# SOUTHERN®

# LAWN INSECT CONTROL

Contains 2.5% Permethrin

STOPS BUGS ON LAWNS, TREES AND SHRUBS, ROSES AND FLOWERS, FRUITS AND NUTS AND VEGETABLES.
FOR USE AROUND RESIDENTIAL (HOME) AREAS ONLY

# KEEP OUT OF REACH OF CHILDREN CAUTION

Distributed by:

## Southern Agricultural Insecticides, Inc.

Palmetto, Fla. 34220 Hendersonville, N.C. 28793 Boone, N.C. 28607 E.P.A. Reg. No. 28293-271-829 EPA Est. No. 829-FL-1

#### PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals - CAUTION

May be harmful if swallowed or absorbed through skin. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

#### FIRST AID

If Swallowed: Call a physician or Poison Control Center immediately.

If on Skin: Wash promptly with plenty of soap and water. Wash contaminated clothing. If in Eyes: Rinse eyes for at least 15 minutes with plenty of water. Call a physician if irritation persists. If inhaled: Remove victim to fresh air. Apply artificial respiration if indicated.

#### **Environmental Hazards**

This pesticide is extremely toxic to fish. Do not apply directly to water. Drifts and runoff from treated areas may be hazardous to aquatic organisms in treated areas. Do not contaminate water when disposing of equipment washwaters. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crop or weeds while bees are actively visiting the treatment area.

#### **DIRECTIONS FOR USE**

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

#### STORAGE AND DISPOSAL

Store in cool, dry area away from heat or open flame. Do not reuse container.

Rinse thoroughly before discarding in trash

This product kills troublesome outdoor insects which destroy lawns, roses, flowers, trees and shrubs: Ants, Bagworms, Aphids, Borers, Armyworms, Chinch Bugs, Inchworms, Spider mites, Green fruitworms, Beetles, Fleas, Cicadas, Thrips, Leafhoppers, Cutworms, Sod webworms, Leafrollers, Whiteflies, Moths, Weevils. Also kills Alfalfa loopers, Brown dog ticks, Budworms, Cabbageworms, Citrus black flies, Cluster flies, Codling moths, Corn earworms, Crickets, Earwigs, Elm spanworms, Fall cankerworms, Gnats, Grasshoppers, House flies, Japanese beetles, Leafminers, Lone star ticks, Lygus bugs, Mealybugs, Millipedes, Mole crickets, Mosquitoes, Navy orangeworms, Scales, Sowbugs (pillbugs), Spring cankerworms, Tent caterpilars, Ticks including Deer tick (which may carry Lyme disease) Tobacco budworms and many others. THREE EASY STEPS TO MIX AND APPLY:

Step #1: For lawns and vegetables, measure the area to be sprayed. Calculate square feet by multiplying

length by width. For all other applications, apply as a thorough cover spray.

Step #2: Use a clean sprayer. Carefully measure and mix the amount of concentrate and water as directed.

Step #3: Spray as directed. Thorough coverage is important. Flush sprayer with clean water after each use.

Make applications when insects first appear. Repeat applications as directed. See directions for complete insect list

. Use dilution rates as indicated. 1 fl. oz. = 6 tsp. or 2 Tbsp; 8 fl. oz. =  $\frac{1}{2}$  pint or 1 cup. Food utensils such as teaspoons or measuring cups should not be used for food purposes after use with inserticible.

