

45735-25

01/03/2003

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



OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

JAN - 3 2003

Mr. Thomas McEntee
Burlington Scientific Corp.
71 Carolyn Blvd
Farmingdale, NY 11735-1527

Dear Mr. McEntee:

Subject: Revised Labeling - Addition of Environmental Hazards Statement
Carbaryl 4L Flowable
EPA Registration No. 45735-25
Your Submission Dated December 12, 2002

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable provided you make the following change indicated below before you release the product for shipment bearing the amended labeling:

- Under the Restrictions and Precautions for rice please clarify why the areas "Mississippi Delta and Texas" are listed. Do these precautions only apply to rice grown in these areas?

Submit two copies of your final printed labeling before you release the product for shipment. A stamped copy is enclosed for your records. If you have any questions, please contact me at (703) 308-6249 or hebert.john@epa.gov.

Regards,

Handwritten signature of John Hebert in cursive script.
John Hebert
Insecticide-Rodenticide Branch
Registration Division (7505C)

CARBARYL 4L FLOWABLE

Controls Listed Insects on Vegetables, Lawns, Ornamentals and Fruits

Active Ingredient:
 Carbaryl (1-Naphthyl N-methylcarbamate).....42.85%
 Inert Ingredients:57.15%
 TOTAL:100.00%
 This product contains 4 pounds of carbaryl per gallon

EPA REG. NO. 45735-25
 EPA Est. NO. 74134-CHN-0011, 16-VA-12
 Subscript following Est. No. Corresponds to first digit in Lot No.

ACCEPTED
with COMMENTS
In EPA Letter Dated:

JAN - 3 2003
 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 45735-25

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID

This product is an N-methyl carbamate and is a cholinesterase inhibitor.

If inhaled	<ul style="list-style-type: none"> -- 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	<ul style="list-style-type: none"> -- 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.
If in eyes	<ul style="list-style-type: none"> -- 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	<ul style="list-style-type: none"> -- 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.

HOT LINE 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 the National Pesticide Tele-communication Network at **1-800-858-7378** for emergency medical treatment information.

NOTE TO PHYSICIAN

Carbaryl is an N-methyl carbamate insecticide, that inhibits cholinesterase. Atropine is antidotal. Do not use 2-PAM (pyridene-2-aldoxime methiodide), opiates or cholinesterase inhibiting drugs. Probable mucosal damage may contraindicate the use of gastric lavage.

Burlington Scientific Corp.
 71 Carolyn Blvd.
 Armingdale, NY 11735

Notice: Buyer assumes all responsibility for safety and use not in accordance with label directions.

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION: Harmful if swallowed, inhaled, or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Avoid breathing spray drift. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

Personal Protective Equipment:

Applicators and Other Handlers Must Wear:

- Long-Sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Chemical resistant head gear for overhead protection

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.

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.

ENVIRONMENTAL HAZARDS

This product is extremely toxic to aquatic and estuarine invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Discharge from rice fields may kill aquatic and estuarine invertebrates. Do not apply when weather conditions favor drift from area treated. Do not contaminate water by cleaning equipment or disposal of wastes. Do not contaminate water when disposing of equipment washwaters.

BEE CAUTION: MAY KILL HONEYBEES IN SUBSTANTIAL NUMBERS

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds: Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. Contact your Cooperative Agricultural Extension Service. For maximum honeybee hazard reduction, apply from late evening to early morning when bees are not foraging.

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), 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: Coveralls, Waterproof gloves, and Shoes plus socks, and chemical resistant head gear for overhead exposure.

Subsequent planting of food and feed crops in treated soil must be made with crops on this or other carbaryl labels.

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.

The area being treated must be vacated by unprotected persons.

Keep unprotected persons out of treated areas until sprays have dried.

MIXING INSTRUCTIONS: To insure a uniform product, gently **SHAKE CONTENTS BEFORE POURING**. Be sure sprayer tank, spray tips and screens are clean before use. Fill the sprayer with 1/2 to 3/4 the desired amount or clean water. Pour the recommended amount of product into the tank and complete filling to desired level with water. Before and frequently during use, agitate the spray mixture in the tank to prevent settling. It is recommended that spray equipment be thoroughly cleaned after each day's use.

