added	120 oz
3	120 oz	60 oz		1 gallon 52 oz
4	1 gallon 32 oz	80 oz		1 gallon 112 oz
5	1 gallon 72 oz	100 oz		2 gallons 44 oz
6	1 gallon 112 oz	120 oz		2 gallons 104 oz
7	2 gallon 24 oz	1 gallon 12 oz		3 gallons 36 oz
8	2 gallons 64 oz	1 gallon 32 oz		3 gallons 96 oz
9	2 gallons 104 oz	1 gallon 52 oz		4 gallons 28 oz
10	3 gallons 16 oz	1 gallon 72 oz		4 gallons 88 oz
11	3 gallons 56 oz	1 gallon 92 oz		5 gallons 20 oz
12	3 gallon 96 oz	1 gallon 112 oz		5 gallons 80 oz
13	4 gallons 8 oz	2 gallons 4 oz		6 gallons 12 oz
14	4 gallons 48 oz	2 gallons 24 oz		6 gallons 72 oz
15	4 gallons 88 oz	2 gallons 44 oz		7 gallons 4 oz
16	5 gallons	2 gallons 64 oz		7 gallons 64 oz
17	5 gallons 40 oz	2 gallons 84 oz		7 gallons 124 oz
18	5 gallons 80 oz	2 gallons 104 oz		8 gallons 56 oz
19	5 gallons 120 oz	2 gallons 124 oz		8 gallons 116 oz
20	6 gallons 32oz	3 gallons 16 oz		9 gallons 48 oz
30	9 gallons 48 oz	4 gallons 88 oz		14 gallons 8 oz
40	12 gallons 64 oz	6 gallons 32 oz		18 gallons 96 oz
50	15 gallons 80 oz	7 gallons 104 oz		23 gallons 92 oz
60	18 gallons 96 oz	9 gallons 48 oz		28 gallons 16 oz
70	21 gallons 112 oz	10 gallons 120 oz		32 gallons 104 oz
80	25 gallons	12 gallons 64 oz		37 gallons 64 oz
90	28 gallons 16 oz	14 gallon 8 oz		42 gallons 24oz
100	31 gallons 32 oz	15 gallon 80 oz		47 gallons 112 oz

5 trees = 1.0 oz Spinosad
 10 trees = 2.0 oz Spinosad
 20 trees = 4.0 oz Spinosad
 30 trees = 6.0 oz Spinosad
 40 trees = 8.0 oz Spinosad
 50 trees = 10.0 oz Spinosad
 60 trees = 12.0 oz Spinosad
 70 trees = 14.0 oz Spinosad
 80 trees = 16.0 oz Spinosad
 90 trees = 18.0 oz Spinosad
 100 trees = 20.0 oz Spinosad

1/5 gallon = 26 oz
 1/4 gallon = 32 oz
 1/3 gallon = 43 oz
 1/2 gallon = 64 oz
 2/3 gallon = 86 oz
 4/5 gallon = 102 oz
 1 gallon = 128 oz