#### **HOME LAWNS**

AREAS	PESTS	REMARKS	USE RATE
Bent, Bermuda, Bluegrass, Dichondra, Fescue, Irish Moss, Merion, St. Augustine	Armyworms, Brown dog ticks, Chiggers, Chinch bugs, Cutworms, Fleas, Japanese beetle grubs, Mole crickets, Mosquitoes, Sod webworms, Ticks, including Deer Tick (which may carry Lyme disease)	Thoroughly wet down grass a few hours before applying. Home lawns should be no taller than 3 inches at time of application. Slightly more water may be used as long as the amount of product per area is as listed below. For heavy infestations, repeat application after 2 weeks.	6 fl. oz. in 10 gals. of water to cover 1,000 sq. ft.
	Ants (including foraging fire ants), Crickets, Grasshoppers	-	2 fl. oz. in 3 gals. of water to cover 1,000 sq. ft.
	Fire ants (mound treatment)	Apply 1 gallon of solution as a gentle rain to each fire ant mound using a sprinkler can. Thoroughly wet the mound and surrounding area to a 4 foot diameter. For best results, apply in cool weather, 65°-80°F, or in early morning or late evening hours. Treat new mounds as they appear. Do not disturb the mound prior to treatment. If possible, treat all mounds in the vicinity, and treat all colonies which may not as yet have constructed a mound. Larger quantities of solution can be prepared for multiple mound treatments. Equipment to deliver the diluted product as a gentle rain at the rate of 1 gallon per mound is still required. Do not use equipment that produces a pressurized sprays may disturb fire ants and cause migration, reducing product effectiveness.	6 fl. oz. in 1 gallon of water to treat one mound

#### TRFFS & SHRUBS

TREES & SHRUBS					
TREATMENT AREAS	PESTS	REMARKS	USE RATE		
Arizona cypress,	Aphids,	Apply as a thorough spray, wetting	1 fl. oz. in 1		
Azalea, Birch, Cherry,	Bagworms,	leaves and branches to the dripping	gallon of		
Nonbearing citrus,	Cicadas, Exposed	point. Try to penetrate dense foliage.	water		
Conifers, Elm, English	thrips, Fall	Spray in the late afternoon or evening,			
vy, Euonymus, Fir,	cankerworms,	when the temperature ranges from 50° to			
Hone suckle, Lilac,	Inchworms,	75° F and when there is little or no			
Mock range, Oak,	Leafminers,	wind. Spray at the first sign of insects.			
Palm, Pine, Poinsettia,	Leafrollers,	Repeat as necessary; use intervals of			
Philogendron, Tulip,	Mealybugs,	4-8 days. Application can be made up			
Po∎a. Rhododendr∎n,	Spider mites,	to the day of collection.			
Taxus Weeping fig	Whiteflies	•			
Ch rr Honeysuckle	Fall webworms	•			
Colifers	Budworms				
Elm)	Elm leaf beetles, Elm				
	spanworms, Fall webworm	S			
Dogs and Grand tes	Tussock moths	•			
No tearing citrus	Citrus black flies	•			
Da	Oakworms	•			
Da Pin	Pine beetles, Pine moths,	•			
	Pine needleminers, Needle	e scales			

## **ROSES & FLOWERS**

TREATMENT			
AREAS	PESTS	REMARKS	USE RATE
Ageratum, Aster, Azalea,	Aphids, Bagworms	Apply as a thorough spray, wetting the plants to	1 fl. oz. in
Begonia, Coleus,	Cicadas,	the dripping point. Try to hit underside of leaves	1 gallon of
Common ninebark and	Exposed thrips,	and penetrate dense foliage. Spray in the later	water
snowberry, Exacum, Gladiolus,	Fall cankerworms,	afternoon or evening, when the temperature	
Gold bells, Hypoestes, Ivy,	Fall webworms,	ranges from 50° to 75° F and when there is little	
Lilac, Marigold, Mock-orange,	Inchworms,	or no wind. Spray at the first sign of insects.	
Nannyberry, Orchid Pansy,	Leafminers, Leafrollers,	Repeat as necessary; use intervals of 4-8 days.	
Pea shrub, Petunia, Poinsettia,	Mealybugs,	Application can be made up to the day of collection	1.
Rhododendron, Rose,	Spider mites,		
Snandragon Zinnia	Whiteflies		

## FRUIT & NUT TREES

TREATMENT AREAS	PESTS	REMARKS	USE RATE
Almonds	Navel orangeworms, Peach twig borers	Apply when insects appear. Wet the plants to the dripping point. Try to hit underside of leaves and penetrate dense foliage. Do not make more than 2 applications during hull split and 5 applications per season. Can be applied up to 7 days prior to harvest.	2 fl. oz. in 1 gallon water
Apples	Green fruitworms, Leafrollers (Oblique-banded; Redbanded), Plum curculio, Rosy apple aphids, Spotted tentiform leafminers, Tarnished plant bugs, White apple leafhoppers	Apply when insects appear.  Wet the plants to the dripping point.  Try to hit underside of leaves and penetrate dense foliage.  Do not make more than 3 applications.  Do not apply after petal fall.	
Peaches	Borers (Lesser peachtree, Peach twig), Green fruitworms, Plum curculio, Oriental fruit moths, Tarnished plant bugs	Apply when insects appear. Wet the plants to the dripping point. Try to hit underside of leaves and penetrate dense foliage. Do not apply within 7 days of harvest. Do not make more than 8 applications per season.	
Pears	Pear psylla	Apply when insects appear. Wet the plants to the dripping point. Try to hit underside of leaves and penetrate dense foliage. Apply during the dormant through delayed dormant growth period only.  Do not make more than 2 applications per season.	
Pears (summer)	Codling moths, Green fruitworms, Pear psylla	Apply when insects appear. Wet the plants to the dripping point. Try to hit underside of leaves and penetrate dense foliage. Do not make more than 3 applications per season. Can be applied up to 14 days prior to harvest.	

## **VEGETABLES**

TREATMENT	PEOTO	DEMARKO	HOE DATE
AREAS	PESTS Assessment beauties	REMARKS	USE RATE
Asparagus (pro hop (oct)	Asparagus beetles, Cutworms	Apply for uniform coverage as needed.  Do not make more than 4 applications per crop.	1½ fl. oz. in
(pre-harvest)	Culworms		1 gallon of
A	Deather (Adult Income	Can be applied up to 3 days prior to harvest.	water to
Asparagus	Beetles (Adult Japanese,	Treat ferns or bush growth after spear	cover 1000 sq. ft.
(post-harvest)	Larval stages of asparagus), Lygus bugs, Tarnished plant bugs	harvest when insects are present.	
Celery	Armyworms (beet, Fall, Southern),	Apply every 3-5 days or as needed. Can be	
	Cabbage loopers, Cutworms (black,	applied up to 3 days prior to harvest. Do not	
	granulate), Vegetable leafminers	make more than 10 applications per season.	
Broccoli,	Beet armyworms,	Apply every 5 days or as needed. Can be applied	1 fl. oz. in 1
Brussels sprouts,	Cabbage aphids and loopers,	up to 1 day prior to harvest. Do not make more	gallon of
Cabbage,	Diamondback moths,	than 8 applications on Cauliflower, Brussels Sprouts,	water to cover
Cauliflower	Imported cabbageworms	and Broccoli and 10 applications on Cabbage.	1,000 sq. ft
Eggplant	Colorado Potato beetles,	Apply for uniform coverage as needed.	3 fl. oz. in 1 gallon
	Vegetable leafminers	Do not exceed 16 applications. Can be	of water to cover
		applied up to 3 days prior to harvest.	1,000 sq. ft.
Horseradish	Imported crucifer weevils	Apply as needed. Do not exceed 3 foliar applications.	
(foliar application)		Can be applied up to 22 days prior to harvest.	
Head lettuce	Corn earworms, Beet armyworms,	Apply every 5-10 days as needed. Do not	2 fl. oz. in 1 gallon
	Loopers (Alfalfa, Cabbage),	make more than 10 applications per season.	of water to cover
	Tobacco budworms	Can be applied up to 1 day prior to harvest.	1,000 sq. ft.
Potatoes	Beetles (Colorado potato,	Apply as needed. Do not make more than	1½ fl. oz. in 1
	Potato flea), Beet armyworms,	12 applications. Can be applied up to	gallon of water to
	Cabbage loopers, Cutworms,	7 days prior to harvest.	cover 1,000 sq. ft.
	European corn borers, Leaf-		
	hoppers (Aster, Potato), Potato		
	aphids, Potato psyllids, Potato		
	tuberworms, Tarnished plant bugs		
Peppers	Cabbage loopers, Corn	Apply as needed, but not more than 8	2 fl. oz. in 1
	earworms, European corn borers,	applications per season. Can be applied	gallon of water to
	Flea beetles, Pepper weevils,	up to 3 days prior to harvest.	cover 1,000 sq. ft.
	Vegetable leafminers		
Spinach	Beet armyworms, Corn earworms,	Apply for uniform coverage when needed,	1½ fl. oz. in 1
	Cabbage loopers, Cutworms,	but not more than 7 applications per season.	gallon of
	European corn borers,	Can be applied up to 7 days prior to harvest.	water to cover
	Green cloverworms, Leafhoppers		1,000 sq. ft.
Sweet corn	Armyworms (Fall, Southern),	Apply every 5 days and when needed, but	
	Corn earworms,	not more than 6 applications per season.	
	European corn borers	Can be applied up to 1 day prior to harvest.	
Tomatoes (Do not	Armyworms (Beet, Southern),	Apply as needed. Do not make more than	1 ½ fl. oz. in 1
apply on Cherry	Cabbage loopers, Colorado	6 applications per season. Can be applied	gallon of
Tomatoes and	potato beetles, Granulate	up to day of harvest.	water to cover
varieties yielding	cutworms Hornworms,		1,000 sq. ft.
tomatoes less than	Tomato fruitworms,		
one inch in diameter)	Tomato pinworms		