Vegetables

Crop	Pest	Qts. of This Product Per Acre
Asparagus, beans, including cowpeas, crowder or Southern peas, dry beans, green beans, lima beans, navy beans, snap beans (succulent, dry and hay, forage), broccoli, Brussels sprouts, beets, cabbage, cauliflower, Chinese cabbage, collards, carrots, corn (sweet, field and pop, forage, silage, grain and fodder), cucumbers, dandelion, endive (escarole), eggplant, Hanover salad, horseradish, kale, kohlrabi, leaf and head lettuce, mustard greens, melons, okra, peanuts, peas (succulent, dried, hay, forage), peppers, potatoes, pumpkin, radish, rutabaga, squash, salisfy, spinach and tomatoes	Alfalfa caterpillar, bean leaf beetle, cucumber beetle, Colorado potato beetle, harlequin bug, Japanese beetle, leafhopper, melon worms, Mexican bean beetle, red-necked peanutworm, squash bug, three-cornered alfalfa hopper, thrips, velvetbean caterpillar and Western bean cutworm.	1
	Armyworms, aster leafhopper, corn earworm, cutworms, grasshopper, pea leaf weevil, pea weevil, spittlebug and yellow striped armyworm	1 1/2
	Asparagus beetle, chinch bug, corn rootworms, cowpea curculio, European corn borer, fall armyworm, imported cabbageworm, lace bug, lima beanpod borer, lygus bug, stink bug, sap beetle, Southwestern corn borer, tarnished plant bug, tomato fruitworm, tomato hornworm and tomato pinworm	2
SPECIFIC DIRECTIONS: Carbaryl 4L Flowable will control a wide range of vegetable insect pests. Begin applications when insects first appear and repeat applications to maintain control but not more often than once every 7 days. Do not apply to any crop not listed on this label. Coverage of both upper and lower leaf surfaces is essential for good control. Use sufficient gallonage to obtain control.		

RESTRICTIONS AND PRECAUTIONS:
 Do not apply within 1 day of harvest for asparagus.

Do not apply within 3 days of harvest for: cabbage, cauliflower, beans, including cowpeas, crowder or Southern peas, dry beans, green beans, lima beans, navy beans, broccoli, brussels sprouts, peppers, melons, okra, cucumbers, squash, pumpkin, eggplant, tomatoes, kohlrabi.

Do not apply within 7 days of harvest for: carrots, horseradish, potatoes, radish, rutabaga.

Do not apply within 14 days of harvest for: Chinese cabbage, collards, dandelion, endive (escarole), Hanover salad, kale leaf and head lettuce, mustard greens, peanuts and spinach.

For snap beans: do not apply within 3 days of harvest for succulent, within 21 days for dried and hay and 14 days for forage.

For beets and satisfy: do not apply within 7 days of harvest for roots and 14 days for tops.

For peas: do not apply within 3 days of harvest for succulent, within 21 days for dried and hay and 14 days for forage.

For corn: do not apply within 2 days for sweet, within 14 days for forage and silage and within 48 days for grain and fodder of sweet, field and popcorn.

Crop	Pest	Qts. of This Product Per Acre
Alfalfa, clovers, forage grasses pasture and rangelands	Blister beetle, Mexican bean beetle, alfalfa caterpillar, bean leaf beetle, cucumber beetle, green cloverworm, Japanese beetle, leafhopper, three-cornered alfalfa hopper, thrips, velvetbean caterpillar, striped blister beetle, red-necked peanutworm, flea beetles, grape colaspis and cereal leaf beetle.	1
	Amyworm, corn earworm, fall armyworm, webworm, lygus bug, chinch bug, sorghum midge, Southwestern corn borer, beet weevil, Egyptian alfalfa weevil larvae, Essex skipper.	1 1/2
	Whitefringed beetle adult, painted lady (thistle caterpillar), sweet potato weevil, leafhopper, stink bug, saltmarsh caterpillar, stern weevil, sweet potato hornworm, tarnished plant bug, white grub (green June beetle), cutworm, yellowstriped armyworm, sunflower beetle, tortoise beetle, leafroller.	2
	<p>SPECIFIC DIRECTIONS: Apply when insects or their damage appear. Repeat applications at 7 to 14 day intervals, if necessary, to maintain control. Thorough and uniform coverage is essential for effective control.</p> <p>Alfalfa and Clover: For alfalfa weevil larvae, if pre-treatment damage is extensive, cut alfalfa and treat the stubble. On dense growth, use 25 to 40 gallons of water per acre with ground equipment to insure adequate coverage.</p> <p>Forage grasses, pasture and rangeland: To control thrips in grasses grown for seed, use high spray pressure to improve penetration into boot.</p>	

RESTRICTIONS AND PRECAUTIONS: For alfalfa, clover and forage grasses, do not apply within 7 days of harvest. For pasture and rangeland, do not apply within 14 days of grazing.