revised: 04/01/12

(1:3) - GROUND Mix Rates for SPINOSAD Formulations

ACRES	WATER	SPINOSAD	BAIT	TOTAL PER ACRE (volume)
1	60 oz	20 oz	Already	80 oz
2	120 oz	40 oz	Added	1 gallon 52 oz
3	1 gallon 52 oz	60 oz		1 gallon 112 oz
4	1 gallon 112 oz	80 oz		2 gallons 64 oz
5	2 gallons 44 oz	100 oz		3 gallons 16 oz
6	2 gallons 104 oz	120 oz		3 gallons 96 oz
7	3 gallon 36 oz	1 gallon 12 oz		4 gallons 48 oz
8	3 gallons 96 oz	1 gallon 32 oz		5 gallons
9	4 gallons 28 oz	1 gallon 52 oz		5 gallons 80 oz
10	4 gallons 88 oz	1 gallon 72 oz		6 gallons 32 oz
11	5 gallons 20 oz	1 gallon 92 oz		6 gallons 112 oz
12	5 gallon 80 oz	1 gallon 112 oz		7 gallons 64 oz
13	6 gallons 12 oz	2 gallons 4 oz		8 gallons 16 oz
14	6 gallons 72 oz	2 gallons 24 oz		8 gallons 96 oz
15	7 gallons 4 oz	2 gallons 44 oz		9 gallons 48 oz
16	7 gallons 64 oz	2 gallons 64 oz		10 gallons
17	7 gallons 124 oz	2 gallons 84 oz		10 gallons 80 oz
18	8 gallons 56 oz	2 gallons 104 oz		11 gallons 32 oz
19	8 gallons 116 oz	2 gallons 124 oz		11 gallons 112 oz
20	9 gallons 48 oz	3 gallons 16 oz		12 gallons 64 oz
30	14 gallons 8 oz	4 gallons 88 oz		18 gallons 96 oz
40	18 gallons 96 oz	6 gallons 32 oz		25 gallons
50	23 gallons 56 oz	7 gallons 104 oz		31 gallons 32 oz
60	28 gallons 16 oz	9 gallons 48 oz		37 gallons 64 oz
70	32 gallons 104 oz	10 gallons 120 oz		43 gallons 96 oz
80	37 gallons 64 oz	12 gallons 64 oz		50 gallons
90	42 gallons 24 oz	14 gallon 8 oz		56 gallons 32 oz
100	46 gallons 112 oz	15 gallon 80 oz		62 gallons 64 oz

5 trees = 1.0 oz Spinosad
 10 trees = 2.0 oz Spinosad
 20 trees = 4.0 oz Spinosad
 30 trees = 6.0 oz Spinosad
 40 trees = 8.0 oz Spinosad
 50 trees = 10.0 oz Spinosad
 60 trees = 12.0 oz Spinosad
 70 trees = 14.0 oz Spinosad
 80 trees = 16.0 oz Spinosad
 90 trees = 18.0 oz Spinosad
 100 trees = 20.0 oz Spinosad

1/5 gallon = 26 oz
 1/4 gallon = 32 oz
 1/3 gallon = 43 oz
 1/2 gallon = 64 oz
 2/3 gallon = 86 oz
 4/5 gallon = 102 oz
 1 gallon = 128 oz

revised: 04/01/12

(1:4) - GROUND Mix Rates for SPINOSAD Formulations

ACRES	WATER	SPINOSAD	BAIT	TOTAL PER ACRE (volume)
1	80 oz	20 oz	Already	100 oz
2	1 gallon 32 oz	40 oz	Added	1 gallon 72 oz
3	1 gallon 112 oz	60 oz		2 gallons 44 oz
4	2 gallons 64 oz	80 oz		3 gallon 16 oz
5	3 gallons 16 oz	100 oz		3 gallon 116 oz
6	3 gallons 96 oz	120 oz		4 gallons 88 oz
7	4 gallons 48 oz	1 gallon 12 oz		5 gallons 60 oz
8	5 gallons	1 gallon 32 oz		6 gallons 32 oz
9	5 gallons 80 oz	1 gallon 52 oz		7 gallon 4 oz
10	6 gallons 32 oz	1 gallon 72 oz		7 gallons 104 oz
11	6 gallons 112 oz	1 gallon 92 oz		8 gallons 76 oz
12	7 gallons 64 oz	1 gallon 112 oz		9 gallons 48 oz
13	8 gallons 16 oz	2 gallons 4 oz		10 gallons 16 oz
14	8 gallons 96 oz	2 gallons 24 oz		10 gallons 120 oz
15	9 gallons 48 oz	2 gallons 44 oz		11 gallons 92 oz
16	10 gallons	2 gallons 64 oz		12 gallons 64 oz
17	10 gallons 80 oz	2 gallons 84 oz		13 gallons 36 oz
18	11 gallons 32 oz	2 gallons 104 oz		14 gallons 8 oz
19	11 gallons 112 oz	2 gallons 124 oz		14 gallons 108 oz
20	12 gallons 64 oz	3 gallons 16 oz		15 gallons 80 oz
30	18 gallons 96 oz	4 gallons 88 oz		23 gallons 56 oz
40	25 gallons	6 gallons 32 oz		31 gallons 32 oz
50	31 gallons 32 oz	7 gallons 104 oz		39 gallons 8 oz
60	37 gallons 64 oz	9 gallons 48 oz		46 gallons 112 oz
70	43 gallons 96 oz	10 gallons 120 oz		54 gallons 88 oz
80	50 gallons	12 gallons 64 oz		62 gallons 64 oz
90	56 gallons 32 oz	14 gallon 8 oz		70 gallons 40 oz
100	62 gallons 64 oz	15 gallon 80 oz		78 gallons 16 oz

