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: Bifenthrin* By Wt. 7.9%
Other Ingredients: 92.1%
100.0%

Talstar® P Professional Insecticide contains 3/4 pound active ingredient per gallon.
*Cis isomers 97% minimum, trans isomers 3% maximum.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

FIRST AID

If swallowed
- 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
- 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
- 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
- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

If swallowed
- Call poison control center or doctor immediately for treatment advice.
- 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.

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.

**PRECAUTIONARY STATEMENTS**

**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.

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).

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.

**NOTE TO PHYSICIAN**

Use of 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, 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 visiting 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.

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 must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:

1. Treatment to soil or vegetation around structures;
2. Applications to lawns, turf, and other vegetation;
3. Applications to building foundations, up to a maximum height of 3 feet.

Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches and structural surfaces (such as windows, doors, and eaves) are limited to spot and crack-and-crevice applications, only.

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 (as 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.

NON-AGRICULTURAL USE REQUIREMENTS**
The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection 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 Tip-N-Measure 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.

**Use Directions for Squeeze-N-Measure Container**

1. Remove the measuring chamber cap and induction seal.
2. Replace cap loosely on measuring chamber to allow venting.
3. Squeeze container gently until liquid fills measuring chamber.
4. Remove measuring chamber cap and dispense into proper application equipment.
5. Replace cap onto measuring chamber and Securely Tighten.

**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 pour concentrate or dilute material into food or drink container.

In case of spill, avoid contact, isolate area and keep out animals and people. 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**

Plastic Container: 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 ¼ 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 put it out in the garbage. If it is 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 refill a 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.

**General Information on the Use of this Product**

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 planters, such as around residential dwellings, parks, institutional buildings, recreational areas, athletic fields and home lawns. Non-boring crops are permitted. For 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.

**Resistance Management Strategies:**

- 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.

**Mixing Equipment:**

- Stirring equipment or a mix tank and drain for 10 seconds after flow begins to drip. Fill container according to markings on side of bottle.

- For multiple dose measuring: Remove fill chamber cap and dispense into proper application equipment or a mix tank and drain for 10 seconds after flow begins to drip. Fill container according to markings on side of bottle.

**Mixing Directions for Tip-N-Measure Container**

1. Stir thoroughly with hand to ensure physical compatibility of the mixture.
2. Return container to level position. No adjustment is needed.
3. Squeeze container gently until liquid fills measuring chamber.
4. Stir thoroughly with hand to ensure physical compatibility of the mixture.
5. Return container to level position. No adjustment is needed.

**Dilution Chart**

<table>
<thead>
<tr>
<th>Applic. Volume:</th>
<th>Applic. Rate:</th>
<th>Fluid Ounces of Talstar P Professional Diluted to these Volumes of Finished Spray</th>
</tr>
</thead>
<tbody>
<tr>
<td>% a.i.</td>
<td>Gall/ 1000 sq. ft.</td>
<td>fl oz.</td>
</tr>
<tr>
<td>0.002</td>
<td>0.125</td>
<td>0.125</td>
</tr>
<tr>
<td>0.005</td>
<td>0.125</td>
<td>0.125</td>
</tr>
<tr>
<td>0.010</td>
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<td>0.25</td>
</tr>
<tr>
<td>0.020</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>0.040</td>
<td>1.0</td>
<td>0.75</td>
</tr>
<tr>
<td>0.062</td>
<td>1.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

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

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

**General 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:

\[
\text{Percent Active Ingredient of spray mix} = \frac{\text{Gallons of finished spray mix}}{7.9} \times \text{Percent Active Ingredient of spray mix}
\]

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 per 1,000 square feet as a general surface, 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. Spray or foam into cracks and crevices or drill holes 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 storable 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 molted 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 0.5 to 1 fluid oz. per 1,000 square feet. Use enough finished volume to penetrate thatch by applying 1 gallon of water and 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 rate 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 of water and surface treated.

For control of Ants, Carpenter Ants, Fire Ants, Armyworms, Lady Beetle, Bees, Beetles †, Biting Flies, Boxelder Bugs, Cockroaches, Crickets, Curtains, *Dichondra Flea Beetles, Earwigs, Elm Leaf Beetles, Firebrats, Fleas, Flies, Gnats, Grasshoppers, Hornets, Japanese Beetles, Midges, Millipedes, Mosquitoes, Moths, Scorpions, Silverfish, Sod Webworms, Sawbugs (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.

*Not for use in California.

†Not for use in California.