Crop	Pest	Qts. of This Product Per Acre
Peanuts	Blister beetle, Mexican bean beetle, alfalfa caterpillar, bean leaf beetle, cucumber beetle, green cloverworm, Japanese beetle, leafhopper, three-cornered alfalfa hopper, thrips, velvetbean caterpillar, striped blister beetle, red-necked peanutworm, flea beetles, grape colaspis and cereal leaf beetle.	1

Armyworm, corn earworm, fall armyworm, webworm, lygus bug, chinch bug, sorghum midge, Southwestern corn borer, beet weevil, Egyptian alfalfa weevil larvae, Essex skipper.	1 ½
Whitefringed beetle adult, painted lady (thistle caterpillar), sweet potato weevil, leafhopper, stink bug, saltmarsh caterpillar, stern weevil, sweet potato hornworm, tarnished plant bug, white grub (green June beetle), cutworm, yellowstriped armyworm, sunflower beetle, tortoise beetle, leafroller.	2
SPECIFIC DIRECTIONS: Apply when insects or their damage appear. Repeat applications at 7 to 14 day intervals, if necessary, to maintain control. Thorough and uniform coverage is essential for effective control.	
RESTRICTIONS AND PRECAUTIONS: Do not apply within 14 days of harvest.	

Crop	Pest	Qts. of This Product Per Acre
Rice	Blister beetle, Mexican bean beetle, alfalfa caterpillar, bean leaf beetle, cucumber beetle, green cloverworm, Japanese beetle, leafhopper, three-cornered alfalfa hopper, thrips, velvetbean caterpillar, striped blister beetle, red-necked peanutworm, flea beetles, grape colaspis and cereal leaf beetle.	1
	Armyworm, corn earworm, fall armyworm, webworm, lygus bug, chinch bug, sorghum midge, Southwestern corn borer, beet weevil, Egyptian alfalfa weevil larvae, Essex skipper.	1 ½
	Whitefringed beetle adult, painted lady (thistle caterpillar), sweet potato weevil, leafhopper, stink bug, saltmarsh caterpillar, stern weevil, sweet potato hornworm, tarnished plant bug, white grub (green June beetle), cutworm, yellowstriped armyworm, sunflower beetle, tortoise beetle, leafroller.	2
	SPECIFIC DIRECTIONS: Apply when insects or their damage appear. Repeat applications at 7 to 14 day intervals, if necessary, to maintain control. Thorough and uniform coverage is essential for effective control.	

RESTRICTIONS AND PRECAUTIONS: Do not apply within 14 days of harvest. CAUTION! May kill shrimp and crabs. Do not use in areas where these are important resources. DO NOT APPLY PROPANIL HERBICIDES WITHIN 15 DAYS BEFORE OR AFTER APPLICATION OF THIS PRODUCT OR PLANT INJURY WILL RESULT. MISSISSIPPI DELTA AND TEXAS.

Crop	Pest	Qts. of This Product Per Acre
Sorghums (Milo and grain sorghum)	Blister beetle, Mexican bean beetle, alfalfa caterpillar, bean leaf beetle, cucumber beetle, green cloverworm, Japanese beetle, leafhopper, three-cornered alfalfa hopper, thrips, velvetbean caterpillar, striped blister beetle, red-necked peanutworm, flea beetles, grape colaspis and cereal leaf beetle.	1
	Armyworm, corn earworm, fall armyworm, webworm, lygus bug, chinch bug, sorghum midge, Southwestern corn borer, beet weevil, Egyptian alfalfa weevil larvae, Essex skipper.	1 ½

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Whitefringed beetle adult, painted lady (thistle caterpillar), sweet potato weevil, leafhopper, stink bug, saltmarsh caterpillar, stern weevil, sweet potato hornworm, tarnished plant bug, white grub (green June beetle), cutworm, yellowstriped armyworm, sunflower beetle, tortoise beetle, leafroller.	2
<p>SPECIFIC DIRECTIONS: Apply when insects or their damage appear. Repeat applications at 7 to 14 day intervals, if necessary, to maintain control. Thorough and uniform coverage is essential for effective control.</p> <p>Direct spray into forming heads for optimum insect control. Treat for sorghum midge when 25 to 30 percent of the heads have emerged from the boot and are in bloom. Repeat 7 days later if adults are still active. A third application may be necessary in late planted sorghum or if midges are abundant. For chinch bugs, use high gallonage ground application directed at the base of plants.</p>	

RESTRICTIONS AND PRECAUTIONS: Forage: do not apply within 14 days of grazing. Grain and fodder: do not apply within 21 days of harvesting.

