

Talstar P[®]

PROFESSIONAL INSECTICIDE

To control pests indoors and outdoors on residential, institutional, public, commercial, and industrial buildings, greenhouses, animal confinement facilities/livestock premises, kennels, food handling establishments, and lawns, ornamentals, parks, recreational areas and athletic fields.

When used as a termiticide, individuals/firms must be licensed by the state to apply termiticide products. States may have more restrictive requirements regarding qualifications of persons using this product. Consult the pest control regulatory agency of your state prior to use of this product.

Provides up to 1 month residual control of house flies
Kills fleas for up to 3 months

EPA Reg. No. 279-3206	EPA Est. 279-NY-1
Active Ingredient:	By Wt.
Bifenthrin*	7.9%
Other Ingredients:	92.1%
	100.0%

Talstar[®] P Professional Insecticide contains 2/3 pound active ingredient per gallon.

*Cis isomers 97% minimum, trans isomers 3% maximum.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FMC

FMC Corporation
2929 Walnut Street
Philadelphia PA 19104

Net Contents: 1 Gallon

3-22-17

FIRST AID	
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.
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.
HOTLINE 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 1-(800)-331-3148 for Emergency Assistance.	
NOTE TO PHYSICIAN	
This product is a pyrethroid. If large amounts have been ingested, the stomach and intestine should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.	
For Information Regarding the Use of this Product Call 1-800-321-1FMC (1362).	

PRECAUTIONARY STATEMENTS

Hazards to Humans (and Domestic Animals) CAUTION

Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash before reuse.

All pesticide handlers (mixers, loaders and applicators) must wear long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves. After the product is diluted in accordance with label directions for use, and/or when mixing and loading using a closed spray tank transfer system (such as an in-line injector system), shirt, pants, socks, shoes and water-proof gloves are sufficient. In addition, all pesticide handlers must wear a respiratory protection device¹ when working in a non-ventilated space. All pesticide handlers must wear protective eyewear when working in non-ventilated space.

¹Use one of the following NIOSH approved respirator with any R, P or HE filter or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE prefilter.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, 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.
- Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

This pesticide is extremely toxic to fish and aquatic invertebrates. Drift and run-off from treated areas may be hazardous to aquatic organisms in neighboring areas. Care should be used when spraying to avoid fish and reptile pets in/around ornamental ponds.

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help to avoid run off to water bodies or drainage systems.

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 to drift to blooming crops if bees are foraging the treatment area.

Physical and Chemical Hazards

Do not apply water-based dilutions of Talstar® P Professional Insecticide to electrical conduits, motor housings, junction boxes, switch boxes or other electrical equipment because of possible shock hazard.

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DIRECTIONS FOR USE

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

Do not apply a broadcast application to interior surfaces of homes.

Do not apply by air.

Do not apply in plant nurseries.

Do not apply this product through any kind of irrigation system.

Not for use on sod farm turf, golf course turf, or grass grown for seed.

Do not water treated area to the point of run-off.

Do not make applications during rain.

Application is prohibited directly into sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur. Do not allow the product to enter any drain during or after application.

Additional Application Restrictions for Residential Outdoor Surface and Space Sprays:

All outdoor applications, if permitted elsewhere on this label, must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses, if allowed elsewhere on this label:

- Applications to soil or vegetation, as listed on this label, around structures;
- Applications to lawns, turf, and other vegetation, as listed on this label;
- Applications to the side of a building, up to a maximum height of 3 feet above grade;
- Applications to underside of eaves, soffits, doors, or windows permanently protected from rainfall by a covering, overhang, awning, or other structure;
- Applications around potential pest entry points into buildings, when limited to a surface band not to exceed one inch in width;
- Applications made through the use of a coarse, low pressure spray to only those portions of surfaces that are directly above bare soil, lawn, turf, mulch or other vegetation, as listed on this label, and not over an impervious surface, drainage or other condition that could result in runoff into storm drains, drainage ditches, gutters or surface waters, in order to control occasional invaders or aggregating pests.

AGRICULTURE 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 intervals. 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
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl chloride or viton.
- Shoes plus socks

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 requirement specific to your State or Tribe, consult the State/Tribal agency responsible for pesticide regulation.

For California

Greenhouse Applicators must wear:

- Full body chemical-resistant protective suit (such as barrier laminate, butyl rubber, nitrile rubber, polyvinyl chloride, or equivalent).

Reapplication Interval: Reapplications to greenhouses must be at intervals of 30 days or longer.

Greenhouse Harvesters must wear:

- Regular length gloves plus a long sleeved shirt or elbow-length (gauntlet type) gloves during the 30 days following application.

*These requirements apply only to the greenhouse uses on this label

NON-AGRICULTURE USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standards for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries and greenhouses.

Do not allow people or pets on treated surfaces until the spray has dried.

**These requirements apply to all other non-greenhouse uses on this label

Use Directions for Container

1. Remove the measuring chamber cap and induction seal. Replace the cap and securely tighten. Tip container until liquid fills measuring chamber.
2. Return container to level position. No adjustment is needed.
3. Remove measuring chamber cap and dispense into proper application equipment.

