

PM 03

432-763

12-7-98

10/6

K-Othrine® SC INSECTICIDE

- Only for Sale To, Use and Storage by Pest Control Operators and/or Commercial Applicators
- To be Applied by or under the Direct Supervision of Commercial Applicators Responsible for Insect Control Programs
- For Residential, Industrial and Institutional Control of Major Nuisance Pests Listed on The Label
- Controls Numerous Pests in and around Households and Other Structures
- Will not Damage Paints, Plastics, Fabrics or Other Surfaces Where Water Alone Causes No Damage
- For Insect Control on Commercial and Residential Turf and Landscape Ornamental Plants
- Contains DeltaGard™ Insecticide

ACTIVE INGREDIENT:

*Deltamethrin 4.75%

OTHER INGREDIENTS: 95.25%
100.00%

*Contains 0.42 lb deltamethrin per gallon.

K-Othrine is a registered trademark of AgrEvo Environmental Health, Inc.

DeltaGard is a trademark of AgrEvo Environmental Health, Inc.

PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada amplimente. (TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

EPA Reg. No.: 432-763

EPA Est. No.:

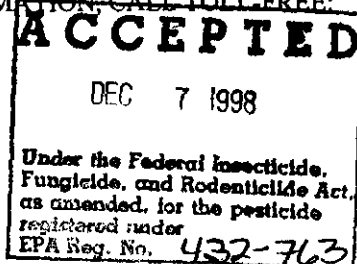
KEEP OUT OF REACH OF CHILDREN CAUTION FIRST AID

If Inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

See Side Panel for Additional Precautions

IN CASE OF MEDICAL EMERGENCIES OR HEALTH AND SAFETY INQUIRIES, OR IN CASE OF FIRE, LEAKING, OR DAMAGED CONTAINERS, INFORMATION MAY BE OBTAINED BY CALLING 1-800-472-0660

FOR PRODUCT INFORMATION, CALL TOLL FREE:
1-800-331-2867.



[graphics of container use directions]

1. Remove only the measuring chamber cap and seal. Replace cap. Tip container until measuring chamber fills.
2. Return container to upright position. Let sit 10 seconds. No adjustment to measuring chamber is needed.
3. Remove measuring chamber cap and pour liquid into proper application equipment.

PRECAUTIONARY STATEMENTS Hazards To Humans & Domestic Animals CAUTION

Harmful if inhaled. Avoid breathing vapor or spray mist. Contact with product may result in transient tingling and reddening of the skin. Remove contaminated clothing and wash before reuse.

Environmental Hazards

This product is extremely toxic to fresh water and estuarine fish and invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Use with care when applying in areas adjacent to any body of water. Do not contaminate water when disposing of equipment washwater.

This pesticide is highly toxic to bees exposed to direct treatment. Do not apply or allow it to drift to crops or weeds on which bees are actively foraging.

Physical & Chemical Hazards

Do not use water-based sprays of K-Othrine SC Insecticide in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard.

DIRECTIONS FOR USE

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

Not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes.

GENERAL INFORMATION:

K-Othrine SC is a suspended concentrate insecticide containing 0.42 lb active ingredient per gallon. K-Othrine SC is designed for use both indoors and outdoors and will provide effective knockdown and long residual control of the pests listed on this label.

2016

Carpenter ants	0.03% w/w	37.5 fl oz/50 gals
		75 fl oz/100 gals

Mixing Instructions:

K-Othrine SC is intended to be mixed with water and applied with hand pressurized or power operated sprayers, such as Actisol® or similar equipment, as a coarse spray or with conventional hydraulic boom-type sprayer or other suitable equipment for outdoor broadcast applications. Shake container well before using. When diluting, it is recommended to add approximately half the water to the spray tank, then add the proper amount of K-Othrine SC Insecticide in accordance with the rates in the appropriate Application Rate table. Agitate, then add the remaining water slowly to avoid excess foam. Thoroughly agitate the sprayer before using to insure proper suspension. If spraying is interrupted when using a back-pack or hand-held spray equipment, reinvert sprayer before use. If spray screens are used, they should be 50 mesh or larger. Dilute K-Othrine SC insecticide only with water. Prepare spray solution when ready to make applications.