Crop	Pest	Qts. of This Product Per Acre
Soybeans	Blister beetle, Mexican bean beetle, alfalfa caterpillar, bean leaf beetle, cucumber beetle, green cloverworm, Japanese beetle, leafhopper, three-cornered alfalfa hopper, thrips, velvetbean caterpillar, striped blister beetle, red-necked peanutworm, flea beetles, grape colaspis and cereal leaf beetle.	1
	Armyworm, corn earworm, fall armyworm, webworm, lygus bug, chinch bug, sorghum midge, Southwestern corn borer, beet weevil, Egyptian alfalfa weevil larvae, Essex skipper.	1 ½
	Whitefringed beetle adult, painted lady (thistle caterpillar), sweet potato weevil, leafhopper, stink bug, saltmarsh caterpillar, stern weevil, sweet potato hornworm, tarnished plant bug, white grub (green June beetle), cutworm, yellowstriped armyworm, sunflower beetle, tortoise beetle, leafroller.	2
	<p>SPECIFIC DIRECTIONS: Apply when insects or their damage appear. Repeat applications at 7 to 14 day intervals, if necessary, to maintain control. Thorough and uniform coverage is essential for effective control.</p>	

RESTRICTIONS AND PRECAUTIONS: For succulent: do not apply within 3 days of harvest. For dried and hay: do not apply within 21 days of harvest. For forage: do not apply within 14 days of grazing. For grain and fodder: do not apply within 21 days of harvesting. **DO NOT APPLY A COMBINATION OF Carbaryl 4L AND 2,4-DB HERBICIDE TO SOYBEANS.**

Crop	Pest	Qts. of This Product Per Acre
Sugar beets	Blister beetle, Mexican bean beetle, alfalfa caterpillar, bean leaf beetle, cucumber beetle, green cloverworm, Japanese beetle, leafhopper, three-cornered alfalfa hopper, thrips, velvetbean caterpillar, striped blister beetle, red-necked peanutworm, flea beetles, grape colaspis and cereal leaf beetle.	1
	Armyworm, corn earworm, fall armyworm, webworm, lygus bug, chinch bug, sorghum midge, Southwestern corn borer, beet weevil, Egyptian alfalfa weevil larvae, Essex skipper.	1 ½

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Whitefringed beetle adult, painted lady (thistle caterpillar), sweet potato weevil, leafhopper, stink bug, saltmarsh caterpillar, stern weevil, sweet potato hornworm, tarnished plant bug, white grub (green June beetle), cutworm, yellowstriped armyworm, sunflower beetle, tortoise beetle, leafroller.	2
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SPECIFIC DIRECTIONS:
Apply when insects or their damage appear. Repeat applications at 7 to 14 day intervals, if necessary, to maintain control. Thorough and uniform coverage is essential for effective control.

RESTRICTIONS AND PRECAUTIONS: For roots and forage: do not apply within 28 days of harvest or grazing.

Crop	Pest	Qts. of This Product Per Acre
Sunflower	Blister beetle, Mexican bean beetle, alfalfa caterpillar, bean leaf beetle, cucumber beetle, green cloverworm, Japanese beetle, leafhopper, three-cornered alfalfa hopper, thrips, velvetbean caterpillar, striped blister beetle, red-necked peanutworm, flea beetles, grape colaspis and cereal leaf beetle.	1
	Armyworm, corn earworm, fall armyworm, webworm, lygus bug, chinch bug, sorghum midge, Southwestern corn borer, beet weevil, Egyptian alfalfa weevil larvae, Essex skipper.	1 ½
	Whitefringed beetle adult, painted lady (thistle caterpillar), sweet potato weevil, leafhopper, stink bug, saltmarsh caterpillar, stern weevil, sweet potato hornworm, tarnished plant bug, white grub (green June beetle), cutworm, yellowstriped armyworm, sunflower beetle, tortoise beetle, leafroller.	2
	SPECIFIC DIRECTIONS: Apply when insects or their damage appear. Repeat applications at 7 to 14 day intervals, if necessary, to maintain control. Thorough and uniform coverage is essential for effective control.	