For multiple dose measuring: Remove fill chamber cap and dispense according to markings on side of bottle.

STORAGE AND DISPOSAL

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

Pesticide Storage: Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use replace lids and close tightly. Do not put concentrate or dilute material into food or drink container.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call CHEMTREC (Transportation and Spills): (800) 424-9300.

To Confine Spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

Pesticide Disposal: Pesticide wastes are toxic. Do not contaminate water, food or feed by storage or disposal. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. Dispose of excess or waste pesticide by use according to label directions, or contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal:

Container Handling: Non-refillable container. Do not reuse or refill this container. Triple rinse as follows: Empty the contents into application equipment or a mix tank and drain for 10 seconds after flow begins to drip. Fill container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Returnable/Refillable Sealed Container: Refill this container with pesticide only. Do not reuse this container for any other purpose. Do not rinse container. Do not empty remaining formulated product. Do not break seals. Return intact to point of purchase. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

Product Information

Talstar® P Professional Insecticide controls a wide spectrum of insects and mites on trees, shrubs, foliage plants, non-bearing fruit and nut trees, and flowers in greenhouses, interiorscapes including hotels, shopping malls, office buildings, etc., and outdoor plantscapes, such as around residential dwellings, parks, institutional buildings, recreational areas, athletic fields and home lawns. Non-bearing crops are perennial crops that will not produce a harvestable raw agricultural commodity during the season of application. Talstar® P Professional Insecticide may also be used in feed and food handling establishments, animal confinement facilities, kennels, confined animal feeding operations, livestock premises, and in/around/under structures.

Resistance: Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state pest management authorities for details.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and suspect that resistance is a reasonable cause, immediately consult your local company representative or pest management advisor for the best alternative method of control for your area.

Talstar® P Professional Insecticide Dilution Chart

Applic. Volume:		Applic. Rate:	Fluid Ounces of Talstar P Professional Diluted to these Volumes of Finished Spray			
% a.i.	Gal/1000 sq. ft.	Fl. oz./1000 sq. ft.	1 Gallon	5 Gallons	10 Gallons	100 Gallons
			fl. oz.	fl. oz.	fl. oz.	fl. oz.
0.008	1.0	0.125	0.125	0.63	1.25	12.5
0.011	1.0	0.18	0.18	0.90	1.8	18.0
0.015	1.0	0.25	0.25	1.25	2.5	25.0
0.020	1.0	0.33	0.33	1.67	3.33	33.3
0.031	1.0	0.5	0.5	2.5	5.0	50.0
0.041	1.0	0.67	0.67	3.33	6.67	66.7
0.046	1.0	0.75	0.75	3.75	7.5	75.0
0.062	1.0	1.0	1.0	5.0	10.0	100.0
0.004	2.0	0.125	-	0.31	0.63	6.3
0.006	2.0	0.18	-	0.45	0.90	9.0
0.008	2.0	0.25	0.13	0.63	1.25	12.5
0.010	2.0	0.33	0.17	0.83	1.65	16.5
0.015	2.0	0.5	0.25	1.25	2.5	25.0
0.021	2.0	0.67	0.33	1.67	3.35	33.5
0.023	2.0	0.75	0.38	1.88	3.75	37.5
0.031	2.0	1.0	0.5	2.5	5.0	50.0
0.003	3.0	0.125	-	0.21	0.42	4.2
0.004	3.0	0.18	-	0.30	0.60	6.0
0.005	3.0	0.25	-	0.42	0.83	8.3
0.007	3.0	0.33	0.11	0.55	1.10	11.0
0.010	3.0	0.5	0.17	0.83	1.67	16.7
0.014	3.0	0.67	0.22	1.11	2.23	22.3
0.015	3.0	0.75	0.25	1.25	2.5	25.0
0.021	3.0	1.0	0.33	1.67	3.33	33.3
0.002	4.0	0.125	-	0.16	0.31	3.1
0.003	4.0	0.18	-	0.23	0.45	4.5
0.004	4.0	0.25	-	0.31	0.63	6.3
0.004	4.0	0.33	-	0.41	0.83	8.3
0.005	4.0	0.5	0.13	0.63	1.25	12.5
0.008	4.0	0.67	0.17	0.84	1.67	16.7
0.010	4.0	0.75	0.19	0.94	1.88	18.8
0.012	4.0	1.0	0.25	1.25	2.5	25.0
0.002	5.0	0.125	-	0.13	0.25	2.5
0.002	5.0	0.18	-	0.18	0.36	3.6
0.003	5.0	0.25	-	0.25	0.5	5.0
0.004	5.0	0.33	-	0.33	0.67	6.7
0.006	5.0	0.5	0.1	0.5	1.0	10.0
0.008	5.0	0.67	0.13	0.67	1.33	13.3
0.009	5.0	0.75	0.15	0.75	1.5	15.0
0.012	5.0	1.0	0.2	1.0	2.0	20.0
0.001	10.0	0.125	-	-	0.13	1.3
0.001	10.0	0.18	-	-	0.18	1.8
0.002	10.0	0.25	-	0.13	0.25	2.5
0.002	10.0	0.33	-	0.17	0.33	3.3
0.003	10.0	0.5	-	0.25	0.5	5.0
0.004	10.0	0.67	-	0.33	0.67	6.7
0.005	10.0	0.75	-	0.38	0.75	7.5
0.006	10.0	1.0	0.1	0.5	1.0	10.0