5 trees = 1.0 oz Spinosad
 10 trees = 2.0 oz Spinosad
 20 trees = 4.0 oz Spinosad
 30 trees = 6.0 oz Spinosad
 40 trees = 8.0 oz Spinosad
 50 trees = 10.0 oz Spinosad
 60 trees = 12.0 oz Spinosad
 70 trees = 14.0 oz Spinosad
 80 trees = 16.0 oz Spinosad
 90 trees = 18.0 oz Spinosad
 100 trees = 20.0 oz Spinosad

1/5 gallon = 26 oz
 1/4 gallon = 32 oz
 1/3 gallon = 43 oz
 1/2 gallon = 64 oz
 2/3 gallon = 86 oz
 4/5 gallon = 102 oz
 1 gallon = 128 oz

revised: 04/01/12

(1:1.5) - AERIAL Mix Rates for SPINOSAD Formulations

(Can also be used for ground treatments)

ACRES	WATER	SPINOSAD	BAIT	TOTAL PER ACRE (volume)
1	30 oz	20 oz	Already	50 oz
2	60 oz	40 oz	Added	100 oz
3	90 oz	60 oz		1 gallon, 22 oz
4	120 oz	80 oz		1 gallon, 72 oz
5	1 gallon 22 oz	100 oz		1 gallon, 122 oz
6	1 gallon 52 oz	120 oz		2 gallons, 42 oz
7	1 gallon 82 oz	1 gallon 12 oz		2 gallons, 94 oz
8	1 gallon 112 oz	1 gallon 32 oz		3 gallons, 16 oz
9	2 gallons 14 oz	1 gallon 52 oz		3 gallons, 66 oz
10	2 gallons 44 oz	1 gallon 72 oz		3 gallons, 116 oz
11	2 gallons 74 oz	1 gallon 92 oz		4 gallons, 38 oz
12	2 gallons 104 oz	1 gallon 112 oz		4 gallons, 88 oz
13	3 gallons 6 oz	2 gallons 4 oz		5 gallons, 10 oz
14	3 gallons 36 oz	2 gallons 24 oz		5 gallons, 60 oz
15	3 gallons 66 oz	2 gallons 44 oz		5 gallons, 110 oz
16	3 gallons 96 oz	2 gallons 64 oz		6 gallons, 32 oz
17	3 gallons 126 oz	2 gallons 84 oz		6 gallons, 82 oz
18	4 gallons 28 oz	2 gallons 104 oz		7 gallons, 4 oz
19	4 gallons 58 oz	2 gallons 124 oz		7 gallons, 54 oz
20	4 gallons 88 oz	3 gallons 16 oz		7 gallons, 104 oz
30	7 gallons 4 oz	4 gallons 88 oz		11 gallons, 92 oz
40	9 gallons 48 oz	6 gallons 32 oz		15 gallons, 80 oz
50	11 gallons 92 oz	7 gallons 104 oz		19 gallons, 68 oz
60	14 gallons 8 oz	9 gallons 48 oz		23 gallons, 56 oz
70	16 gallons 52 oz	10 gallons 120 oz		27 gallons, 44 oz
80	18 gallons 96 oz	12 gallons 64 oz		31 gallons, 32 oz
90	21 gallons 12 oz	14 gallon 8 oz		35 gallons, 20 oz
100	23 gallons 56 oz	15 gallon 80 oz		39 gallons, 8 oz