Tank Mixing:

K-Othrine SC insecticide may be tank-mixed with other currently registered pesticides unless expressly prohibited by the product label. A small volume mixing test with other products is recommended to ensure compatibility. Observe all restrictions and precautions which appear on the labels of these products.

Application Rates:

Pests	Concentration of Active Ingredient ¹	Dilution Rate ²
Ants, centipedes, firebrats, gnats, midges, millipedes, pantry pests, silverfish	0.01% - 0.03% w/w	0.25 - 0.75 fl oz/gal
		12.5 - 37.5 fl oz/50 gals
		25 - 75 fl oz/100 gals
Bedbugs, bees, carpet beetles, cockroaches, crickets, fleas, flies (including such flies as stable, house, cluster and horseflies), hornets, killer bees, lice, mosquitoes, pillbugs, scorpions, sowbugs, spiders, ticks, yellow jackets, wasps	0.03 - 0.06% w/w	0.75 - 1.5 fl oz/gal
		37.5 - 75 fl oz/50 gals
		75 to 150 fl oz/100 gals
Termites (formosan & Eastern subterranean - localized control only)	0.06% w/w	1.5 fl oz/gal
		75 fl oz/50 gals
		150 fl oz/100 gals
		0.75 fl oz/gal

¹ The recommended rate for maintenance treatments is 0.01% and for cleanout treatments is 0.03%. For control of SEVERE infestations and longer residual control, use the 0.06% rate. In addition, more frequent applications may be needed on concrete surfaces.

² 0.25 fl oz = 7.5 milliliters
0.75 fl oz = 22.7 milliliters
1.5 fl oz = 45.4 milliliters

GENERAL PEST CONTROL INDOORS

Treatment Sites: When used in accordance with label directions, K-Othrine SC may be applied in and around residential and non-residential buildings and structures including residential kitchens and all types of food/feed handling establishments. This product can be applied to walls, floors, ceilings, in and around cabinets, between, behind and beneath equipment and appliances, around floor drains, window and door frames and around plumbing, sinks and other possible pest harborage sites. Permitted areas of use include, but are not limited to, the food/feed and non-food/non-feed areas of:

Aircraft	Installations
Apartment buildings	Kitchens
Bakeries	Laboratories
Bottling facilities	Mausoleums
Breweries	Meat, poultry & egg processing & packaging plants
Buses	Mobile & motor homes
Cafeterias	Nursing homes
Candy plants	Offices
Canneries	Railcars
Dairy product Processing plants	Restaurants
Food manufacturing plants	Schools
Food processing plants	Ships & vessels
Food service establishments	Trailers
Granaries & grain mills	Trucks
Hospitals	Warehouses
Hotels	Wineries
Houses	
Industrial buildings	

Treatments may be applied at 21-day intervals or as necessary to maintain adequate control. Remove pets and cover aquariums and terrariums before spraying. Do not apply to classrooms when in use. Do not use in aircraft cabins.

Treat specific areas that insects inhabit or where they are frequently found. Use 0.25 to 1.5 fluid ounces of K-Othrine SC in one gallon of water and apply to adequately cover 1000 square feet. Do not allow dripping or run-off to occur. Under conditions of severe pest infestation, when quick knockdown and/or longer residual control is

desired, use one gallon of 0.06% K-Othrine SC per 1,000 sq. ft.

Premise Pest Control: *Cockroaches, Ants, Crickets, Silverfish, Firebrats, Centipedes, Millipedes, Cloth Moths, Earwigs, Pillbugs, Sowbugs, Scorpions and Spiders:* Apply as a coarse, low pressure spot or crack and crevice spray to areas that these pests normally inhabit. Pay particular attention to dark corners of rooms and closets; floor drains; cracks and crevices in walls; along and behind baseboards; beneath and behind sinks, stoves, refrigerators, and cabinets; around plumbing and other utility installations; doors, windows and in attics and crawl spaces. Applications may be made to floor surfaces along baseboards and around air ducts. Let surfaces dry before allowing children or pets to contact surfaces.