1 fluid oz. = 29.57 ml = 2 tablespoons = 6 teaspoons

Do not use household utensils to measure Talstar® P Professional Insecticide.

Note: Higher finished volume should be applied to penetrate thatch, mulch, brush, and porous surfaces. Lower finished volumes can be used indoors and for non-porous surfaces. Do not apply more than 1 oz. Talstar Professional per 1,000 square feet.

Application Instructions

Talstar® P Professional Insecticide formulation mixes readily with water and other aqueous carriers.

Talstar® P Professional Insecticide may be tank-mixed with adjuvants, and with other pesticides, including insect growth regulators. When tank mixing Talstar® P Professional Insecticide with other pesticides, observe all precautions and limitations on each separate product label. The physical compatibility of Talstar® P Professional Insecticide may vary with different sources of pesticide products, and local cultural practices. Any tank mixture which has not been previously tested should be prepared on a small scale (pint or quart jar), using the proper proportions of pesticides and water to ensure the physical compatibility of the mixture.

The following procedure is recommended for preparation of a new tank mix, unless specified otherwise in label directions: (1) Add wettable powders to tank water, (2) Agitate, (3) Add liquids and flowables, (4) Agitate, (5) Add emulsifiable concentrates, and (6) Agitate. If a mixture is found to be incompatible following this order of addition, try reversing the order of addition, or increase

the volume of water. **Note:** If the tank-mixture is found to be compatible after increasing the amount of water, then the sprayer will need to be recalibrated for a higher volume application. Do not allow tank mix to stand overnight.

Formula for Determining the Active Ingredient Content of the Finished Spray Mixture: The following formula may be used to determine the percent active ingredient that is in the spray tank after mixing Talstar® P Professional Insecticide:

$$\frac{(7.9)(\text{Fl. Oz. of Talstar P Professional added to tank})}{(\text{Gallons of finished spray mix})(128)} = \text{Percent Active Ingredient of spray mix}$$

APPLICATION DIRECTIONS

ANT CONTROL

Nuisance Ants Indoors: For best results, locate and treat ant nests. Dilute 0.5 to 1.0 fluid oz. of Talstar® P Professional Insecticide per gallon of water and apply at the rate of one gallon of dilution per 1,000 square feet as a crack and crevice or spot treatment to areas where ants have been observed or are expected to forage. These areas include, but are not limited to, baseboards, in and behind cabinets, under and behind dishwashers, furnaces, refrigerators, sinks and stoves, around pipes, cracks and crevices and in corners. Particular attention should be given to treating entry points into the home or premises such as around doors and windows. When using Talstar® P Professional Insecticide in combination with baits, apply Talstar® P Professional Insecticide as instructed above, and use baits in other areas that have not been treated with Talstar® P Professional Insecticide.

Nuisance Ants Outdoors: For best results, locate and treat ant nests. Apply Talstar® P Professional Insecticide to ant trails around doors and windows and other places where ants have been observed or are expected to forage. Apply a perimeter treatment using either low or high volume applications described in the "Pest Control on Outside Surfaces and Around Buildings" section of this label. The higher dilutions and/or application volumes, as well as more frequent applications, may be necessary when treating concrete surfaces for ant control. Maximum control is generally achieved using the following procedure:

The following procedure must be followed to help achieve maximum control of the pest:

- 1) Treat non-porous surfaces only in areas protected from rainfall and spray from sprinklers with low volume applications using 0.5 to 1.0 fluid oz. of Talstar® P Professional Insecticide per gallon of water and applying this dilution at the rate of one gallon per 1,000 square feet.
- 2) Treat porous surfaces and vegetation with high volume applications (usually 5 to 10 finished gallons per 1,000 square feet) using dilutions that are calculated to deliver 0.5 to 1.0 fluid oz. of Talstar® P Professional Insecticide per 1,000 square feet (refer to the Talstar® P Professional Insecticide Dilution Chart).
- 3) For maximum residual control, dilute 1.0 fluid oz. of Talstar P Professional Insecticide per gallon of water and apply at a rate of up to 10 gallons of dilution per 1,000 square feet.