5 trees = 1.0 oz Spinosad
10 trees = 2.0 oz Spinosad
20 trees = 4.0 oz Spinosad
30 trees = 6.0 oz Spinosad
40 trees = 8.0 oz Spinosad
50 trees = 10.0 oz Spinosad
60 trees = 12.0 oz Spinosad
70 trees = 14.0 oz Spinosad
80 trees = 16.0 oz Spinosad
90 trees = 18.0 oz Spinosad
100 trees = 20.0 oz Spinosad

1/5 gallon = 26 oz
1/4 gallon = 32 oz
1/3 gallon = 43 oz
1/2 gallon = 64 oz
2/3 gallon = 86 oz
4/5 gallon = 102 oz
1 gallon = 128 oz

revised: 04/01/12



Department of Pesticide Regulation



Brian R. Leahy
Director

Edmund G. Brown Jr.
Governor

August 2, 2017

ID# 3P-282103

PLEASE NOTE:
THIS REVISED, AMENDED LABEL REPLACES THE PREVIOUS LABEL.
ALL USERS SHOULD BE NOTIFIED AND GIVEN A COPY OF THIS LATEST LABEL.

Dayna Napolillo
California Department of Food & Agriculture
Emergency Quarantine Response Program
1220 N Street, Room 325
Sacramento, California 95814

Dear Ms. Napolillo:

AMENDMENT TO SLN REGISTRATION #CA-830012, MALATHION 8 AQUAMUL
(EPA REG. NO. 34704-474-ZA)/ VARIOUS LISTED CROPS/ QUARANTINED
MEMBERS OF THE FRUIT FLY FAMILY (*TEPHRITIDAE*); AMENDED BY
REMOVING ALPHA CODE FROM REGISTRATION NUMBER ON SLN LABEL.

The above amended third-party special local need label was amended effective August 2, 2017 and is on file as the "latest" registered label.

This registration will be valid until withdrawn, suspended, or canceled by the United States Environmental Protection Agency (USEPA), the manufacturer, the 24(c) registrant, the Department of Pesticide Regulation, or expires.

A copy of the amended SLN, (Section 24C) label is enclosed.

If you should have any questions, please contact me.

Sincerely,

John E. Inouye
Senior Environmental Scientist
Pesticide Registration Branch
(916) 324-3538

Enclosure

s:\sec24\24doc\letter\830012m





Department of Pesticide Regulation



Brian R. Leahy
Director

Edmund G. Brown Jr.
Governor

August 2, 2017

FIFRA 24(c) Special Local Need Label (SLN)

For distribution and use only in the state of California
For use on listed crops for control of
Quarantined members of the fruit fly family Tephritidae

Trade Name: Malathion 8 Aquamul

EPA Reg. No.: 34704-474

SLN # CA-830012

Firm Name: Loveland Products
3005 Rock Mountain Avenue
Loveland, Colorado 80538
(970) 685-3300

This label expires and must not be distributed or used in accordance with this SLN registration after March 31, 2022.

DIRECTIONS FOR USE

- It is a violation of federal law to use this production a manner inconsistent with its labeling.
- This state-specific Section 24(c) labeling must be in the possession of the user at the time of application.
- Follow all applicable directions, restrictions, and precautions on the EPA registered label for Malathion 8 Aquamul, EPA Reg. No. 34704-474 and this label.