RESTRICTIONS AND PRECAUTIONS: Do not apply within 60 days of harvest. Do not use in California.

Crop	Pest	Qts. of This Product Per Acre
Sweet potato	Blister beetle, Mexican bean beetle, alfalfa caterpillar, bean leaf beetle, cucumber beetle, green cloverworm, Japanese beetle, leafhopper, three-cornered alfalfa hopper, thrips, velvetbean caterpillar, striped blister beetle, red-necked peanutworm, flea beetles, grape colaspis and cereal leaf beetle.	1
	Armyworm, corn earworm, fall armyworm, webworm, lygus bug, chinch bug, sorghum midge, Southwestern corn borer, beet weevil, Egyptian alfalfa weevil larvae, Essex skipper.	1 ½
	Whitefringed beetle adult, painted lady (thistle caterpillar), sweet potato weevil, leafhopper, stink bug, saltmarsh caterpillar, stern weevil, sweet potato hornworm, tarnished plant bug, white grub (green June beetle), cutworm, yellowstriped armyworm, sunflower beetle, tortoise beetle, leafroller.	2

SPECIFIC DIRECTIONS:
Apply when insects or their damage appear. Repeat applications at 7 to 14 day intervals, if necessary, to maintain control. Thorough and uniform coverage is essential for effective control. Apply as a foliage spray. Full coverage of plant is essential.

RESTRICTIONS AND PRECAUTIONS: Do not apply within 7 days of harvest. Do not use in California.

Crop	Pest	Qts. of This Product Per Acre
Wheat	Blister beetle, Mexican bean beetle, alfalfa caterpillar, bean leaf beetle, cucumber beetle, green cloverworm, Japanese beetle, leafhopper, three-cornered alfalfa hopper, thrips, velvetbean caterpillar, striped blister beetle, red-necked peanutworm, flea beetles, grape colaspis and cereal leaf beetle.	1
	Armyworm, corn earworm, fall armyworm, webworm, lygus bug, chinch bug, sorghum midge, Southwestern corn borer, beet weevil, Egyptian alfalfa weevil larvae, Essex skipper.	1 ½
	Whitefringed beetle adult, painted lady (thistle caterpillar), sweet potato weevil, leafhopper, stink bug, saltmarsh caterpillar, stem weevil, sweet potato hornworm, tarnished plant bug, white grub (green June beetle), cutworm, yellowstriped armyworm, sunflower beetle, tortoise beetle, leafroller.	2
SPECIFIC DIRECTIONS: Apply when insects or their damage appear. Repeat applications at 7 to 14 day intervals, if necessary, to maintain control. Thorough and uniform coverage is essential for effective control.		

RESTRICTIONS AND PRECAUTIONS: For forage: do not apply within 7 days of grazing. For grain & straw: do not apply within 21 days of harvest.

Crop	Pest	Qts. of This Product Per Acre
Tobacco	Tobacco flea beetle (in plant beds)	2 tablespoons/gallon or 1 quart/50 gallons per 100 square yards
	SPECIFIC DIRECTIONS: To prevent plant injury, avoid excessive applications.	
	Green June beetle grubs	1 ½ quarts per 100 gallons
	SPECIFIC DIRECTIONS: Apply to areas that larvae have uprooted by sprinkling as a drench with 50 to 100 gallons per square yards.	
	budworms, fall armyworm, flea beetle, hornworm, Japanese beetle, June beetle and shuckfly.	1 to 2
SPECIFIC DIRECTIONS: Use lower rate on young plants (up to knee high). Use at least 10 gallons of prepared spray per acre. Begin treatments when worms are small. If late season applications are necessary, allow three days before pruning or cutting.		

Crop	Pest	Qts. of This Product Per Acre
Chestnuts	Chestnut weevil	2 or 3 quarts per 100 gallons of water
	SPECIFIC DIRECTIONS: Make 4 applications at weekly intervals beginning in late July for adult chestnut weevil control. Last application should be made prior to shuck split.	