Pantry Pest Control: To kill adult and accessible stages of insect pests such as *Lesser Grain Borers, Grain Weevils, Flour Beetles, Saw-toothed Grain Beetles, Cigarette Beetles, Merchant Grain Beetles, Angoumois Grain Moths, Mediterranean Flour Moths, Indian Meal Moths, Grain Mites and Spider Mites:* Make applications to cupboards, shelving and storage areas. Remove all foodstuffs, all utensils, shelf paper and other objects before spraying. Allow all treated surfaces to dry and cover shelves with clean paper prior to replacing foodstuffs, utensils or other items. Any foodstuff accidentally contaminated with any spray solution should be discarded.

Crawling and Flying Insect Pests such as flies, gnats, midges, mosquitoes, cockroaches, ants and silverfish: Apply directly to walls, ceilings, window screens and other resting areas as a residual surface treatment. May be used inside residential buildings, as well as in and around carports, garages, storage sheds, unoccupied horse stables and pet kennels.

Ants: (including Pharaoh Ants): Apply to trails, around doors and windows and other areas where ants inhabit or enter premises.

Bedbugs and Lice: Remove linens and wash before reuse. Apply to mattresses, especially tufts, folds, and edges until moist. Apply to the interior of the frame. Allow to dry before remaking bed.

Fleas, Carpet Beetles and Ticks: A total management program is recommended. It is suggested that infested areas be thoroughly vacuumed prior to treatment. These areas include all carpet, upholstered furniture, baseboards and other indoor areas frequented by pets. The vacuum cleaner bag should be discarded in an outdoor trash container upon completion. Pet bedding should be cleaned or replaced. Thoroughly apply K-Othrine SC to rugs, carpets, upholstered furniture, pet beds, floor coverings, pet resting areas and other infested habitats. The quantity of finished spray required is dependent upon carpet/fabric density. Provide uniform coverage, apply until infested area is moist. Effective flea control includes controlling the source of flea infestations. This can require treatment

of pets with a product registered by EPA for such use and treating outside areas frequented by pets. K-Othrine SC can also be applied out-of-doors for flea control. **Do NOT treat pets with this product. Do not allow pets to contact treated areas until spray has dried.**

Pet Kennels: For residual control of crawling and flying insects in and around these structures, apply as a general surface and/or crack and crevice spray. Optimal control results if facilities to be treated are clean and if the exterior perimeter is concurrently treated with K-Othrine SC. Apply only to areas of facility where animals are not present. Allow spray to dry before allowing re-entry of animals into treated areas. Do not apply to animal feed or watering equipment.

Food/Feed Handling Establishments:

For control of all labeled pests, applications are permitted in food/feed and non-food/non-feed areas of food/feed handling and processing establishments as a general surface, spot or crack and crevice treatment. Not for use in Federally Inspected Meat and Poultry Plants.

Food/Feed handling establishments are defined as places other than private residences in which exposed food/feed is held, processed, prepared or served. Included also are areas for receiving, storing, packing (canning, bottling, wrapping, boxing), preparing, edible waste storage and enclosed processing systems (mills, dairies, edible oils, syrups) of food/feed. Serving areas where food/feed is exposed and the facility is in operation are also considered food/feed areas.

Non-Food/Non-Feed Areas: Examples of non-food/non-feed areas include garbage rooms, lavatories, floor drains (to sewers), entries and vestibules, offices, locker rooms, machine rooms, boiler rooms, mop closets and storage (after packaging, canning or bottling). All areas that insects inhabit or through which insects may enter should be treated.

General Surface Applications: Do not use this application method in the food/feed handling areas of the facility when the facility is in operation or foods/feeds are exposed. Do not apply directly to food/feed products. Cover or remove all food/feed processing and/or handling equipment during application. After application in food/feed processing plants, cafeterias and similar facilities, wash all equipment, benches, shelving and other surfaces which food/feed will contact. Clean food/feed handling or processing equipment and thoroughly rinse with clean, fresh water. After application in bakeries, clean all food contact surfaces thoroughly with appropriate equipment.