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. of 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 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. Repeat application should be limited to no more than once per seven days.

Pepper 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 per 1,000 square feet in sufficient water to provide adequate coverage (refer to Talstar® P Professional Insecticide Dilution Chart).

Broadcast Treatment of Wood for the Control of Wood-insecting 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 thoroughly and uniformly cover the surface but limit excess runoff.

To control wood-insecting 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.

**Pea Weevil Slabs**

Infestations of Arthropods, such as Ants, Cockroaches and Spiders inhabiting under slab area may be controlled by drilling and injecting or horizontal rodding and then injecting 1 gallon of a 0.06% ¹/₂ gallon 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 to determine the high rate of control for mosquitoes. Use this product for control of urban 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, carpots, fence lines, storages, bams, and other commercial, residential and non-commercial structures, soil, trunk of woody ornamentals, trees, shrubs, ground cover, bedding plants, foliage flowers, non-bearing fruit and nut trees urban areas, parks, campsites, athletic fields, playgrounds, recreations areas, 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. Use of a fogging agent increases the amount of insecticide applied to a treated surface and reduces the amount of insecticide required to achieve a desired level of control. Use of a foaming agent increases a.i. surface contact time on challenging surfaces and provides visual marking of 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.

**Bugs, Ticks (including Brown Dog Ticks), Vinegar (Fruit) Flies, and Mosquitoes, Moths, Scorpions, Silverfish, Spiders, Ticks**

Apply as a coarse, low pressure spray to areas where these pests hide, such as basements, corners, storage areas, closets, around water pipes, doors and windows, attics and eaves, behind and under refrigerators, cabinets, sinks, furnaces, and stoves, the undersides of shelves, drawers and similar areas. Pay particular attention to cracks and crevices. Bees and Wasps: to control Bees, Wasps, 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 alight. Spray at emergence points, especially underground in attics and 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.

**Important:** 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. Do not apply into electrical fixtures, switches, or sockets. If in the home, all food processing surfaces and utensils in the treatment area should be covered before application and then 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.

During any overhead applications to overhead interior areas of structure, cover surfaces below with plastic sheeting or similar materials. 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, Scurrier Beetles, 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 that are suitable for these pests to infest 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 basements, 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 general surface, spot or crack and crevice treatment in food and nonfood 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 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. Serving areas where food is exposed and the facility is in operation are also considered to be food areas.

Permitted non-food areas of use include, garbage rooms, lavatories, floor drains (to sewers), 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), apartment buildings, bakeries, bottling facilities, breweries, buses, cafes, candy plants, canneries, dairy product processing plants, food manufacturing plants, food processing plants, food service establishments, granaries, grain mills, hospitals, hotels, industrial buildings, livestock, nurseries, poultry, print shops, mobile/motor homes, nursing homes offices, railcars, restaurants, schools, ships, trailers, trucks, vessels, warehouses and wineries.

General Surface Application: Do not use this application method in food/feed handling establishments when the facility is in operation or foods/feeds are exposed. Apply directly to cracks and crevices or around structures, apply a 0.06% dilution to voids and galleries in damaged wood, etc. Permits the application of this product to wood-in-place for control of wood-infesting insects in and around structures, apply a 0.06% dilution.

Posts, Poles, and Other Constructions

Do not treat electrically active underground services. 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, apply treat the soil in the area near the services. Clean food hand, 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 the surface. Do not apply directly to food. For this application a "spot" will not exceed 2 ft.

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

Controls pests of poultry/livestock facilities and kennels, including biting flies, filth-breeding flies, fleas, litter beetles, bed bugs, mites, and ticks. Apply as a general 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 and perimeter treatments. Exterior perimeter 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. ft. 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 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. Apply no more than 0.25 fl oz to any surface. Do not 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 sanitation 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. ft. All other birds are removed and during filling, 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. ft 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. ft. Pit walls, posts, and exterior of structure should also be sprayed. Reapply between each flock.

Apply Talstar P Professional Insecticide to dry before applying disinfectants.

DO NOT apply Talstar P Professional Insecticide as a general 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, floor drains (to sewers) or as a spot spray on vertical or horizontal surfaces. 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, apply 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 service.

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.

Precautions:

Do not treat electrically active underground services.

Posts, Poles, and Other Constructions

Create an insecticidal barrier in the soil around wooden constructions such as signs, fences and landscape ornamentation by applying a 0.06% dilution.

