

# K-Othrine® SC Insecticide

- \* Only for Use and Storage by Pest Control Operators and/or Commercial Applicators
- \* 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

#### **ACTIVE INGREDIENT:**

*Deltamethrin	4.75%
OTHER INGREDIENTS:	<u>95.25%</u>
	100 00%

<sup>\*</sup>Contains 0.42 lb deltamethrin per gallon.

PRECAUCION AL USARIO: 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.)

# KEEP OUT OF REACH OF CHILDREN CAUTION

See Side Panel for First Aid And Additional Precautions

EPA Reg. No.: 432-763 EPA Est. No.: 432-TX-1

NET CONTENTS:

ACCEPTED

APR - 5 2005

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under

EPA Reg. No. 432-763

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Insecticide

FIRST AID				
If Inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> </ul>			
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>			

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-334-7577 for emergency medical treatment.

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

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

# **Mixing Instructions:**

K-Othrine SC Insecticide 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 Methods:**

For indoor uses this product may be applied as crack and crevice, spot, general surface treatments. For residential building and structures apply only as a crack and crevice or spot treatment. Treat where pests are found or normally occur. For general pest control outdoors see this section for additional methods of application.

Crack and Crevice Applications: Use a low pressure system with a pinpoint or variable pattern nozzle to apply the spray mixture to areas such as floors, cracks and crevices in and around baseboards, walls, expansion joints, areas around water and sewer pipes, and voids formed by equipment or appliances.

Spot Applications: Use a low pressure system with fan-type nozzle to uniformly apply spot treatments in and around cupboards, and between, beneath and behind equipment or appliances. For control of carpet beetles, fleas and ticks indoors, apply as a coarse, low pressure crack and crevice spot treatment to problem areas and infested habitats. Do not treat entire area of floor, carpet or floor coverings. Do not apply as a space spray. Application to furniture should be restricted to areas where prolonged contact by humans will not occur. Care should be taken to limit spot treatment to pet beds and infested floor coverings.

# **Application Rates:**

Pests	Concentration of Active Ingredient <sup>1</sup>	Dilution Rate <sup>2</sup>
ants, carpet beetles, firebrats, fleas, gnats, midges, centipedes, millipedes, pantry pests, silverfish, ticks (indoor)	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
Bees, bedbugs, boxelder bugs, fleas (outdoor) cecid flies, cockroaches, elm leaf beetles, ground beetles, moths, midges, crickets, flies (including such flies as stable, house, cluster and horseflies), hornets, killer bees, lice, mosquitoes, Multicolored Asian Lady Beetle, pillbugs, scorpions, sowbugs, spiders, ticks (outdoor), yellowjackets, wasps	0.03% -0.06%w/w	0.75 - 1.5 fl oz/gal 37.5-75 fl oz/50 gals 75 -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
Carpenter Ants	0.03% w/w	0.75 fl oz/gal 37.5 fl oz/50 gals 75 fl oz/100 gals

<sup>&</sup>lt;sup>1</sup> 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.

#### **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. K-Othrine SC is intended to be mixed with water and applied indoors as a crack and crevice, spot or general surface treatment with hand pressurized or power operated sprayers or other suitable equipment for applying insecticides to localized areas. For residential buildings and structures apply only as a crack and crevice or spot treatment. 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 (cargo only)

Installations

Apartment buildings

Kitchens

 $<sup>^{2}</sup>$  0.25 fl. oz = 7.5 milliliters

 $<sup>0.75 \</sup>text{ fl. oz} = 22.7 \text{ milliliters}$ 

 $<sup>1.5 \</sup>text{ fl. oz} = 45.4 \text{ milliliters}$ 

**Bakeries** Bottling facilities

Mausoleums **Breweries** Meat, poultry & egg processing & packaging Buses plants

Cafeterias

Candy plants Mobile & motor homes

Canneries Nursing homes

Dairy product Offices Processing plants Railcars Food manufacturing plants Restaurants Food processing plants Schools

Food service establishments Ships & vessels

Granaries & grain mills Trailers Hospitals Trucks Hotels Warehouses Houses Wineries.

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.

Laboratories

Treat specific areas that insects inhabit or where they are frequently found. Use 0.25 to 1.5 fluid ounces of K-Othrine SC Insecticide in sufficient amount 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 1.5 ounces (0.06%) of K-Othrine SC Insecticide 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.