Spot or Crack & Crevice Applications: Except in federally inspected meat and poultry plants, spot or crack and crevice applications may be made while the facility is in operation provided exposed food is covered or removed.

4066

from area being treated prior to application. Do not apply directly to food or food-handling surfaces.

In the home, do not allow spray to contact food/feed surfaces. If it does, clean surfaces with soap and water.

GENERAL PEST CONTROL OUTDOORS

Use K-Othrine SC to control outdoor pests by application as either a perimeter treatment, residual spray or broadcast application to lawns, grounds and ornamental plantings.

Treatment Sites: When used in accordance with label directions, K-Othrine SC may be applied as a perimeter treatment or as a residual spray around residential and non-residential settings. Begin applications when pests are noticed and repeat as needed.

Residual Spray: Apply K-Othrine SC as a coarse low-pressure spray at the rate of 0.75 to 1.5 fl oz to surfaces of buildings, porches, screens, window frames, eaves, patios, refuse dumps, garages and lawns. Repeat as needed.

Perimeter Treatments: To help prevent infestation of buildings, apply K-Othrine SC where pests are active and may find entrance. It is recommended to treat a band of soil or lawn up to 6 - 10 feet wide around and adjacent to buildings and treat the building foundation to a height of 2 to 3 feet. Apply as a coarse spray at the rate of 0.25 to 1.5 fl oz of K-Othrine SC per gallon of water. (See Application Rate table). Use an adequate volume to thoroughly and uniformly wet the barrier area but do not allow run-off to occur. Repeat as needed.

Fleas and Ticks: Apply K-Othrine SC as a coarse wet spray to areas where fleas and ticks are most likely to be found, such as but not limited to, dog houses, kennels, runways, cracks and crevices in sidewalks, paths or patios, under plants, shrubs, bushes, trees, or other shaded, moist areas where pests may rest.

Fire Ants: Apply K-Othrine SC as a drench. Dilute 1.5 oz per one gallon of water. Gently sprinkle 1 to 2 gallons of the diluted insecticide over the surface of each mound and surrounding area to a 2-foot diameter. For best results, apply in cool weather, 65 to 80°F or in early morning or late evening hours. Treat new mounds as they appear. Pressurized sprays may disturb the ants and cause migration, reducing product effectiveness.

Wood-Infesting Insects:

For control of wood-infesting beetles on surfaces in homes and other structures, apply a 0.06% suspension of K-Othrine SC. For treatment of small areas, apply by brushing or spraying the suspension evenly on wood surfaces. For large or overhead areas of homes, apartment buildings, etc., apply as a coarse spray to thoroughly cover the area. Cover all surfaces below the area being sprayed with plastic sheeting or other material which can be disposed of by placing in trash if contamination from

dripping occurs. Sprayed surfaces should be avoided until the treated area is completely dry.

For control of above-ground termites and wood-infesting beetles in localized areas, apply a 0.06% suspension or sufficient volume of foam of K-Othrine SC to voids and galleries in damaged wood and in spaces between wooden structural members and between the sill plate and foundation where wood is vulnerable. Applications may be made to inaccessible areas by drilling and then injecting the suspension or foam with a suitable directional injector into the damaged wood or wall voids. All treatment holes drilled in construction elements in commonly occupied areas of structures must be securely plugged.

Termite carton nests in building voids may be injected with 0.06% suspension or foam using a pointed injection tool. Multiple injection points to varying depths may be necessary. It is desirable to physically remove carton nest material from building voids when such nests are found.

Application to attics, crawl spaces, unfinished basements, or man-made voids may be made with a coarse fan spray of 0.06% suspension to control exposed worker and winged reproductive forms of termites. For control of swarming or reproductive stages of termites, apply a 0.06% suspension to the swarm or area on which they collect.

The purpose of such applications of K-Othrine SC is to kill workers or winged reproductive forms which may be present at the time of treatment. Such applications are not a substitute for mechanical alteration, soil treatment or foundation treatment but are merely a supplement.

Do not apply solution until location of heat or air conditioning ducts, vents, water and sewer lines and electrical conduits are known and identified. When located, applications may be made around these structures. However, caution must be taken to avoid contamination of these structural elements and airways.