RESTRICTIONS AND PRECAUTIONS: Do not apply within 14 days of harvest. Do not use in California.

ADULT MOSQUITO CONTROL

Crop	Pest	Qts. of This Product Per Acre
Pastures, rangelands, yards, parks, recreational areas, logging camps, military posts and adjacent forested lands or wastelands	Adult mosquito	½ to 1 quart per 100 gallons of water (½ to 1 tablespoons per gallon)
	SPECIFIC DIRECTIONS: Treat shrubbery and areas where adult mosquitoes congregate. Treat with pressure ground sprayers when adult mosquitoes are active.	

RESTRICTIONS AND PRECAUTIONS: Caution! May kill shrimp and crabs. Do not use in area where there are important resources. **OBSERVE BEE CAUTION.** Do not allow public use of treated areas during applications or until sprays have dried.

Crop	Pest	Qts. of This Product Per Acre
Ornamentals and lawns	Ants, apple aphid, armyworm, azalea, leafminer, bagworms, birch leaf miner, blister beetle, boxelder bug, boxwood leafminer, browntail moth, cankerworms, catalpa sphinx, chiggers, cooley spruce gall aphid, cutworms, cypress tip moth, Douglas Fir Tussock moth, Eastern spruce gall aphid, Elm leaf aphid, Elm leaf beetle, Elm spanworm, Eriophid mites, European Pine shoot moth, fall armyworm, flea beetle, fuller rose beetle, gall midges, gall wasps, green striped mapleworm, grasshoppers, gypsy moth, hackleberry hipplegall maker, holly bud moth, holly leafminer, jackpine budworm, budworm, Japanese beetle, Jeffrey pine needleminer, June beetles, lace bug, leafhoppers, leafrollers, locust borer, Maple leafcutter, mealy bugs, mimosa webworm, Nantucket Pine tip moth, Oak leafminers, Oak leaf skeletoniser, oakworm complex, Oleander caterpillar, olive ash borer, orange striped oakworm, orange tortix, periodical cicada, pine sawfly, pine spittlebug, pitch pine tip moth, plant bugs, poinsettia hornworm, psyllids, puss caterpillar, red-humped oakworm, rose aphid, rose chafer, rose slug, saddled prominent, sawflies (exposed), scale insects, sowbugs, spiny elm caterpillar, springtails, spruce budworm, spruce needleminer, subtropical pine tip moth, tent caterpillars, thorn bugs, thrips (exposed), ticks, walnut caterpillars, webworms, Western Hemlock looper, Western Spruce budworm, willow leaf beetles, and yellow poplar weevil.	1 quart to 100 gallons of water
<p>SPECIFIC DIRECTIONS: Apply and spray thoroughly covering both upper and lower leaf surfaces. Begin applications when insects, or their damage first appear and repeat in 7-10 day intervals if necessary, to maintain control. The addition of DRAGON® Spreader Sticker may improve residual control.</p>		
<p>RESTRICTIONS AND PRECAUTIONS: Do not allow public use of treated areas during applications or until sprays have dried.</p>		

Crop	Pest	Qts. of This Product Per Acre
Lawn and recreational areas	Ants, armyworms, bluegrass billbug, centipedes, chiggers, cutworms, earwigs, Essex skipper, European chafer, fall armyworm, fiery skipper, fleas, grasshoppers, June beetles, leafhoppers, Lucerne moth, millipedes, mosquitoes, sod webworms (lawn moths), sowbugs, springtails, ticks, yellowstriped armyworm, chinch bugs, and white grubs.	<p>To treat 500 sq. ft., use 3 ½ to 5 oz. to 15 gallons of water;</p> <p>treat 1,000 sq. ft. with 7 ½ to 10 oz. per 30 gallons of water,</p> <p>treat 2,500 sq. ft. with ½ - 2/3 quarts to 75 gallons of water;</p> <p>treat 5,000 sq. ft. with 1-1 ½ quarts to 150 gallons of water.</p>
<p>SPECIFIC DIRECTIONS: Apply as a coarse (large droplet) spray using a low pressure sprayer such as a knapsack type, hose attachment applicator or other similar equipment. For best results, mow lawn and apply after watering or rain. If it is impractical to use the quantity of water listed in the table, apply in at least one gallon of water per 1,000 sq. ft. and sprinkle with the recommended amount of water after application to insure good penetration of turf. Repeat 2-3 weeks later if necessary.</p>		
chinch bugs and white grubs.		Use the higher rate listed to control chinch bugs and white grubs.
<p>SPECIFIC DIRECTIONS:</p>		
<p>RESTRICTIONS AND PRECAUTIONS: Do not allow public use of treated areas during applications or until sprays have dried.</p>		

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TREE FRUIT, NUT CROPS, SMALL FRUIT

Carbaryl 4L Flowable will control many insect pests on fruit and nut trees. Use sufficient gallonage to obtain coverage. Follow the specific directions for each crop. Follow locally issued spray schedules for timing and frequency of applications in your area.