Previously installed poles and posts may be treated by sub-surface injection or treated by gravity-flow through holes made from the bottom of wall. For 4 inches of ground on the pole or post side, create a con- tinuous insecticidal barrier around the pole. Use 1 gallon of dilution per foot of depth for poles and posts less than six inches in diameter. For larger poles, use 1.5 gallons per foot of depth. Apply to a depth of 6 inches below the bottom of the wood. For larger constructions, use 4 gallons per 10 linear feet per foot of depth.

Treatment of Wood-in-Place for Control of Wood-Infesting Insects:

(Localized Areas in Structure) For the control of insects such as Termites, Carpenter Ants, and wood-and-insect-biting beetles such as Old House Borer and Powder Post in localized areas of infested wood in and around structures, apply a 0.06% dilution to voids and galleries in damaged wood and in spaces between wooden members of a structure and between wood and foundations where wood is vulnerable. Paint on or fan spray applications may also be used. Plastic sheathing must be placed immediately below overhead areas that are spot treated except for soil surfaces in crawl spaces. Application may be made to inaccessible areas by making a hole and then injecting dilution with a crack and crevice injector into the damaged wood or void spaces. This type of application is not intended to be a substitute for soil treatment, mechanical alteration or fumigation to control extensive infestation of wood-infesting insects.
Termite carton nests in trees or building voids may be injected with 0.06% dilution. 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.

**Pest Control in Crawlspaces and Voids:** Broadcast Talstar® P Professional Insecticide at 0.02% to 0.06% to all surfaces in crawl-space and/or void to control ants, fleas, roaches, scorpions, or other arthropods. This treatment is not intended as a substitute for termite control. Treatment should be made to thoroughly and uniformly cover the surface but limit excess runoff. Keep children and pets off surface until dry.

### SUBTERRANEAN TERMITES

**Termites and Their Control:**

**Critical Areas:** Critical areas include any where the foundation is penetrated by utility services, cracks and expansion joints, building voids, and areas where cement constructions have been poured adjacent to the foundation such as stairs, patios and slab additions.

**Structures with Wells/Cisterns Inside Foundations**

Structures that contain wells or cisterns within the foundation of a structure can only be treated using the following techniques:

1. **Structures w ith W ells/C isterns Inside Foundations**
   - Treat the soil at the rate of 4 gallons of dilution per 10 linear feet per foot of depth of the trench, or 1 gallon per 1.0 cubic feet of soil. See “Mixing Directions section of the label.” Mix thoroughly into the soil taking care to contain the liquid and prevent runoff or spillage.
   - After the treated soil has absorbed the dilution, replace the soil into the trench.

2. **Treat infested and/or damaged wood in place using an injection technique such as described in the “Control of Wood Infesting Insects” section of this label.**

**Structures with Adjacent Wells/Cisterns and/or Other Water Bodies**

Applicators must inspect all structures with nearby water sources such as wells, cisterns, surface ponds, streams, and other bodies of water and evaluate, at a minimum, the treatment recommendations listed below prior to making an application.

1. Prior to treatment, if feasible, expose the water pipe(s) coming from the well to the structure, if the pipe(s) enter the structure within 3 feet of grade.

2. Prior to treatment, applicators are advised to take precautions to limit the risk of applying the termicide into subsurface drains that could emulate water into water bodies. These precautions include evaluating whether application of the termicide to the top of the footer may result in contamination of the subsurface drain. Factors such as depth to the drain system and soil type and degree of compaction should be taken into account in determining the depth of treatment.

3. When appropriate (i.e., on the water side of the structure), the treated backfill technique (described above) can also be used to minimize off-site movement of termicide.

Prior to using this technique near wells or cisterns, consult state, local or federal agencies for information regarding approved treatment practices in your area.

**Application Rate:**

Use a 0.06% dilution for subterranean termites. For other pests on the label use specific listed rates.

**Mixing Directions:** Mix the termicide use dilution in the following manner: Fill tank 1/4 to 1/3 full. Start pump to begin by-pass agitation and place end of treating tool in tank to allow circulation through hose. Add appropriate amount of Talstar® P Professional Insecticide. Add remaining amount of water. Let pump run and allow recirculation through the hose for 2 to 3 minutes. Talstar® P Professional Insecticide may also be mixed into full tanks of water, but requires substantial agitation to insure uniformity of the dilution.

To prepare a 0.06% water dilution, ready to use, dilute 3 quarts of Talstar® P Professional Insecticide with 99.25 gallons of water.

**Mixing:**

For the desired application rate, use the chart below to determine the amount of Talstar® P Professional Insecticide for a given volume of finished dilution:

<table>
<thead>
<tr>
<th>Dilution Concentration</th>
<th>Amount of Talstar® P Professional Insecticide</th>
<th>Amount of Water</th>
<th>Desired Galls of Finished Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.06%</td>
<td>Amount</td>
<td>Amount</td>
<td>Desired Galls</td>
</tr>
<tr>
<td>0.12%</td>
<td>Amount</td>
<td>Amount</td>
<td>Desired Galls</td>
</tr>
</tbody>
</table>

Common units of measure:

1 pint = 16 fluid ounces (oz.)
1 quart = 2 pints = 4 cups = 32 fluid ounces (oz.)

*For termite applications, only use this rate in conjunction with the application volume adjustments as listed in the section below or in the foam or underground service application sections.
Pre-Construction Subterranean Termite Treatment

The treatment site must be covered prior to a rain event in order to prevent run-off of the pesticide into non-target areas.

The applicator must either provide the contractor himself or herself or written notification of the above requirement to the contractor on site and to the person commissioning the application (if different than the contractor). If notice is provided to the contractor or the person commissioning the application, then they are responsible under FIFRA to ensure that: 1) if the concrete slab cannot be poured over the treated soil within 24 hours of application the treated soil is covered with a waterproof covering, and 2) the treated soil is covered if precipitation is predicted to occur before the concrete slab is scheduled to be poured.

Do not treat soil that is water-saturated or frozen.

Do not treat when raining.

Do not allow treatment to runoff from the target area.

Do not apply within 10 feet of storm drains. Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or ponds; estuaries; and commercial fish farm ponds).

Pre-Construction Treatment: Do not apply at a lower dosage and/or concentration than specified on this label for applications prior to the installation of the finished grade.

When treating foundations deeper than 4 feet, apply the termiteicide as the backfill is being replaced. If the contractor fails to notify the applicator to permit this, the treatment to a minimum depth of 4 feet after the backfill has been installed. The applicator must trench and rod into the trench or trench along the foundation walls and around piers and other foundation elements, at the rate prescribed from grade to a minimum depth of 4 feet. When the top of the footing is exposed, the applicator must treat the soil adjacent to the footing to a depth not to exceed the bottom of the footing. However, in no case should a structure be treated below the footing.

Effective pre-construction subterranean termite control is achieved by the establishment of vertical and/or horizontal insecticidal barriers using 0.06% dilution of Talstar® P Professional Insecticide.

Horizontal Barriers

Create a horizontal barrier wherever treated soil will be covered by a slab, such as footing trenches, slab floors, carpentry, and the soil beneath stairs and crawl spaces.

For a 0.06% rate apply 1 gallon of dilution per 10 square feet, or use 1 fluid ounce of Talstar® P Professional Insecticide per 10 square feet in sufficient water (no less than 1/2 gallon or more than 2 gallons) to provide thorough and continuous coverage of the treated soil.

If the fill is washed gravel or other coarse material, it is important that the sufficient amount of dilution be used to reach the soil substrate beneath the coarse fill.

Applications shall be made by a low pressure spray (less than 50 p.s.i.) using a coarse spray nozzle. If slab will not be poured the same day as treatment, cover treated soil with a waterproof covering to prevent the treated soil from being washed away.

Vertical Barriers

Vertical barriers must be established in areas such as around the base of foundations, plumbing, utility entrances, back-filled soil against foundation walls and other critical areas.

For a 0.06% rate, apply 4 gallons of dilution per 10 linear feet per foot of depth or 4 fluid ounces of Talstar® P Professional Insecticide 10 linear feet per foot of depth from grade to top of footing in sufficient water (not less than 2 gallons or more than 8 gallons) to ensure complete coverage.

a. When trenching and rodding into the trench, or trenching, it is important that dilution reaches the top of the footing. Rod holes must be spaced so as to achieve a continuous termiteicide barrier, no more than 12 inches apart.

b. Care should be taken to avoid soil wash-out around the footing.

c. Trenches need not be wider than 6 inches. Dilution should be mixed with the soil as it is being replaced in the trench.

d. For a monolithic slab, an inside vertical barrier may not be required.

Hollow block voids may be treated at a rate of 2 gallons of dilution per 10 linear feet so that the dilution will reach the top of the footing.

Prior to each application, applicators must notify the general contractor, construction superintendent, or similar responsible party, of the intended termiteicide application and intended sites of application and instruct the responsible person to notify construction workers and other individuals to avoid the area to be treated during application and until the termiteicide is absorbed into the soil.

Post Construction Subterranean Termite Treatment

Use a 0.06% dilution for post-construction treatment. Post-construction soil applications shall be made by injection, trenching and rodding into the trench or trenching, or coarse fan spray with pressures not exceeding 25 p.s.i. at the nozzle. Care should be taken to avoid soil wash-out around the footing.

Do not apply dilution until location of wells, radiant heat pipes, water and sewer lines and electrical conduits are known and identified. Care must be taken to avoid puncturing and injection into these elements.

Foundations: For applications made after the final grade is installed, the applicator must trench and rod into the trench or trench along the foundation walls and around pillars and other foundation elements, at the rate prescribed from grade to the top of the footing. When the footing is more than four (4) feet below grade, the applicator must trench and rod into the trench or trench along the foundation walls at the rate prescribed to a minimum depth of four feet. The actual depth of treatment and degree of pencillation of the soil type and location of termiticide activity. When the top of the footing is exposed, the applicator must treat the soil adjacent to the footing to a depth not to exceed the bottom of the footing. However, in no case should a structure be treated below the footing.

Slabs

Vertical barriers may be established by sub-slab injection within the structure and trenching and rodding into the trench or trenching outside at the rate of 4 gallons of dilution per 10 linear feet per foot of depth. Special care must be taken to distribute the treatment evenly. Treatment should not extend below the bottom of the footing.

Treat along the outside of the foundation and where necessary beneath the slab on the inside of foundation walls. Treatment may also be required beneath the slab along both sides of interior footing-support ed walls or where there are known or suspected termite-infested elements. Horizontal barriers may be established where necessary by long-rodding or by grid pattern injection vertically through the slab.

a. Drill holes in the slab and/or foundation to allow for the application of a continuous insecticidal barrier.

b. For shallow foundations (1 foot or less) dig a narrow trench approximately 6 inches wide along the outside of the foundation walls. Do not dig below the bottom of the footing. The dilution should be applied to the trench and soil at 4 gallons of dilution per 10 linear feet per foot of depth as the soil is replaced in the trench.

c. For foundations deeper than 1 foot follow rates for basement.

d. Exposed soil and wood in bath traps may be treated with a 0.06% dilution.

Basements

Where the footing is greater than 1 foot of depth from grade to the bottom of the foundation, application must be made by trenching and rod-ding into the trench, or trenching at the rate of 4 gallons of dilution per 10 linear feet per foot of depth. When the footer is more than four feet below grade, the applicator may trench and rod into the trench, or trench along foundation walls at the rate prescribed for four feet of depth. Rod holes may be spaced to provide a continuous insecticidal barrier, but in no case more than 12 inches apart. The actual depth of treatment will vary depending on soil type, degree of compaction, and location of termite activity. However, in no case should a structure be treated below the footer. Sub-slab injection may be necessary along the inside of foundation walls, along cracks and partition walls, around pipes, conduits, piers, and along both sides of interior footing-supported walls.

Accessible Crawl Spaces: For crawl spaces, apply vertical termiteicide barriers at the rate of 4 gallons of dilution per 10 linear feet per foot of depth from grade to top of the footing, or if the footing is more than

<table>
<thead>
<tr>
<th>Volume Adjustment Chart</th>
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<tbody>
<tr>
<td>Rate (% dilution)</td>
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<tr>
<td>Volume allowed</td>
</tr>
<tr>
<td>Horizontal (gallons) dilution/10 ft²</td>
</tr>
<tr>
<td>Vertical (gallons) dilution/10 lin. ft.</td>
</tr>
</tbody>
</table>
4 feet below grade, to a minimum depth of 4 feet. Apply by trenching and rodding into the trench, or trenching. Treat both sides of foundation and around all piers and pipes. Where physical obstructions such as concrete walkways adjacent to foundation elements prevent trenching, treatment may be made by rodding alone. When soil type and/or conditions make trenching prohibitive, rodding may be used. When the top of the footing is exposed, the applicator must treat the soil adjacent to the footing to a depth not to exceed the bottom of the footing. Read and follow the mixing and use direction section of the label if situations are encountered where the soil will not accept the full application volume.

1. Rod holes and trenches must not extend below the bottom of the footing.

2. Rod holes must be spaced so as to achieve a continuous termiteicidal barrier but in no case more than 12 inches apart.

3. Trenches must be a minimum of 6 inches deep or to the bottom of the footing, whichever is less, and should not be wider than 6 inches. When trenching in sloping (tiered) soil, the trench must be stepped to ensure adequate distribution and to prevent termiticide from running off. The dilution must be mixed with the soil as it is replaced in the trench.

4. When treating plenums or crawl spaces, turn off the air circulation system of the structure until application has been completed and all termiticides have been absorbed by the soil.

Inaccessible Crawl Spaces: For inaccessible interior areas, such as areas where there is insufficient clearance between foundation elements in commonly occupied areas of structures should be treated according to the instructions for accessible crawl spaces. Otherwise, apply one or a combination of the following two methods.

1. To establish a horizontal barrier, apply to the soil surface, 1 gallon of dilution per 10 square feet overall using a nozzle pressure of less than 25 p.s.i. and a coarse application nozzle (e.g., Delavan Type RD Raindrop, RD-7 or larger, or Spraying Systems Co. 8010LP TeeJet or comparable nozzle). For an area that cannot be reached with the application wand, use one or more extension rods to make the application to the soil. Do not broadcast or power spray with higher pressures.

2. To establish a horizontal barrier, drill through the foundation wall or through the floor above and treat the soil perimeter at a rate of 1 gallon of dilution per 10 square feet. Drilling must be at intervals not to exceed 16 inches. Many States have smaller intervals, so check State regulations which may apply.

When treating plenums and crawl spaces, turn off the air circulation system of the structure until application has been completed and all termiticides have been absorbed by the soil.

Masonry Voids: Drill and treat voids in multiple masonry elements of the structure extending from the structure to the soil in order to create a continuous treatment barrier in the area to be treated. Apply at the rate of 2 gallons of dilution per 10 linear feet of footing, using a nozzle pressure of less than 25 p.s.i. When using this treatment, access holes must be drilled below the sill plate and should be as close as possible to the footing as is practical. Treatment of voids in block or rubble foundation walls must be closely examined: Applicators must inspect areas of possible runoff or in combination with liquid applications. Applications may be made as described in the Postconstruction treatment section of this label.

All leaks resulting in the deposition of termiticide in locations other than those prescribed on this label must be sealed prior to the clean-up is completed. Do not allow people or pets to contact contaminated areas or to reoccupy the contaminated areas of the structure until the clean-up is completed.

Note: When treating behind veneer care should be taken not to drill beyond the veneer. If concrete blocks are behind the veneer, both the blocks and the veneer may be drilled and treated at the same time. Not for use in voids insulated with rigid foam insulation.

Excavation Technique: If treatment must be made in difficult situations, along fieldstone or rubble walls, along faulty foundation walls, and around pipes and utility lines which lead downward from the structure to a well or pond, excavation as a precaution against application leakage in the treated areas. Some areas may not be treatable or may require mechanical alteration prior to treatment. Check State regulations which may apply.

All leaks resulting in the deposition of termiticide in locations other than those prescribed on this label must be sealed prior to the clean-up is completed. Do not allow people or pets to contact contaminated areas or to reoccupy the contaminated areas of the structure until the clean-up is completed.

Foam Applications

Talstar® P Professional Insecticide dilution, from 0.06 to 0.12 % may be converted to a foam with expansion characteristics from 2 to 40 times. Localized Application: The dilution may be converted to a foam and the foam used to control or prevent termiticidal infestations.
The application rates listed in the following table will provide excellent discretion of the applicator, Talstar® P Professional Insecticide may be applied at up to 1 fl. oz. per 1000 square feet to control each of the occur.

To ensure optimal control of eriophyid mites, apply in combination with 25% higher volumes of applied Talstar® P Professional Insecticide. Applications should be made when adult billbugs are first observed during April and May. Degree day models have been developed to optimize application rates as pest pressure & foliage area increases. Limit repeat applications to no more than once per seven days.

To ensure optimum control, a second application, five to seven days after the first, may be necessary to achieve acceptable control.

For ornamental applications (including but not limited to treesh, shrubs, ground covers, bedding plants, and annuals) apply 0.125 to 1.0 fluid oz. of Talstar® P Professional Insecticide per 1,000 square feet or 43.5 fl. oz per 100 gallons. Talstar® P Professional Insecticide may be diluted and applied in various volumes of water providing that the maximum label rate (1.0 fluid oz. per 1,000 square feet or 43.5 fl. oz per 100 gallons.) is not exceeded. Talstar® P Professional Insecticide may be applied through low volume application equipment by dilution with water or other carriers and providing that the maximum label rate (1.0 fluid oz. per 1,000 square feet or 43.5 fl. oz per 100 gallons) is not exceeded.

Lawn Application rates

1. Flea larvae: Flea larvae develop in the soil of shaded areas that are accessible to pets or other animals. Use a higher volume application when treating these areas to ensure penetration of the insecticide into the soil. Note: If the lawn area is being treated with Talstar® P Professional Insecticide at 0.25 fl. oz. per 1000 square feet for adult flea control, then the larval application rate may be achieved by increasing the application volume two- to four-fold.

2. Imported Fire Ants: Control will be 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 to bring the mole crickets closer to the soil surface where contact with the insecticide will be maximized. Grass areas that receive pressure from adult mole crickets should be treated at peak egg hatch to ensure optimum control of subsequent nymph populations (see below).

3. Mole Cricket nymphs: Grass areas that received intense adult mole cricket pressure in the spring should be treated immediately prior to peak egg hatch. Optimal control is achieved at this time because young nymphs are more susceptible to insecticides and they are located near the soil surface where the insecticide is most concentrated. Control of larger, more damaging, nymphs later in the year may require both higher application rates and more frequent applications to maintain acceptable control. Applications should be made as late in the day as possible and should be watered in with up to 0.5 inches of water immediately after treatment. If the soil is not moist, then it is important to irrigate before application to bring the mole crickets closer to the soil surface where contact with the insecticide will be maximized.

4. Japanese Beetle (Adult): Applications should be made when adult beetles are first encountered. Applications may be made to early season larvae (approximately August – February) as they feed on plant crowns. Treatments made to late-season larvae (approximately March, April) may only provide suppression.

In New York State, this product may NOT be applied to any grass or turf area within 100 feet of a water body (lake, pond, river, stream, wetland, or drainage ditch).

In New York State, do make a single repeat application of Talstar® P Professional Insecticide if there are signs of renewed insect activity, but not sooner than two weeks after the first application.

Comments

Armyworms, Cutworms and Sod Webworms: To ensure optimum control, delay watering (irrigation) or mowing for 24 hours after application. If the grass area is being maintained at a mowing height of greater than 1 inch, then higher application rates (Up to 1 fluid oz. per 1000 square feet) may be required during periods of high pest pressure.

Annual Bluegrass Weevil (Hyperodex) adults: Applications should be timed to coincide with the full bloom stage of Vanhoutte spirea (Spiraea vanhouttei) and horse chestnut (Aesculus hippocastanum). The July application should be timed to coincide with the blooming of Rose of Sharon (Hibiscus syriacus).

Black Turfgrass Attaenius adults: Applications should be made when adult mole crickets are first observed during April and May. Degree day models have been developed to optimize application timing. Consult your State Cooperative Extension Service for more specific information regarding application timing.

Billbug adults: Applications should be made when adult billbugs are first observed during April and May. Degree day models have been developed to optimize application timing. Consult your State Cooperative Extension Service for information specific to your region. In temperate regions, spring applications targeting billbug adults will also provide control of over-wintered chinch bugs. Use Talstar® P Professional per mound in 1 to 2 gallons water by sprinkling the mound until it is thoroughly 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.

Mole Crickets: Achieving acceptable control of adult mole crickets is difficult because preferred grass areas are subject to continuous invasion during the early spring by this extremely active stage. Applications should be made as late in the day as possible and should be watered in with up to 0.5 inches of water immediately after treatment. If the soil is not moist, then it is important to irrigate before application to bring the mole crickets closer to the soil surface where contact with the insecticide will be maximized.

Japanese Beetle (Adult): Applications should be made when adult beetles are first encountered. Applications may be made to early season larvae (approximately August – February) as they feed on plant crowns. Treatments made to late-season larvae (approximately March, April) may only provide suppression.

ORNAMENTALS AND TREES

For ornamental applications (including but not limited to treesh, shrubs, ground covers, bedding plants, and annuals) apply 0.125 to 1.0 fluid oz. of Talstar® P Professional Insecticide per 1,000 square feet or 4.5 to 43.5 fl. oz. per 100 gallons. Talstar® P Professional Insecticide may be diluted and applied in various volumes of water providing that the maximum label rate (1.0 fluid oz. per 1,000 square feet or 43.5 fl. oz per 100 gallons) is not exceeded. Talstar® P Professional Insecticide may be applied through low volume application equipment by dilution with water or other carriers and providing that the maximum label rate (1.0 fluid oz. per 1,000 square feet or 43.5 fl. oz per 100 gallons) is not exceeded.