For control of above-ground termites inside trees, utility poles, fencing and decking materials and similar structural members, drill to find the interior infested cavity and inject 0.06% suspension or foam using an appropriate treatment tool with a splashback guard.

Termite carton nests in trees may be injected with 0.06% suspension or foam using a pointed injection tool. Multiple injection points to varying depths may be necessary. It is desirable to physically remove carton nest material from trees when such nests are found.

For protection of firewood from carpenter ants and termites, treat soil beneath firewood prior to stacking with a 0.06% suspension at 1 gallon per 8 square feet to prevent carpenter ant or termite infestation. DO NOT treat firewood with this product.

For control of carpenter ants in houses and other structures, use a 0.06% suspension and apply as a general surface, spot, crack and crevice or wall void application. Repeat treatments when necessary. Apply around doors and windows and other places where carpenter ants may enter the premises. Spray or foam into cracks and crevices through small drilled holes into voids where these ants or their nests are present. Use a sufficient amount of coarse spray or foam to cover the area. Do not exceed 1 gallon of dilute suspension per 1000 square feet of treated surface.

For control of carpenter ants inside trees, utility poles, fencing and decking materials and similar structural members, drill to find the interior infested cavity and inject 0.06% suspension or foam using an appropriate treatment tool with a splashback guard. Retreat as needed.

For control of tunneling carpenter ants in soil, apply a 0.06% suspension as a drench or inject the suspension or foam at intervals of 8 to 12 inches. Establish a uniform vertical barrier at the edge of walls, driveways or other hard surfaces where ants are tunneling beneath the surfaces.

For control of carpenter bees in structures, apply a 0.06% suspension or sufficient volume of foam directly into gallery entrance holes. Following treatment, the entrance holes may be left open 24 hours to be certain that returning adult bees are killed. When there is no activity, the hole may be sealed with a suitable sealant.

Foam Application Use Directions: K-Othrine SC can be converted to a foam and the foam used to treat structural voids to control insect and arthropod pests in walls, under slabs or in other void areas. Mix end-use dilution of K-Othrine SC with manufacturer's recommended volume of foaming agent. Use the recommended rate suspension, converted to a foam to achieve the desired foam expansion ratios. Verify before treatment that the foaming agent is compatible with K-Othrine SC.

Turfgrass Applications:

K-Othrine SC controls a broad spectrum of insects on turfgrasses and ornamental plants in outdoor areas such as athletic fields, recreational areas, residential landscapes, parks, and public and commercial sites. Uniform coverage is essential. Begin applications when pests are evident and repeat as needed.

Apply K-Othrine SC as a broadcast application using a conventional hydraulic boom-type sprayer or other suitable equipment for turfgrass pests according to the rates listed in the Application Rates for Turfgrass Sites table. Apply using a minimum of 2 gallons of water per 1000 sq. ft. Higher volumes (4 to 10 gallons of water per 1000 sq. ft.) may be needed for adequate coverage of dense turfgrass canopies and/or turfgrasses maintained under high mowing heights.

Target insects must be exposed to the insecticide to be controlled. For optimum control of surface-feeding insects, delay irrigation or mowing for 24 hours after application. For subsurface-feeding insects, irrigate with 0.25 to 0.5 inch of water immediately after application.

Tank Mixing: K-Othrine SC Insecticide has been found to be compatible with many commonly used pest control and fertilizer products. When tank-mixing K-Othrine SC, observe all restrictions and precautions and limitations which appear on the label of each product. For any tank-mixture which has not been previously tested, mix the correct proportion of products and water in a quart jar to ensure proper physical compatibility of the mixture. Tank mixtures of K-Othrine SC with silicone surfactants may improve the control of some insects.