#### **ORNAMENTAL HOUSE PLANTS**

INDOORS: To protect plants in home greenhouses, lathhouses, and indoor landscapes

Armyworms, Cabbageworms,

Cutworms, Leafrollers Fungus gnats

Chrysanthemums

Velvet plants

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AREAS	PESTS	REMARKS	USE RATE
Ageratum, Ardisia, Aster, Azalea,	Aphids, Armyworms,	Contact and residual spray. Use sufficient spray to	1 fl. oz. in
Baby's breath, Begonia,	Corn earworms,	obtain full coverage of all foliage. Adjust spray	1 gallon of
Birdsnest fern, Bleeding heart,	Exposed thrips,	volume used to plant size. Spray directly on insects.	water
Carnation, Chrysanthemum,	Fall cankerworms,	If application is to be made indoors, remove infested	
Coleus, Crown of thorns,	Inchworms,	plants from living areas prior to application. Spray plants	
Cockscomb, Cyclamen, Dracaena,	Japanese beetles,	in an area not likely to be occupied by people or pets	
Dumbcane, English ivy, Fuchsia,	Leafminers,	(particularly fish). When leaves dry, plants can be	
Gladiolus, Grape ivy, Hypoestes,	Leafrollers,	returned to original location.	
lvy, Juniper, Lily, Marigold, Orchid,	Mealybugs, Scales,	Do not use more product than recommended, as this	
Palm, Pansy, Peperomia, Petunia,	Spider mites, Spring	may cause some plant injury. Use with care on ferns,	
Philodendron, Piggy-back plant,	cankerworms,	palms and fuchsia. As with all plants listed above,	
Poinsettia, Portulaca, Pothos,	Whiteflies	especially carnations, chrysanthemums and roses,	
Prayer plant, Purple passion,		there exists a wide variety of species and cultivars, and,	
Rabbits foot fern, Rose, Schefflera,		therefore, a wide variety of susceptibility to injury.	
Snapdragon, Snake plant, Statice,		To ascertain possible phytotoxicity, spray a few plants as	
Velvet plant, Verbena, Zinnia		described above, wait 24 hours, and check for	



#### **NUISANCE PESTS IN OUTDOOR AREAS**

possible injury. Repeat applications may be necessary

to control citrus blackflies on non-bearing

citrus and adult Japanese beetles on roses

TREATMENT AREAS	PESTS	REMARKS	USE RATE
Outside surfaces Of buildings	Ants (including foraging fire ants), Chiggers, Clover mites, Crickets, Earwigs, Millipedes, Sowbugs (pillbugs), Mosquitoes	To help prevent infestation of buildings, treat the building foundation to a height of 2 to 3 feet, where pests are active and may find entrance. Also, apply as a residual spray to outside surfaces of building, including porches, screens, window frames, eaves, patios, garages, refuse dumps and other areas where these pests congregate or have been seen. Repeat treatment as needed to maintain effectiveness.	6 2/3 fl. oz. in 1 quart of water, treating 400 linear feet with a 6-inch spray band
Other outdoor areas	Ants (including foraging fire ants), Chiggers, Crickets, Earwigs, Fleas, Lone star ticks, Ticks, including Deer tick (which may carry Lyme disease)	For treatment of localized infestations of these insects in areas where there are weeds or bushy non-crop areas, spray infested areas thoroughly.  For Ants, thoroughly wet hills and runways.  Repeat application as reinfestation occurs.	
	Cluster flies, Flying moths, Gnats, House Flies, Mosquitoes.	For use only as an aid in reducing annoyance from these insects. Spray outside surfaces of screens, doors, window frames or wherever these insects may enter the room. Also treat surfaces around light fixtures on porches, in garages and other places where these insects alight or congregate. Repeat as necessary.	
	Tent caterpillars	Application should be made when caterpillars are young and tents are first noticed. For best results, apply in the late afternoor or evening, when caterpillars have returned to their tents. Wet tents with spray on all sides. A few caterpillars may be seen escaping from the tent, however, they should die within several h	

Do not spray animals. People and pets should not be allowed in treated areas until spray has dried.

# WOOD-INFESTING INSECTS INCLUDING TERMITES\*\* (OUTDOOR USE):

WOOD INFESTING INSECTS INCLUDING TERMITES: For Beetles (Furniture, Deathwatch, False powderpost, Longhorned, Powderpost, Carpenter ants (and other wood-infesting ants), Carpenter bees and Termites (for localized control only) (including dry-wood termites):

Treat outside surfaces of building, porches, wooden decks and patios, wooden fences, window frames, doorways, foundations, eaves, patios, garages, garage areas and other areas where you may find these pests.

Mix 10 fl. oz. with 1 gallon of water to treat 100 sq. ft. Spray infested surfaces until thoroughly wet, avoiding dripping and runoff. Apply evenly on wood surfaces. To treat small areas, apply by brushing or spraying the diluted spray. For large areas, use a coarse, low-pressure spray. Repeat treatment as needed to maintain effectiveness. Do not spray into electrical outlets or utilities.

Spray infested areas and areas likely to be infested, such as wood surfaces, voids and channels in damaged wood, spaces between wooden parts of a structure, and between wood and foundations where infestation is likely to occur, also around fence posts, wood piles (do not use on firewood) and tree stumps.

Suitable protective clothing should be worn in confined or overhead areas to prevent exposure to eyes and skin. The use of gloves and footwear, a long-sleeved shirt and long pants or coveralls are recommended. Do not permit contact with treated surfaces until spray has dried. Treated confined areas, such as detached garages, under porches and decks, should be ventilated during and immediately following application before the areas are re-occupied.

For carpenter ants, spray around doors and windows and other places where ants may enter or crawl and hide. Also treat cracks and crevices or openings into wall voids or other areas where these ants may be present.

For carpenter bees, spray or inject into holes and tunnels already made by the bees with a tank sprayer, and spray areas where they are beginning to build tunnels into the wood.

For termites\*\* (including dry-wood termites): treat as for other wood-infesting insects. This product will kill workers and winged reproductive forms of termites in the treated areas. Re-treat as needed to maintain effectiveness. For localized control only. For active infestations get a professional inspection.

\*\* USE OF THIS TYPE OF PRODUCT TO CONTROL (KILL) TERMITES SHOULD NOT BE CONSIDERED A SUBSTITUTE FOR SOIL TREATMENT OF SUBTER-RANEAN TERMITES DONE BY A PROFESSIONAL PEST CONTROL OPERATOR.

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