Carpenter Ants Indoors: Dilute 0.5 to 1.0 fluid oz. of Talstar® P Professional Insecticide per gallon of water and apply at the rate of one gallon of dilution per 1,000 square feet as a crack and crevice or spot treatment to areas where carpenter ants have been observed or are expected to forage. These areas include, but are not limited to, baseboards, in and behind cabinets, under and behind dishwashers, furnaces, refrigerators, sinks, and stoves, around pipes, cracks and crevices and in corners. Particular attention should be given to treating entry points into the home or premises such as around doors and windows. Spray or foam into cracks and crevices or drill holes and spray, mist or foam into voids where carpenter ants or their nests are present. When using Talstar® P Professional Insecticide in combination with baits, apply Talstar® P Professional Insecticide as instructed above, and use baits in other areas that have not been treated with Talstar® P Professional Insecticide.

Carpenter Ants Outdoors: Apply Talstar® P Professional Insecticide to carpenter ant trails around doors and windows and other places where carpenter ants have been observed or are expected to forage. For best results, locate and treat carpenter ant nests. Apply a perimeter treatment using either low or high volume applications described in the "Pest Control on Outside Surfaces and Around Buildings" section of this label. The higher dilutions and/or application volumes, as well as more frequent applications, may be necessary when treating concrete surfaces for carpenter ant control. Maximum control is generally achieved using the following procedure:

The following procedure must be followed to help achieve maximum control of the pest:

- 1) Treat non-porous surfaces only in areas protected from rainfall and spray from sprinklers with low volume applications using 0.5 to 1.0 fluid oz. of Talstar® P Professional Insecticide per gallon of water and applying this dilution at the rate of one gallon per 1,000 square feet
- 2) Treat the trunks of trees that have carpenter ant trails, or upon which carpenter ants are foraging, using 0.5 to 1.0 fluid oz. of Talstar® P Professional Insecticide per gallon of water and apply-

ing this dilution to thoroughly wet the bark from the base of the tree to as high as possible on the trunk

- 3) Treat porous surfaces and vegetation with high volume applications (usually 5 to 10 finished gallons per 1,000 square feet) using dilutions that are calculated to deliver 0.5 to 1.0 fluid oz. of Talstar® P Professional Insecticide per 1,000 square feet (refer to the Talstar® P Professional Insecticide Dilution Chart)
- 4) For maximum residual control, dilute 1.0 fluid oz. of Talstar® P Professional Insecticide per gallon of water and apply at a rate of up to 10 gallons of dilution per 1000 square feet.

To control carpenter ants inside trees, utility poles, fencing or deck materials and similar structural members, drill to locate the interior infested cavity and inject or foam a 0.06% dilution (1.0 fluid oz. of Talstar® P Professional Insecticide per gallon of water) into the cavity using a sufficient volume and an appropriate treatment tool with a splashback guard.

To control carpenter ants that are tunneling in the soil, dilute 0.5 to 1.0 fluid ounces of Talstar® P Professional Insecticide per gallon of water and apply as a drench or inject the dilution or foam at intervals of 8 to 12 inches. Establish a uniform vertical barrier at the edges of walls, driveways or other hard surfaces where ants are tunneling beneath the surfaces.

To protect firewood from carpenter ants (and termites), dilute 1.0 fluid oz. of Talstar® P Professional Insecticide per gallon of water and apply to the soil beneath where the firewood will be stacked at the rate of one gallon of dilution per 8 square feet

For wood piles and stored lumber apply a 0.06% dilution. Use a hose-end sprayer or sprinkling can to deliver a coarse drenching spray. Treated wood can be burned as firewood or used for lumber one month after treatment. Do not use in structures.

For Ant and Fire Ant Mounds control is optimized by combining broadcast applications that will control foraging workers and newly mated fly-in queens with mound drenches that will control existing colonies. If the soil is not moist, then it is important to irrigate before application or use a high volume application. Apply broadcast treatments at 0.6 to 1 fluid oz. per 1,000 square feet. Use enough finished volume to penetrate thatch or sod. Treat mounds by applying 1 fl oz Talstar P Professional per mound in 1 to 2 gallons water by sprinkling the mound until it is wet and treat 3 feet out around the mound. Use the higher volume for mounds larger than 12". Treat mounds with sufficient force to break their apex and allow the insecticide solution to flow into the ant tunnels. For best results, apply in cool weather (65 - 80°F) or in early morning or late evening hours.

Pest Control on Outside Surfaces and Around Buildings

Talstar® P Professional Insecticide will provide up to 1 month residual control of house flies. Length of residual control is dependant upon rate and surface treated.

Follow Additional Application Restrictions for Outdoor Surface and Space Sprays under DIRECTIONS FOR USE

Applications to vertical exterior surfaces (e.g., foundations) are permitted to a maximum height of 3 feet from ground level. Sections of vertical exterior surfaces that abut non-porous horizontal surfaces can only be treated if either 1) these sections are protected from rainfall and spray from sprinklers or 2) they do not drain into a sewer, storm drain, or curb-side gutter (e.g., not to sections that abut driveways or sidewalks that drain into streets).