DIRECTION FOR USE

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

Location: Statewide



Crop/Site/Commodity: Commercial and ornamental plantings of crops –

Alfalfa; Amaranth; Apricots; Arugula; Asparagus; Avocados; Beets (garden, not sugar); Birdsfoot trefoil, (forage, hay); Blackberries; Blueberries; Boysenberries; Broccoli; Broccoli, Chinese; Broccoli raab; Brussel sprouts; Cabbage; Cabbage, Chinese (bok choy, napa); Cabbage Chinese mustard; Carrots; Cauliflower; Cavalo broccolo; Celery; Chayote fruit; Cherries; Chervil; Chestnuts; Chrysanthemum, (edible-leaved, garland); Clover; Collards; Corn (field, fresh); Corn salad; Cress, (garden, upland); Cucumbers; Currants; Dandelion; Dewberries; Dock; Endive; Eggplants; Figs; Garlic; Gooseberries; Grapefruit; Grapes; Grass; Grass hay; Guavas; Hops; Horseradish; Kale; Kohlrabi; Kumquats; Leeks; Lemons; Lespedeza, hay; Lettuce, (head and leaf); Limes; Loganberries; Macadamia nuts; Mangoes; Melons; Mizuna; Mustard Greens; Mustard Spinach; Nectarines; Okra; Onions, (bulb, green); Orach; Oranges; Papayas; Parsley; Parsnips; Passion fruit; Peaches; Peas, green; Pecans; Peppermint; Peppers; Pineapples; Potatoes; Pumpkins; Purslane, (garden, winter); Radicchio; Radishes; Rape greens; Raspberries; Rice, wild; Rutabagas; Salsify (including tops); Shallots; Sweet Potatoes; Spearmint; Spinach; Spinach, New Zealand; Spinach, vine; Squash, (summer, winter); Strawberries; Swiss chard; Tangelos; Tangerines; Tomatoes; Turnips (including tops); Vetch, (hay, straw); Watercress; Watermelons.

Target Pest/Problem: Quarantined members of the fruit fly family Tephritidae.

Dosage: Apply 2.8 fluid ounces of product (0.18 lbs a.i.) mixed with approximately 9.6 fl. oz. protein hydrolase (or similar substance) bait per acre. Amount of bait may vary according to type, viscosity, medium, or tank needs. Add water which has been buffered to near 7.0 pH, if required, according to the amounts given below, per acre.

I. Aerial Application

Urban Areas

2.8 fl. oz. of product
9.6 fl. oz. (approx. bait)
No dilution with water

Commercial Acreage

2.8 fl. oz. of product
9.6 fl. oz. (approx. bait)
2.9 gal. water (optional)

II. Ground Application

Urban Areas

2.8 fl. oz. of product
9.6 fl. oz. (approx. bait)
39.9 gal. water (optional)

Commercial Acreage

2.8 fl. oz. of product
9.6 fl. oz. (approx. bait)
39.9 gal. water (optional)

Dilution Rate: See "Dosage" under appropriate heading.

Method of Application: Ground or Air

**Frequency/Timing
of Application:**

1. Aerial and/or ground applications shall commence immediately upon establishment of treatment zones, or boundaries.
2. Ground or aerial applications will be conducted at 6-14 day scheduled intervals, and shall continue as needed.
3. At the onset of an infestation, it may be determined to be biologically and economically expedient to immediately initiate ground applications on selected properties or sites, to be followed within 24-96 hours with a comprehensive aerial application. In such cases, the combined treatment will only be conducted once after which regular application scheduling will follow.
4. If application within a scheduled treatment zone is interrupted by breakdowns or other factors, the entire zone may be retreated within 24 hours in order to preserve the schedule interval.
5. Do not treat when there is a 50% or more chance of receiving significant rainfall within the next 24 hours of scheduled application.

Restricted Entry Interval (REI): Agricultural Use Requirements – As required by the product label.

Non-Agricultural Use Requirements – Do not allow contact with treated surfaces until sprays have dried.

Preharvest Interval (PHI): The PHI () in days for commercial crop production

PHI (0); Alfalfa, Birdsfoot trefoil (forage, hay), Clover, Chayote roots, Grass, Grass hay, Lespedeza, hay, Potatoes, Sweet Potatoes, Vetch (hay, straw)

PHI (1); Asparagus, Blackberries, Blueberries, Boysenberries, Chayote fruit, Cucumbers, Currants, Dewberries, Gooseberries, Loganberries, Macadamia nuts, Mangoes, Melons, Okra, Papayas, Pears, Pumpkins, Squash (summer, winter), Raspberries, Tomatoes, Turnips, Watercress, Watermelon.