Carpet Beetles, Fleas and Ticks: A total integrated pest 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. Apply Suspend SC as a uniform coarse low-pressure spot or crack and crevice treatment to areas where these pests normally inhabit. Care should be taken to limit spot treatments to pet bedding and its surrounding area, infested floor coverings and pest habitats. Do not treat entire area of floor, carpet or floor coverings. Use a dust such as Deltadust® in areas around electrical equipment. Do not apply as a space spray. Restrict applications to furniture where no prolonged contact by humans will occur. Do not allow people or pets to contact treated areas until spray has dried. This product can be used with an Insect Growth Regulator (IGR). 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. Suspend SC can also be applied out-of-doors for flea control. Do NOT treat pets with this product.

**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 Insecticide. 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.

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 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.

#### STORED GRAIN

**Pest Control:** To control adults and accessible stages of insect pests such as, lesser grain borer, larger grain borer, Angoumois grain moth, Indianmeal moth, tobacco moth, dermestids, and bean weevil; also to suppress populations of granary weevil, rice weevil, maize weevil, saw-toothed grain beetle, red flour beetle, and confused flour beetle.

#### GENERAL DIRECTIONS FOR TREATMENT

Dilute K-Othrine SC Insecticide with water for FDA approved food grade mineral or soybean oils and apply to the moving grain stream as a coarse spray to provide a concentration of 0.5 ppm of deltamethrin on the grain. Final spray volume with water solutions-5 gallons of liquid per 1000 bushels of grain. Final spray volume with oil solutions should be applied at oil manufacturer's rates. Occasional agitation is needed in water solutions and constant agitation is necessary in oil solutions. A uniform treatment can only be obtained by treating a moving grain stream.

K-Othrine SC Insecticide is to be applied to stored grain in accordance with the General Directions at the rate of 5 gallons of solution per 1000 bushels to achieve a 0.5 ppm concentration of deltamethrin. Apply at rates as shown in the tables below:

#### AMOUNT OF K-OTHRINE SC INSECTICIDE/1000 BUSHELS OF GRAIN

GRAIN	K-OTHRINE	SC INSECTICIDE	GALLONS OF
	AT 0.5 PPM	TREATMENT	DILUTE
	FL. OZ.	ML	
BARLEY	7.31	216	5
CORN	8.53	252	5
OATS	4.88	144	5
POPCORN	8.53	252	5
RICE	6.86	202	5
RYE	8.53	252	5
SORGHUM (milo)	8.53	252	5
WHEAT	9.14	270	5

K-Othrine SC Insecticide is to be applied in solution in accordance with the General Directions to stored grains. Final spray volumes to treat 100 metric tons of grain at 0.5 ppm concentrations of deltamethrin are provided in the tables below corresponding to the grain being treated.

#### AMOUNT OF K-OTHRINE SC INSECTICIDE/100 METRIC TONS OF GRAIN

GRAIN	K-OTHRINE	SC Insecticide PER	LITERS OF
	100 METRIC	TONS AT	DILUTE
	0.5	PPM	SOLUTION
	FL.OZ.	ML	
BARLEY	33.6	993	86.9
CORN	33.6	993	74.5
OATS	33.6	993	130.4
POPCORN	33.6	993	74.5
RICE	33.6	993	92.7
RYE	33.6	993	74.5
SORGHUM (milo)	33.6	993	74.5
WHEAT	33.6	993	69.5

SEED TREATMENT: For protection of stored grain see against injury from stored grain insects listed above. For optimum results, thoroughly clean and treat seed storage areas prior to storage. If seed is insect infested, fumigate\*\* to control existing populations and apply K-Othrine SC Insecticide for residual protection. K-Othrine SC Insecticide may also be used in conjunction with registered fungicide or other insecticide see protectants, to protect barley, corn, oats, popcorn, rice, rye, sorghum and wheat seed during the seed treating process, and prior to bagging or placing in bulk seed storage at the rate of 0.5 ppm. Treated seed with other pesticide products should be properly tagged, indicating the seed should not be used for food, feed or oil purposes. Seed treated with K-Othrine SC Insecticide alone is considered grain.

\*\*Fumigate with EPA-registered fumigant according to manufacturer's label recommendations.

GRAIN BINS AND WAREHOUSES: Dilute 0.25-1.5 fl. oz. of K-Othrine SC Insecticide with water to make 1 gallon of solution. Apply finished spray to equipment, wall and floor surfaces of grain bins and warehouses at the rate of 1 gallon per 1000 sq. ft. prior to storing or handling grain. Do not allow run-off to occur. Application should be made only after equipment bins and buildings have been thoroughly cleaned. Empty bins or warehouses should be fumigated with an EPA registered fumigant according to the manufacturer's label recommendations when inaccessible areas exist. To help prevent infestation of these structures, apply K-Othrine SC Insecticide as a perimeter treatment 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 structures and treat the foundation to a height of 2 to 3 feet. Mix 0.25-1.5 fl. oz. of K-Othrine SC Insecticide with water to make 1 gallon of solution. Apply as a coarse spray at a rate of 1 gallon per 1000 sq. ft. Thoroughly and uniformly wet the barrier area but do not allow run-off to occur.

#### GENERAL PEST CONTROL OUTDOORS

Use Suspend 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 Insecticide may be applied as a perimeter treatment or as a residual spray around residential and non-residential settings. Begin applications when pests are noticed.

**Residual Spray**: Apply K-Othrine SC Insecticide 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, eves, patios, refuse dumps, garages and lawns.

**Perimeter Treatments**: To help prevent infestation of buildings, apply K-Othrine SC Insecticide 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 Insecticide in sufficient amount of water. (See Mixing Directions for Perimeter Application below). Use an adequate volume to thoroughly and uniformly wet the barrier area but do not allow run-off to occur.

MIXING DIRECTIONS FOR K-OTHRINE SC INSECTICIDE -OUTDOOR PERIMETER APPLICATION

I. K-OTHRINE SC INSECTICIDE DILUTION (0.25 oz./1000 sq. ft.) (Based on one home being 1,000 sq. ft.)

Tank Size	15 (	Gallon	25 C	Sallon	50 G	allon	100 C	Fallon
Finished Spray:	K-	Homes	K-	Homes	K-	Homes	K-	Homes
Gallons Per 1000	Othrine	Per	Othrine	Per	Othrine	Per	Othrine	Per
sq. ft.	SC Per	Tank*	SC Per	Tank *	SC Per	Tank*	SC Per	Tank*
	Tank		Tank		Tank	}	Tank	į.
	(fl. oz.)		(fl. oz.)		(fl. oz.)		(fl. oz.)	
1	3.75	15	6.25	25	12.50	50	25.00	100
3	1.25	5	2.08	8	4.17	16	8.33	33
5	0.75	3	1.25	5	2.50	10	5.00	20
10	0.37	1.5	0.63	2.5	1.25	5	2.50	10

<sup>\*</sup>Based on K-Othrine SC Insecticide applied at 0.25 ounces per 1,000 square feet treated per home or structure.

II. K-OTHRINE SC INSECTICIDE DILUTION (1.00 oz./1000 sq. ft.)

Tank Size	15 (	Gallon	25 (	Fallon	50 C	allon	100 C	Sallon
Finished Spray: Gallons Per 1000 sq. ft.	K- Othrine SC Per Tank (fl. oz.)	Homes Per Tank*	K-Othrine SC Per Tank (fl. oz.)	Homes Per Tank *	K-Othrine SC Per Tank (fl. oz.)	Homes Per Tank*	K-Othrine SC Per Tank (fl. oz.)	Homes Per Tank*
1	15.0	15	25.0	25	50	50	100.0	100
3	5.0	5	8.4	8.3	16.70	16.7	33.3	33.3
5	3.0	3	5.0	5	10.0	10	20.0	20
10	1.5	1.5	2.5	2.5	5.0	5	10.0	10

<sup>\*</sup>Based on K-Othrine SC Insecticide applied at 1.00 ounce per 1,000 square feet treated per home or structure.

Fleas and Ticks: Apply K-Othrine SC Insecticide 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 Insecticide as a drench. Dilute 1.5 oz per one gallon of water. Gently apply 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 80oF 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 Insecticide. 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 Insecticide 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 Insecticide 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. 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.

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 Insecticide 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 Insecticide 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 Insecticide.

# **Turfgrass Applications:**

K-Othrine SC Insecticide 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 such as around institutional, commercial and industrial buildings.