For control of Ants, Carpenter Ants, Fire Ants, Armyworms, Lady Beetle, Bees, Beetles¹, Biting Flies, Boxelder Bugs, Centipedes, Chiggers, Chinch Bugs, Cicadas, Clover Mites, Cockroaches, Crickets, Cutworms, Dichondra Flea Beetles, Earwigs, Elm Leaf Beetles, Firebrats, Fleas, Flies, Gnats, Grasshoppers, Hornets, Japanese Beetles¹, Midges, Millipedes, Mosquitoes, Moths, Scorpions, Silverfish, Sod Webworms, Sowbugs (Pillbugs), Spider Mites, Spiders (including Black Widow, Brown Recluse and Hobo Spiders), Springtails, Stink Bugs, Ticks (including Brown Dog Ticks), Vinegar (Fruit) Flies, and Wasps.

¹Not for use in California.

Apply Talstar® P Professional Insecticide using a 0.02 to 0.06% dilution as a residual spray to outside surfaces of buildings including, but not limited to, exterior siding, foundations, porches, window frames, eaves, patios, garages, refuse dumps, lawns such as grass areas adjacent or around private homes, duplexes, townhouses, condominiums, house trailers, apartment complexes, carports, garages, fence lines, storage sheds, barns, and other residential and non-commercial structures, soil, trunks of woody ornamentals and other areas where pests congregate or have been seen. Do not apply more than 1 oz. Talstar P Professional per 1000 square feet. (Refer to the Talstar P Professional Dilution Chart.). Higher application volumes may be used to obtain the desired coverage of dense vegetation or landscaping materials.

Mixing Directions: For 0.02% dilution, mix 0.33 fluid oz. of Talstar® P Professional Insecticide per gallon of water. For 0.06% dilution, mix 1 fluid oz. Talstar® P Professional Insecticide per gallon of water (1 fluid oz. = 2 tablespoons). Do not use household utensils to measure Talstar® P Professional Insecticide. Use the higher rate for heavy pest infestation, quicker knockdown or longer residual control. Retreatment may be nec-

essary to achieve and/or maintain control during periods of high pest pressure. Repeat application is necessary only if there are signs of renewed insect activity. Repeat application should be limited to no more than once per seven days.

Perimeter Treatment: Apply to a band of soil and vegetation 6 to 10 feet wide around and adjacent to the structure. Also, treat the foundation of the structure to a height of 2 to 3 feet. Apply 0.33 to 1.0 fluid oz. of Talstar® P Professional Insecticide per 1,000 square feet in sufficient water to provide adequate coverage (refer to Talstar® P Professional Insecticide Dilution Chart). For sections of foundation that abut non-porous horizontal surfaces, the treated areas must be protected from rainfall and spray from sprinklers or they do not drain into a sewer, storm drain, or curbside gutter (e.g. not to sections that abut driveways or sidewalks that drain into streets).

Broadcast Treatment of Wood for the Control of Wood-infesting Insects and Nuisance Pests Outside of Structure

Apply a 0.06% dilution with a fan spray using a maximum pressure of 25 psi. Treatment should be made to thoroughly and uniformly cover the surface but limit excess runoff.

To control wood-infesting insects active inside trees, utility poles and/or fence posts, drill to find the interior infested cavity and inject a 0.06% dilution. To control Bees, Wasps, Hornets, and Yellow-Jackets, apply in late evening when insects are at rest. Aim spray at nest openings in ground, bushes and in cracks and crevices which may harbor nests, saturating nest openings and contacting as many insects as possible.

Pests Under Slabs

Infestations of Arthropods, such as Ants, Cockroaches and Scorpions inhabiting under slab area may be controlled by drilling and injecting or horizontal rodding and then injecting 1 gallon of a 0.06% or 1/2 gallon of a 0.12% dilution per 10 square feet (or 2 gallons of a 0.06% dilution or 1 gallon of a 0.12% dilution per 10 linear feet).

MOSQUITO CONTROL

To control adult mosquitoes outdoors on residential, institutional, public, commercial and industrial buildings, and lawns, ornamentals, parks, recreational areas and athletic fields.

Apply Talstar® P Professional Insecticide for mosquito control at an application rate of 0.33 to 1.0 fluid oz. Talstar® P Professional Insecticide per gallon of water (0.07 to 0.22 lbs bifenthrin/acre), and apply at the rate of one gallon of dilution per 1,000 square feet as a general spray (refer to the Talstar® P Professional Insecticide Dilution Chart). Use the high rate for residual control of mosquitoes. Use this product for control of mosquitoes that may potentially transmit malaria and arboviruses (West Nile fever, dengue fever, Eastern equine encephalitis, and St. Louis encephalitis).

Apply as a residual spray to outside surfaces of buildings including but not limited to, exterior siding, foundations, porches, window frames, eaves, patios, garages, refuse dumps, lawns such as grass areas adjacent to or around private homes, duplexes, townhouses, condominiums, house trailers, apartment complexes, carports, fence lines, storage sheds, barns, and other commercial, residential and non commercial structures, soil, trunk of woody ornamentals, trees, shrubs, ground cover, bedding plants, foliage plants, flowers, non-bearing fruit and nut trees, urban areas, parks, campsites, athletic fields, playgrounds, recreational and overgrown waste areas, roadsides and other areas where mosquitoes are found. May also be applied to non-bearing crops or perennial crops that will not produce harvestable raw agricultural commodities during the season of application.