PHI (2); Broccoli, Broccoli Chinese, Broccoli raab, Brussel sprouts, Cauliflower, Cavalo broccoli, Chestnuts, Guavas, Mizuna, Mustard Spinach, Rape greens

PHI (3); Cherries, Eggplants, Garlic, Grapes, Leeks, Onions (bulb, green), Passion fruit, Peas green, Peppers, Shallots, Strawberries

PHI (5); Corn (pop, fresh), Figs

PHI (6); Apricots

PHI (7); Amaranth, Arugula, Avocados, Beets (garden not sugar), Cabbage, Cabbage Chinese (bok choy, napa), Cabbage Chinese mustard, Carrots, Celery, Chervil,

Chrysanthemum (edible-leaved, garland), Collards, Corn field, Corn salad, Cress (garden, upland), Dandelion, Dock, Endive, Grapefruit, Horseradish, Kale, Kohlrabi, Kumquats, Lemons, Limes, Mustard Greens, Nectarines, Orach, Oranges, Parsley, Parsnips, Peaches, Pecans, Peppermint, Pineapple, Purslane (garden, winter), Radicchio, Radishes, Rice, Rutabagas, Salsify (including tops), Spearmint, Spinach, Spinach New Zealand, Spinach vine, Tangerines, Walnuts

PHI (10) Hops

PHI (14) Lettuce (head and leaf), Swiss Chard

- Other Requirements:**
1. This special local need registration must be in the possession of the applicator and supervisory personnel responsible for conducting the treatment at the treatment site.
 2. The Department shall be notified immediately of any adverse effects resulting from the use of this treatment.
 3. Treatments and their schedules listed in this registration are intended to be quarantine and eradication only and therefore shall be conducted under the direct supervision of federal, state, or county authorized agricultural personnel.
 4. The public shall be given prior notification via appropriate news media and departmental literature handouts of the treatment area schedules. Such information shall include the date treatment is to be made, material to be used, and the precautions listed on the product label.
 5. When applying do not apply over bodies of water (lakes, rivers, permanent streams, natural ponds, commercial fish ponds, swamps, marshes, or estuaries), except when necessary to target areas where quarantined members of the fruit fly family Tephritidae are present, and weather conditions will facilitate movement of applied material away from the water in order to minimize incidental deposition into the water body.

The County Agricultural Commissioner's (or designee's) signature must be obtained prior to this use. This does not constitute a recommendation of the Department of Pesticide Regulation and will not prevent quarantine action if illegal residues are found on or in the crop.

To the extent consistent with applicable law, neither the Department nor the county agricultural commissioner, makes any warranty of merchantability, fitness of purpose, or otherwise, expressed or implied, concerning the use of a pesticide in accordance with these provisions. The user and/or grower acknowledge the preceding disclaimer.

Do not use in mixture with other pesticides unless provided for in the labeling. Trial on a small area to check out unanticipated problems is suggested.

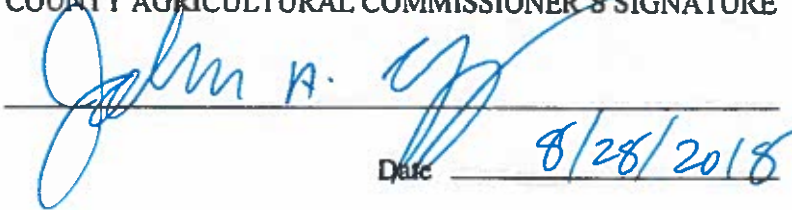
24(c) Registrant: California Department of Food and Agriculture
Emergency Quarantine Response Program
1220 N Street, Room A-325
Sacramento, California 95814
(916) 654-0312