Apply the specified application rate as a full coverage foliar spray. Repeat treatment as necessary to achieve control using higher application rates as pest pressure & foliage area increases. Limit repeat applications to no more than once per season.

Certain cultivars may be sensitive to the final spray solution. A small number of plants should be treated and observed for one week prior to application to the entire planting.

Use of an alternate class of chemistry in a treatment program is recommended to prevent or delay pest resistance.

GREENHOUSES AND INTERIORSCAPES

Use Talstar® P Professional Insecticide, either alone or tank mixed with other products, including insect growth regulators, to control a wide spectrum of insects and mites on trees, shrubs, foliage plants, non-bearing fruit and nut trees, and flowers in greenhouses and interiorscapes including hotels, shopping malls, office buildings, etc.

Calculating Dilution Rates using the Ornamental and Greenhouse Application Rates Table and the Talstar® P Professional Insecticide Dilution Chart (page 3): The following steps should be taken to control pests:

1. Identify the least susceptible target pest (the pest requiring the highest application rate for control).
2) Select an application rate in terms of fluid oz. of Talstar® P Professional Insecticide.
3) Identify your application volume and how much spray mix you want to prepare.
4) Use the Dilution Chart to determine the appropriate volume of Talstar® P Professional Insecticide that must be mixed in your desired volume of water.

**ORNAMENTAL and GREENHOUSE APPLICATION RATES**

The application rates listed in the following table will provide excellent control of the respective pests under typical conditions. However, at the discretion of the applicator, Talstar® P Professional Insecticide may be applied at up to 1 fluid oz. per 1,000 square feet (43.5 fl. oz. per 100 gallons per acre) to control each of the pests listed in this Table. The higher application rates should be used when maximum residual control is desired.

Apply the specified rate as a full coverage foliar spray. Repeat as necessary to achieve control using higher rates as pest pressure and foliage increases.

Certain cultivars may be sensitive to the final spray solution. A small number of plants should be tested prior to application of the entire planting.

Use an alternate class of chemistry in the treatment program is recommended to prevent or delay resistance.

### Application Rate

<table>
<thead>
<tr>
<th>Pest</th>
<th>Talstar® P Professional Insecticide</th>
<th>Fluid Ounces per 1,000 square feet</th>
<th>Fluid Ounces per 100 gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bagworms</td>
<td>0.125 - 0.25</td>
<td>5.4 - 10.8</td>
<td></td>
</tr>
<tr>
<td>Aphids</td>
<td>0.25 - 0.5</td>
<td>10.8 - 21.7</td>
<td></td>
</tr>
<tr>
<td>Ants</td>
<td>0.5 - 1.0</td>
<td>21.7 - 43.5</td>
<td></td>
</tr>
<tr>
<td>Mosquitoes</td>
<td>See Mosquito Control directions for residual control rates and information on page 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Attention**

Do not apply a broadcast application to interior surfaces of homes. Do not apply to pets, food crops, or sources of electricity.

Firewood is not to be burned for one month after treatment. Use only in well ventilated areas.

Do not use on edible crops during any application to overhead areas within the structure, cover surfaces below with plastic sheeting or similar material, except for soil surfaces in crawlspaces.

Do not allow spray to contact food, foodstuffs, food contacting surfaces, food utensils or water supplies.

Thoroughly wash dishes and food handling utensils with soap and water if they become contaminated by application of this product.

Do not treat areas where food is exposed. During indoor surface applications do not allow dripping or run-off to occur. Do not allow people or pets on treated surfaces until spray has dried.

Let surfaces dry before allowing people and pets to contact surfaces. Prior to applying Talstar® P Professional Insecticide to wood siding, especially rough wood siding, be sure to thoroughly agitate the tank mixture. Prior to treating wood siding, test a small area and allow it to dry to be sure no deposits will form. Follow the same procedure when applying to wood surfaces in direct sunlight or the heat of the day.

Do not apply this product in patient rooms or in any rooms while occupied by the elderly or infirm. Do not apply in classrooms when in use. Do not apply when occupants are present in the immediate area in institutions such as libraries, sports facilities, etc.

Application equipment that delivers low volume treatments, such as the Micro-Injector® or Actisol® applicators, may also be used to make crack and crevice, deep harborage, spot and general surface treatments of Talstar® P Professional Insecticide.

**Conditions of Sale and Limitation of Warranty and Liability:**

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions beyond the control of FMC or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold FMC and Seller harmless for any claims relating to such factors.

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