Use the high rate for heavy pest infestation, quicker knockdown, or longer residual control. Retreatment may be necessary to achieve and/or maintain control during periods of high pest pressure, or if there are signs of renewed insect activity. For the lower use rates, repeat application should be limited to no more than once per seven days. For the high use rate of 1.0 fluid oz. Talstar® P Professional Insecticide per gallon of water, do not apply more than once per four weeks.

Apply with hand-held and back pack sprayers or mist blowers, ground sprayers, power sprayers, truck mounted hydraulic sprayers or mist blowers. Do not apply by air or with hand held or truck mounted cold aerosol ULV sprayers and thermal fogging devices. For best results apply when mosquitoes are most active. Application during the cooler hours of the night or early mornings is recommended.

Do not apply more than 1.0 fluid oz. of Talstar® P Professional Insecticide per 1,000 square feet (equivalent to 0.22 lbs. bifenthrin/acre) per application

Do not apply when wind speed exceeds 10 MPH.

INDOOR USE

For control of Ants, Carpenter Ants, Bedbugs, Bees, Beetles, Biting Flies, Boxelder Bugs, Centipedes, Cicadas, Cockroaches, Crickets, Earwigs, Firebrats, Fleas, Flies, Gnats, Millipedes, Mosquitoes, Moths, Scorpions, Silverfish, Sowbugs (Pillbugs), Spider Mites, Spiders (including Black Widow, Brown Recluse and Hobo Spiders), Springtails, Stink Bugs, Ticks (including Brown Dog Ticks), Vinegar (Fruit) Flies, and Wasps.

In the home, all food processing surfaces and utensils should be covered during treatment or thoroughly washed before use. Exposed food should be covered or removed.

Use a 0.02% to 0.06% dilution (0.33 to 1 fluid oz. per gallon of water) for residual pest control in buildings and structures and on modes of transport. Apply either as a crack and crevice, pinstream, spot, coarse, low pressure spray (25 psi or less) or with a paint brush.

Apply as a coarse, low pressure, crack and crevice or spot spray to areas where pests hide, such as baseboards, corners, storage areas, closets, around water pipes, doors and windows, attics and eaves, behind and under refrigerators, cabinets, sinks, furnaces, stoves, the underside of shelves, drawers and similar areas. Do not use as a space spray. Pay particular attention to cracks and crevices.

Mixing Directions: See mixing directions in "Pest Control on Outside Surfaces and Around Buildings" section.

Talstar® P Professional Insecticide is to be diluted with water for spray or brush application. Fill sprayer with the desired volume of water and add Talstar® P Professional Insecticide. Close and shake before use in order to ensure proper mixing. Mix only the amount of solution needed for the application. Retreatment may be necessary to achieve and/or maintain control during periods of high pest pressure. Repeat application is necessary only if there are signs of renewed insect activity. Limit repeat application to no more than once per seven days.

Talstar® P Professional Insecticide may be converted to a foam and used to treat void spaces, or as a spot spray on vertical or horizontal surfaces where visual marking of application is desired. Use of a foaming agent increases a.i. surface contact time on challenging surfaces and provides visual marking of the application.

Bedbugs: Thorough application should be made to crack and crevices where evidence of bed bugs occurs. This includes bed frames, box springs, inside empty dressers and clothes closets and carpet edges, high and low wall moldings and wallpaper edges. Do not use this product on bed linens, pillows, mattresses or clothes. Remove all clothes and other articles from dressers or clothes closets before application. Allow all treated areas to thoroughly dry before use. Not recommended for use as sole protection against bedbugs. If evidence of bedbugs is found in/on mattresses, use products approved for this use.

Use a 0.06% dilution (1 fluid oz. per gallon of water) for residual pest control in buildings and structures and on modes of transport. Apply either as a crack and crevice, pinstream, spot, coarse, low pressure spray (25 psi or less) or with a paint brush.

Cockroaches, Crickets, Firebrats, Flies, Gnats, Moths, Mosquitoes, Scorpions, Silverfish, Spiders, Ticks

Talstar® P Professional Insecticide will provide up to 1 month residual control of house flies. Length of residual control is dependant upon rate and surface treated.

Apply as a coarse, low pressure spray to areas where these pests hide, such as baseboards, corners, storage areas, closets, around water pipes, doors and windows, attics and eaves, behind and under refrigerators, cabinets, sinks, furnaces, and stoves, the underside of shelves, drawers and similar areas. Pay particular attention to cracks and crevices.

Ants: Apply to any trails, around doors and windows and other places where ants may be found.