USEPA SLN No. CA-830012



John E. Inouye
Senior Environmental Scientist
Registration Branch
(916) 324-3538

COUNTY AGRICULTURAL COMMISSIONER'S SIGNATURE


Date 8/28/2018

USER'S SIGNATURE _____

Mix Rates for MALATHION 8 AQUAMUL Formulations

ACRES	WATER /gallons	MALATHION 8	NuLure BAIT	TOTAL PER ACRE (estimated volume)
1	1	2.8 oz	9.6 oz	1 gallon 12.4 oz
2	2	5.6 oz	19.2 oz	2 gallons 24.8 oz
3	3	8.4 oz	28.8 oz	3 gallons 37.2 oz
4	4	11.2 oz	38.4 oz	4 gallons 49.6 oz
5	5	14.0 oz	48.0 oz	5 gallons 62.0 oz
6	6	16.8 oz	57.6 oz	6 gallons 74.4 oz
7	7	19.6 oz	67.2 oz	7 gallons 86.8 oz
8	8	22.4 oz	76.8 oz	8 gallons 99.2 oz
9	9	25.2 oz	86.4 oz	9 gallons 111.6 oz
10	10	28.0 oz	96.0 oz	10 gallons 124 oz
11	11	30.8 oz	105.6 oz	12 gallons 8.4 oz
12	12	33.6 oz	115.2 oz	13 gallons 20.8 oz
13	13	36.4 oz	124.8 oz	14 gallons 33.2 oz
14	14	39.2 oz	1 gallon 6.4 oz	15 gallons 45.6 oz
15	15	42.0 oz	1 gallon 16.0 oz	16 gallons 58.0 oz
16	16	44.8oz	1 gallon 25.6 oz	17 gallons 70.4 oz
17	17	47.6 oz	1 gallon 35.2 oz	18 gallons 82.8 oz
18	18	50.4 oz	1 gallon 44.8 oz	19 gallons 95.2 oz
19	19	53.2 oz	1 gallon 54.4 oz	20 gallons 107.6 oz
20	20	56.0 oz	1 gallon 64.0 oz	21 gallons 120 oz
30	30	84.0 oz	2 gallons 32.0 oz	32 gallons 116 oz
40	40	112.0 oz	3 gallons	43 gallons 112.0 oz
50	50	1 gallon 12.0 oz	3 gallons 96.0 oz	54 gallons 108.0 oz
60	60	1 gallon 40.0 oz	4 gallons 64.0 oz	65 gallons 104.0 oz
70	70	1 gallon 68.0 oz	5 gallons 32.0 oz	76 gallons 100.0 oz
80	80	1 gallon 96.0 oz	6 gallons	87 gallons 96.0 oz
90	90	1 gallon 124.0 oz	6 gallons 96.0 oz	98 gallons 92.0 oz
100	100	2 gallons 24.0 oz	7 gallons 64.0 oz	109 gallons 88.0 oz

5 trees = 0.14 oz Malathion and 0.48 oz NuLure
 10 trees = 0.28 oz Malathion and 0.96 oz NuLure
 20 trees = 0.56 oz Malathion and 1.92 oz NuLure
 30 trees = 0.84 oz Malathion and 2.88 oz NuLure
 40 trees = 1.12 oz Malathion and 3.83 oz NuLure
 50 trees = 1.40 oz Malathion and 4.80 oz NuLure
 60 trees = 1.68 oz Malathion and 5.76 oz NuLure
 70 trees = 1.96 oz Malathion and 6.72 oz NuLure
 80 trees = 2.24 oz Malathion and 7.68 oz NuLure
 90 trees = 2.52 oz Malathion and 8.64 oz NuLure
 100 trees = 2.80 oz Malathion and 9.60 oz NuLure

1/5 gallon = 26 oz
 1/4 gallon = 32 oz
 1/3 gallon = 43 oz
 1/2 gallon = 64 oz
 2/3 gallon = 86 oz
 4/5 gallon = 102 oz
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revised: 04/01/12