Uniform coverage is essential. Begin applications when pests are evident.

Apply K-Othrine SC Insecticide 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. Allow sufficient time for the application to dry before allowing pets or people to enter treatment area.

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.

<u>Tank Mixing</u>: 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 Insecticide 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 Insecticide with silicone surfactants may improve the control of some insects.

NOTE: 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.

Application Rates For Turfgrass Sites:								
Sites	Pests	Rates	Remarks					
Athletic fields,	Ants, armyworms,	0.4 to 0.6 fl oz/1000 sq.	Apply when pests					
recreational areas, lawns	centipedes, chiggers,	ft	become evident.					
and grounds, residential	cockroaches, crickets,							
areas, parks, public and	cutworms, fleas	or	Apply as a broadcast					
commercial sites.	(adult),grasshoppers,		spray in a minimum of 2					
	ground beetles, Japanese	17.5 to 26 fl oz/Acre	gallons or of water per					
	beetles (adults),		1000 sq. ft.					
	leafhoppers, mealybugs,	or						
	pillbugs, scorpions, sod		Delay irrigation or					
	webworms, sowbugs,	0.06 to 0.08 lb ai/A	mowing for 24 hours					
	springtails, spiders,		after application for					
	ticks		optimum control of					
	Annual bluegrass weevil	0.6 to 0.9 fl oz/1000 sq.	surface-feeders such as					
	(adult), billbugs (adult),	ft	cutworms and					
	black turfgrass ataenius		webworms. For					
	(adult), chinch bugs,	or	subsurface-feeders, such as mole crickets, irrigate					
	mites*, mole crickets		with 0.25 to 0.5 inch of					
		26 to 39 fl oz/Acre	water immediately after					
			application The					
		or	addition of a silicone					
		0.00 4- 12 11//4	surfactant may enhance					
		0.08 to 13 lb ai/A	mole cricket control					

<sup>\*</sup>Suppression Only

# **Landscape Ornamental Treatments:**

K-Othrine SC Insecticide provides control of a wide range of insects on landscape ornamentals. Mix K-Othrine SC Insecticide 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 O	rnamentals:		
Sites	Pests	Rate	Remarks
Landscape ornamentals	Adelgids, ants, aphids,	4 to 8 oz/ 100 gallons of	Apply when pests
including trees, shrubs,	azalea lace bugs,	water	become evident.
evergreens, and foliage	bagworms, become		
plants	boxelder bugs,		Thorough coverage is
	cankerworms,		required for best results.
	cardamom thrips,		
	cockroaches, crickets,		Apply with sufficient
	coverage is elm leaf		water to ensure coverage
	beetles, elm spanworms,		of upper and lower leaf
	European pine sawflies,		surfaces.
	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,	į	
	plant bugs, redhumped		
	caterpillar, red imported		
	fire ants, sawfly larvae,		
	sowbugs, spiders,		
	springtails, spanworms,	İ	
	scale insects (crawlers),		
	tent caterpillars, ticks,		
	webworms,		
	yellownecked caterpillar		
*117111	properties on treated ornan		ot .

<sup>\*</sup>Will provide anti-feedant properties on treated ornamentals against Japanese beetles.

#### NOTES

1. DO NOT apply K-Othrine SC Insecticide through any type of irrigation system.

<sup>\*\*</sup>Suppression only.

- 2. DO NOT apply this product to edible crops.
- 3. DO NOT apply this product in hospital patient rooms while occupied or in any rooms occupied by the elderly or infirm.
- 4. DO NOT apply in classrooms when in use.
- 5. DO NOT apply to institutions (including libraries, sport facilities, etc.) in the immediate area when occupants are present.

#### 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] If empty: Do not reuse this container. Securely wrap container in several layers of newspaper and discard in trash or offer for recycling if available. If partly filled: Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

[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 Bayer Environmental Science. If the container has been damaged and cannot be returned according to the recommended procedures, contact the Customer Service Department at 1-800-843-1702 to obtain proper handling instructions.

#### IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following conditions, disclaimer of warranties and limitations of liability.

CONDITIONS: The directions for use of this product are believed to be adequate and should be followed carefully. However, because of manner of use and other factors beyond Bayer Environmental Science's control, it is impossible for Bayer Environmental Science to eliminate all risks associated with the use of this product. As a result, crop injury or Ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

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