Fleas:

Talstar® P Professional Insecticide will kill fleas for up to 3 months

Apply as a coarse, low pressure spot or crack and crevice treatment to areas frequented by pets, such as under bedding, rugs, next to furniture. Do not apply Talstar® P Professional Insecticide dilution directly to pets. Treatment must be dry before pet re-entry. Vacuum prior to treatment.

Boxelder Bugs, Centipedes, Cicadas, Earwigs, Beetles, Millipedes, Pillbugs, Sowbugs, Springtails, and Stink Bugs: Apply around doors and windows and other places where these pests may be found or where they may enter premises. Check damp areas and drains for pest access. Spray baseboards, storage areas and other locations.

Spider Mites: Treat houseplants thoroughly but do not allow run off to occur. Make sure to treat underside of leaves.

Bees and Wasps

To control Bees, Wasp, Hornets, and Yellow-Jackets apply a 0.06% dilution. Application should be made in the late evening when insects are at rest. Thoroughly spray nest and entrance and surrounding areas where insects aight. Spray liberally into hiding and breeding places, especially under attic rafters, contacting as many insects as possible. Retreatment may be necessary to achieve and/or maintain control during periods of high pest pressure. Repeat application is necessary only if there are signs of renewed insect activity.

Precautions: Do not apply dilution until location of heat pipes, ducts, water and sewer lines and electrical conduits are known and identified. Caution must be taken to avoid puncturing and injection into these structural elements. During any overhead applications to overhead interior areas of structures, cover surfaces below with plastic sheeting or similar materials.

Restrictions:

Do not apply into electrical fixtures, switches, or sockets.

In the home, all food processing surfaces and utensils in the treatment area should be covered during treatment or thoroughly washed before re-use. Remove pets, birds, and cover aquariums before spraying. Do not permit humans or pets to contact treated surfaces until the spray has dried.

Wear protective clothing, unvented goggles, gloves and respirator, when applying to overhead areas or in poorly ventilated areas. Avoid touching sprayed surfaces until spray has completely dried.

FOR CONTROL OF STORED PRODUCTS PESTS

Including Indian Meal Moths, Rice Moths, Tobacco Moths, Flour Beetles, Lesser Grain Borers, Merchant Grain Beetles, Sawtoothed Grain Beetles, Grain Weevils, Warehouse Beetles, Cigarette Beetles, and Dermestid Beetles, Psocids, and other similar pests. Inspect to locate and remove infested food sources, remove or cover any food items or food serving dishes or utensils prior to treatment. Apply Talstar P Professional using a 0.02 to 0.06% dilution, Apply as a coarse, low pressure spray to areas where these pests hide, such as baseboards, corners, storage areas, closets, around water pipes, doors and windows, attics and eaves, behind and under refrigerators, cabinets, sinks, furnaces, and stoves, the underside of shelves, drawers and similar areas. Pay particular attention to cracks and crevices. Do not apply directly to food.

WAREHOUSES and GROCERY/PET STORES: Talstar® P Professional Insecticide dilution may be applied as a surface, spot or crack and crevice treatment in food and storage warehouses and stores. Apply to all areas that may harbor pests, including under and between pallets, bins, and shelves. Do not apply directly to food, grain bins (interior), or animals.

FOOD/FEED HANDLING ESTABLISHMENT APPLICATIONS

Applications of this product are permitted in both food/feed and non-food areas of food/feed handling establishments as a surface, spot, or crack and crevice treatment.

Talstar P Professional Insecticide will provide up to 1 month residual control of house flies. Length of residual control is dependant upon rate and surface treated.

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. Serving areas where food is exposed and the facility is in operation are also considered food areas.

Permitted non-food areas of use include, garbage rooms, lavatories, entries and vestibules, offices, locker rooms, machine rooms, garages, mop closets and storage (after canning or bottling).

Permitted use sites include, but are not limited to: Aircraft (Do not use in aircraft cabins), bakeries, bottling facilities, breweries, buses, cafeterias, candy plants, canneries, dairy product processing plants, food manufacturing plants, food processing plants, food service establishments, granaries, grain mills, hospitals, hotels, industrial buildings, laboratories, meat/poultry/egg processing plants, mobile/motor homes, nursing homes offices, railcars, restaurants, schools, ships, trailers, trucks, vessels, warehouses and wineries.

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

Spot, Crack and Crevice Application: Spot or crack and crevice applications may be made while the facility is in operation; however, food should be covered or removed from area being treated. Do not apply directly to food. For this application a "spot" will not exceed 2 ft²

ANIMAL CONFINEMENT FACILITIES, LIVESTOCK PREMISES, CONFINED ANIMAL FEEDING OPERATIONS, and KENNELS

Controls biting flies, filth-breeding flies, fleas, litter beetles, hide beetles, bed bugs, mites, and ticks. Apply as a surface (including directed spray) and/or crack and crevice treatment. Control is enhanced when interior and exterior perimeter applications are made in and around the livestock, poultry, or pet housing structures. Normal cleaning practices of the structure also must be followed along with applications of Talstar P Professional Insecticide to effectively control crawling and flying insect pests.