Apple Thinning

Crop		Qts. of This Product Per Acre
For easily thinned varieties: Cortland, Grimes, Jonathan, Macintosh, Orleans, Rome Beauty, Puritan, Red Delicious, Winesap, Yellow Newton	SPECIFIC DIRECTIONS: Apply in a full coverage dilute spray between 10 to 25 days after full bloom.	½ to 1 pint per 100 gallons of water
For varieties that are difficult to thin, including: Baldwin, Ben Davis, Duchess, Early Macintosh, Golden Delicious, Lady Apple, Northern Spy Rhode Island Greening, Steele Red, Turley, Wealthy, Yellow Transparent and York Imperial	SPECIFIC DIRECTIONS: Apply in a full coverage dilute spray between 10 to 25 days after full bloom.	1 to 2 pints per 100 gallons of water
RESTRICTIONS AND PRECAUTIONS: If factors such as tree age, variety, nutrition, previous crop, pruning, bloom and degree of set favor excessive fruit thinning with Carbaryl 4L Flowable, exercise caution to avoid possible yield reduction.		

Crop	Pest	Qts. of This Product Per Acre
Apples and Pear	Apple aphid, apple maggot, apple mealybug, apple rust mite, apple sucker, bagworm, California pear slug, (pear sawfly), codling moth, Eastern tent caterpillar. European apple sawfly, eyespotted, bud moth, Forbes scale, fruittree leafroller, green fruitworm, Japanese beetle, lecanium scales, lesser appleworm, lygus bugs, orange tortrix, oystershell scale, pear curculio, red-banded leafroller, rosy apple aphid, San Jose scale, tarnished plant bug, tentiform leafminer, white apple leafhopper, wooly apple aphid, and yellow headed fire worm	1 quart per 100 gallons. Apple mealy bugs, apple aphid, codling moth, and white apple leafhopper may be controlled with 1 pint east of Rocky Mountains only.
	SPECIFIC DIRECTIONS: For psylla control, apply when eggs hatch or young nymphs are present. For optimum scale control, apply when crawlers are present.	
RESTRICTIONS AND PRECAUTIONS: Do not apply within 3 days of harvest. To avoid undesirable apple thinning, delay use until at least 30 days after full bloom.		

Crop	Pest	Qts. of This Product Per Acre
Citrus fruits	Avocado leafroller, black scale, brown soft scale, California orangedog, California Red Scale, Citricola scale, citrus cutworm, citrus rootweevil, citrus snow scale, fruittree leafroller, orange tortrix, Western tussock moth, West Indian sugarcane borer (adult) and yellow scale.	1 quart per 100 gallons.
	SPECIFIC DIRECTIONS: May be mixed with petroleum oils commonly used on citrus.	
RESTRICTIONS AND PRECAUTIONS: Do not apply within 5 days of harvest. Do not apply less than 10 gallons of diluted spray mixtures per mature tree.		

Crop	Pest	Qts. of This Product Per Acre
Peaches, Plums, Pears, Cherries, Apricots, Nectarines:	Apple pademas, black cherry aphids, brown soft scale, cherry fruitworm, cherry maggots, cucumber beetle, European earwig, eyespotted bud moth, forbes scale, fruittree leafhopper, green fruitworm, Japanese beetle, June beetle, Lecanium scales, lesser peachtree borer, mealy plum aphid, olive scale, oystershell scale, orange tortrix, Oriental fruit moth, peach twig borer, periodical cicada, plum curculio, prune leafhopper, red-banded leafhopper, rose chafer, San Jose scale, tarnished plant bug, Tussock moth, variegated leafhopper.	1 quart per 100 gallons of water

SPECIFIC DIRECTIONS: Spray for thorough coverage. For optimum scale control, apply when crawlers are present. For lesser peachtree borer control, spray limbs and tree trunk thoroughly weekly during moth flight.

RESTRICTIONS AND PRECAUTIONS: Do not apply within 3 days of harvest.

NUT CROPS

Crop	Pest	Qts. of This Product Per Acre
Pecans	Black margined aphid, fall webworm, hickory shuckworm, lesser webworm, pecan leaf phylloxera, pecan nut-casebearer, pecan spittlebug, pecan weevil, twig girdler and walnut caterpillar.	Apply 10 ounces per medium sized tree in approximately 20 gallons of water. This is equivalent of 3 1/8 quarts per acre based on 10 trees per acre.
	SPECIFIC DIRECTIONS: Soil application for pecan weevil: When foliar application of Carbaryl 4L Flowable is not feasible due to lack of proper equipment, poorly accessible tree location or other factors, a soil application method may be used to provide suppression of adult pecan weevil populations. Apply 5 ounces Carbaryl 4L Flowable per tree, to the soil under tree in sufficient water (10 gallons minimum per tree) to uniformly cover the entire area beneath the tree canopy 10 feet beyond the dripline. Make applications every 7-10 days from the time that the pecan shells begin to harden (early August) until the adult weevils are not longer present (about September 15).	
RESTRICTIONS AND PRECAUTIONS: Do not apply within 14 days from harvest.		

Crop	Pest	Qts. of This Product Per Acre
Walnuts	Calico scale, codling moth, European fruit lecanium, fiberworm, fruit leafroller, and frosted scale.	1 pint per 100 gallons of water.
	SPECIFIC DIRECTIONS: Spray the entire tree thoroughly.	
	Codling moth	1 pint
	SPECIFIC DIRECTIONS: apply first spray when average cross sectional diameters of developing nuts are 1/3 to 1/2 inch. Repeat during middle or late June as needed.	
	European earwig	2 quarts per 100 gallons of water
SPECIFIC DIRECTIONS: Spray tree to point of runoff.		
RESTRICTIONS AND PRECAUTIONS: Do not apply 14 days from harvest.		

SMALL FRUIT CROPS

Crop	Pest	Qts. of This Product Per Acre
Brambles (Blackberries, raspberries, dewberries, boysenberries, loganberries)	European raspberry aphid, Japanese beetle, leafhopper, rose chafer, snow tree cricket.	1-2 quarts per 100 gallons of water
	SPECIFIC DIRECTIONS: Spray thoroughly.	
RESTRICTIONS AND PRECAUTIONS: Do not apply within 7 days of harvest.		

Crop	Pest	Qts. of This Product Per Acre
Blueberries	Blueberry maggot, cherry fruitworm, cranberry fruitworm, European fruit lecanium and Japanese beetle	1 1/2 quarts per 100 gallons of water
RESTRICTIONS AND PRECAUTIONS: Do not apply within 7 days of harvest.		

Crop	Pest	Qts. of This Product Per Acre
Grapes	Cutworms, eight spotted forester, European fruit lecanium, grape berry moth, grape leafroller, grape leafhopper, Japanese beetle, June beetle, orange tortrix, omnivorous leafroller, red-banded leafroller, saltmarsh caterpillar, western grapeleaf skeletonizer, and western yellowstriped armyworm	2 quarts per 100 gallons of water
	SPECIFIC DIRECTIONS: Spray thoroughly. Apply before first brood leafroller larvae emerge from rolls.	
RESTRICTIONS AND PRECAUTIONS: Do not apply within 7 days of harvest.		

Crop	Pest	Qts. of This Product Per Acre
Strawberries	Flea beetles, meadow spittlebug, omnivorous leaftier (strawberry fruitworm), strawberry leafroller, and strawberry weevil,	Apply 1-2 quarts per 100 gallons of water.
RESTRICTIONS AND PRECAUTIONS: Carbaryl may injure Early Dawn and Sunrise varieties on the Delmarva Peninsula. Do not apply within 7 days of harvest.		

STORAGE AND DISPOSAL

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

STORAGE

Store this product in original container only, in cool, dry area out of reach of children and animals. Do not store in areas where temperatures frequently exceed 100° F.

If container is damaged, before cleaning up, put on Personal Protective Equipment.

PESTICIDE DISPOSAL

Open dumping is prohibited. Do not reuse empty container. Pesticide, spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of on site or at an approved water disposal facility. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose on in sanitary landfill or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.