Application Rates For Turfgrass Sites:

Sites	Pests	Rates	Remarks
Athletic fields, recreational areas, lawns & grounds, residential areas, parks, public and commercial sites	Ants, armyworms, centipedes, chiggers, cockroaches, crickets, cutworms, fleas (adult), grasshoppers, ground beetles, Japanese beetles (adults), leafhoppers, mealybugs, pillbugs, scorpions, sod webworms, sowbugs, springtails, spiders, ticks	0.4 to 0.6 fl oz/1000 sq. ft or 17.5 to 26 fl oz/Acre or 0.06 to 0.08 lb ai/A	Apply when pests become evident. Apply as a broadcast spray in a minimum of 2 gallons of water per 1000 sq. ft. Delay irrigation or mowing for 24 hours after application for optimum control of surface-feeders such as cutworms and webworms.
	Annual bluegrass weevil (adult), billbugs (adult), black turfgrass ataenius (adult), chinch bugs, mites*, mole crickets	0.6 to 0.9 fl oz/1000 sq. ft or 26 to 39 fl oz/Acre or 0.08 to 0.13 lb ai/A	For subsurface-feeders, such as mole crickets, irrigate with 0.25 to 0.5 inch of water immediately after application. The addition of a silicone surfactant may enhance mole cricket control.

*Suppression Only

Landscape Ornamental Treatments:

K-Othrine SC Insecticide provides control of a wide range of insects on landscape ornamentals. Mix K-Othrine SC with the required amount of water according to the Application Rates for Ornamentals table below. Thoroughly apply the finished spray to upper and lower

leaf surfaces to ensure adequate coverage, but prior to dripping. Be sure to penetrate dense foliage to wet leaves, trunk and branches.

Plant safety testing has been conducted on many species of ornamental plants under a wide range of environmental and cultural conditions and no injury has been observed. If local use information is not available, it is advisable to pre-spray a few plants.

Application Rates for Ornamentals:

Sites	Pests	Rate	Remarks
Landscape ornamentals including trees, shrubs, evergreens and foliage plants	Adelgids, ants, aphids, azalea lace bugs, bagworms, boxelder bugs, cankerworms, cardamom thrips, cockroaches, crickets, elm leaf beetles, elm spanworms, European pine sawflies, fall webworms, flea beetles, flies, fungus gnats, grasshoppers, greenstriped mapleworm, Gypsy moth (larvae), imported willow leaf beetles, Japanese beetles (adults)*, June beetles (adults), lace bugs, leaf-feeding caterpillars, leafhoppers, leaf rollers, loopers, leaf skeletonizers, mealybugs, midges, mimosa webworms, mites**, orangestriped oakworms, pillbugs, pine shoot beetles, pine tip moths, pinyon spindlegall midges, plant bugs, redhumped caterpillar, red imported fire ants, sawfly larvae, sowbugs, spiders, springtails, spanworms, scale insects (crawlers), tent caterpillars, ticks, webworms, yellownecked caterpillar	4 to 8 oz/100 gallons of water	Apply when pests become evident. Thorough coverage is required for best results. Apply with sufficient water to ensure coverage of upper and lower leaf surfaces.

*Will provide anti-feedant properties on treated ornamentals against Japanese beetles.

**Suppression only.

NOTES:

1. DO NOT apply K-Othrine SC through any type of irrigation system.
2. DO NOT apply this product to edible crops.
3. In New York State, product may not be applied to turf within 100 feet of a coastal marsh or stream that

drains directly into a coastal marsh. For control of turf insects in New York, a second application may be made after two weeks if target insect activity persists.

STORAGE & DISPOSAL

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

Storage: Mix as needed. Store in original container in a secured dry storage area. Avoid extremes in temperatures. Prevent cross-contamination with other pesticides and fertilizers. If the container is leaking and/or material is spilled, on floor or paved surfaces, absorb on sawdust or other commercially available absorbing material, sweep up and remove to chemical waste area for your disposal. Concentrate is stable at normal storage temperatures.

Pesticide Disposal: Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: [less than one gallon] Securely wrap container in several layers of newspaper and discard in trash. [Non-Refillable] Triple rinse (or equivalent) then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. [Refillable] Replace the dry disconnect cap if applicable, and seal all openings which have been opened during use. Return the empty container to a collection site designated by AgrEvo Environmental Health. If the container has been damaged and cannot be returned according to the recommended procedures, contact the Customer Service Department at 1-800-xxx-xxxx to obtain proper handling instructions.

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