For occupied areas of poultry/livestock facilities and kennels, apply to indoor cracks and crevices only. Exterior applications to walls and foundation perimeters can help prevent interior infestations of flying and crawling insect pests. Apply Talstar P Professional Insecticide at a rate equivalent to 0.33 to 1 fl. oz per 1000 sq. feet.

For unoccupied areas of poultry/livestock facilities and kennels, apply to floors, vertical and overhead surfaces where crawling or flying insect pests may be present. Feeders, waterers, and feed carts should be covered before application to prevent contamination. Do not apply to milk rooms. Pay attention to animal areas including stanchions, pipes, windows, doors, and areas where insect pests hide or congregate. Exterior applications to walls and foundation perimeters can help prevent interior infestations of flying and crawling insect pests. Apply Talstar P Professional Insecticide at a rate equivalent to 0.33 to 1 fl. oz per 1000 sq. feet. Use sufficient finished volume to penetrate leaf litter, thatch, mulch, or porous surfaces.

To control bed bugs, mites and ticks in animal facilities, treat cracks/crevices, walls, posts, nest boxes, and mobile side curtains. Do not apply Talstar P Professional Insecticide directly to animals. To control bedbugs, use 0.5 to 1 fl. oz per 1000 sq. ft. Use the higher rate of application on painted and non-porous surfaces.

For adult fly control in and around animal facilities, spray application should target areas where flies will rest, such as the ceiling, rafters, and trusses. Also treat windows, interior and exterior walls and supports, fences, and vegetation. Talstar P Professional Insecticide dilution may be sprayed on manure in areas where fly larvae are abundant and the area cannot be cleaned.

For poultry houses, apply to floor area (birds grown on litter) or to walls, posts, and cage framing (birds grown in cages). Application should also be made into cracks and crevices around insulation. Reapply after each growout or sanitization procedure, but not more frequently than every 8 weeks. Indoor control can be enhanced by making perimeter treatments around the outside of building foundations to prevent immigrating adult beetles. Apply in a uniform band 2 to 3 feet up and 6 to 10 feet out from the structure. Maintaining a year-round treatment program will prevent background populations from reaching problem levels.

To control beetles in houses containing birds grown on litter, apply Talstar P Professional Insecticide at a rate equivalent to 0.33 to 1 fl. oz per 1000 sq. feet to litter after birds are removed and during tilling. If litter is removed and replaced with fresh litter, apply Talstar P Professional Insecticide at a rate equivalent to 0.33 to 1 fl. oz per 1000 sq. feet to bare soil or concrete, and treat new litter after it is spread. Apply spray to inside walls, posts, and exterior perimeter. Reapply between each flock.

To control beetles in broiler-breeder houses, apply as directed above for litter and soil/floor treatment.

To control beetles in caged-layer houses, do not treat accumulated manure, as it will likely disrupt natural enemies that control fly breeding. Instead, treat the perimeter of the manure at a rate equivalent to 0.33 to 1 fl. oz Talstar P Professional Insecticide per 1000 sq. feet. Pit walls, posts, and exterior of structure should also be sprayed. Reapply between each flock.

Allow Talstar P Professional Insecticide treatment to dry before applying disinfectants.

DO NOT apply Talstar P Professional Insecticide as a surface spray when animals are present in the facility. Allow applications to dry before restocking the facility. Treatment may be made to cracks and crevices when animals are present.

DO NOT apply Talstar P Professional Insecticide to any animal feed, water, or watering equipment.

DO NOT contaminate any animal feed, food, or water in and around livestock, poultry, or pet housing when making applications.

Foam Applications

Talstar® P Professional Insecticide may be converted to a foam and used to treat void spaces, or as a spot spray on vertical or horizontal surfaces where visual marking of application is desired. Use of a foaming agent increases a.i. surface contact time on challenging surfaces and provides visual marking of the application. Ensure that the foaming agent is approved for food surface/area contact use.

Specific Pest Control Applications

Underground Services such as: wires, cables, utility lines, pipes, conduits, etc. Services may be within structures or located outside structures, in right-of-ways or to protect long range (miles) of installations of services.

Soil treatment may be made using 0.06 to 0.12% Talstar® P Professional Insecticide dilution to prevent attack by Termites and Ants.

Apply 2 gallons of dilution per 10 linear feet to the bottom of the trench and allow to soak into the soil. Lay services on the treated soil and cover with approximately 2 inches of fill soil. Apply another 2 gallons per 10 linear feet over the soil surface to complete the treatment barrier. In wide trenches, only treat the soil in the area near the services. It is important to establish a continuous barrier of treated soil surrounding the services.

Where soil will not accept the above labeled volume, 1 gallon of 0.12% Talstar® P Professional Insecticide may be used per 10 linear feet of trench both to the bottom of the trench and over the soil on top of the services.

Finish filling the trench with treated fill soil. The soil where each service protrudes from the ground may be treated by trenching/rodding of no more than 1 to 2 gallons of dilution into the soil.

Restrictions: