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 ⅔ pound active ingredient per gallon.
*Cis isomers 97% minimum, trans isomers 3% maximum.

KEEP OUT OF REACH OF CHILDREN

CAUTION

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 U-Turn®), or an in-line injector system, shirt, pants, socks, shoes and waterproof gloves are sufficient. In addition, all pesticide handlers must wear a respiratory protection device when working in a non-ventilated space. All pesticide handlers must wear protective eyewear when working in non-ventilated space.

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.

FMC
Agricultural Products Group
1735 Market Street
Philadelphia PA 19103

Net Contents: 1 Gallon

07-18-11
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.

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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 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 manner that will contact workers or other persons either directly or through drift.

**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 Intervals: 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 only to the greenhouse uses on this label**

**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. Place 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 into proper containers 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 put 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 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 put in the garbage 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 refill. 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 plantings, such as around residential dwellings, parks, institutional buildings, recreational areas, athletic fields and home lawns. Non-bearing crops are permitted, but 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.

**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:

\[
\text{Percent Active Ingredient of spray mix} = \left( \frac{\text{Gallons of finished spray mix}}{128} \right) \times 100
\]

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 this dilution at the rate of one to 0.5 gallons or more per 100 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 under dishwashers, furnaces, refrigerators, sinks and stoves, around pipes, cracks, masonry 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, 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. For perimeter treatment using either low or high volume applications described in the “Pest Control on Outside Surfaces” 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:

1) Treat non-porous surfaces 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 in up to 10 gallons of water and apply 1 to 10 gallons 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 this dilution at the rate of one gallon per 1,000 square feet as a general surface. 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 under 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” 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:

1) Treat non-porous surfaces 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 may be foraging, using 0.5 to 1.0 fluid oz. of Talstar® P Professional Insecticide per gallon of water and applying 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 in up to 10 gallons of water and apply 1 to 10 gallons per 1,000 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 foaming at 0.06% dilution (1 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 splashguard. To control carpenter ants that are tunneling in the soil, dilute 0.5 to 1.0 fluid oz. 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 the firewood to maintain the rate of one gallon of dilution per 8 square feet.

For wood piles and lumber apply a 0.06% dilution. Use a hose-end sprayer or sprinkler and direct a coarse dusting 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 finishing volume to penetrate thatch by applying 1 to 2 fluid oz. Talstar® P Professional Insecticide per mound in 1 to 2 gallons water by spraying 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 Round 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.

For control of Ants, Carpenter Ants, Fire Ants, Armyworms, Lady Beetle, Bees, Beetles†, Biting Flies, Boxelder Bugs, Centipedes, Chiggers, Chinch Bugs, Cicadas, Clover Mites, Cockroaches, Crickets, Cutworms†, Dichondra Flea Beetles, Earwigs, Em. med. Centipedes, Firebrats, Flies, Fleas, Gnats, Grasshoppers, Hornets, Japanese Beetles†, Midges, Millipedes, Mosquitoes, Moths, Scorpions, Silverfish, Sod Webworms, Soldierbugs (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.

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 as grass areas adjacent or around private homes, duplexes, townhouses, condominiums, house trailers, apartment complexes, campsites, 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 Insecticide per 1000 square feet. (Refer to the Talstar® P Professional Insecticide 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. 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.

Pest Control 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 1000 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-Destroying 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 applied 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.

Pea Weevil 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% solution. Talstar® 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® Professional Insecticide Dilution Chart). Use the high rate of control of mosmoquitos. 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, carports, fence lines, storage areas, 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, campsite, athletic fields, playgrounds, recreation 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. For the lower use rates, repeat application is necessary only in situations of heavy pest pressure. 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.

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% solution. Talstar® 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® Professional Insecticide Dilution Chart). Use the high rate of control of mosmoquitos. 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, carports, fence lines, storage areas, 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, campsite, athletic fields, playgrounds, recreation 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. For the lower use rates, repeat application is necessary only in situations of heavy pest pressure. 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.

Bedbugs:

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 alight. 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.

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. In the home, all food processing surfaces and utensils in the treatment area should be cleaned and sanitized 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 structures, cover surfaces below with plastic sheeting or similar materials. Wear protective clothing, unventilated 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, and pantry pests. 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 used as food service areas 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.

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.

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 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 nonfood 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 food/feed areas.

Permitted non-food areas of use include, garage 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, cafeterias, candy plants, canneries, dairy product processing plants, food manufacturing plants, food processing plants, food service establishments, grainaries, grain mills, hospitals, hotels, industrial buildings, laundries, glass/poultry/fruit packers/impressors/fruit; 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 food/products are exposed. Do not apply directly to food, feed, or water. To control flies, apply as directed above to establish a continuous barrier of treated soil surrounding the services. Maintain 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 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 contaminate any animal feed, food, or water, or watering equipment.

DO NOT contaminate any animal feed, food, or water, or watering equipment.

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 surfaces. Foam application 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.

SPORAL PEST CONTROL APPLICATIONS

Underground Services such as: sewers, 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 treatment to the soil near the services. Clean food, feed, or processing equipment and thoroughly rinse with clean, fresh water.

Additional method of application includes: 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 area.

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 a hole around the pole or post. To create a continuous 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 of dilution 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-feeding insects 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 wood members of a structure and between wood and foundations where wood is vulnerable. Paint on or fan spray applications may also be used. Plastic sheeting 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 drilling a crack and crevice injector into the damaged wood or void spaces. This type of application is not intended to be substituted for soil treatment, mechanical alteration or fumigation to control extensive infestation of wood-infesting insects.
Termite control in Crawlspaces and Voids: Broadcast Talstar® 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 TERMITE CONTROL

Directions For Use

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 when mixing and loading using a closed spray tank transfer system (such as an in-line injector system), shirt, pants, socks, shoes and waterproof gloves are sufficient. In addition, all pesticide handlers must wear a respiratory protection device when working in a non-ventilated space. All pesticide handlers must wear protective eyewear when working in non-ventilated space or when applying termicide by rodding or sub-slab injection.

1. Use 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 filter.

2. When treating adjacent to an existing structure, the applicator must check the area to be treated, and immediately adjacent areas of the structure, for visible and accessible cracks and holes to prevent any leaks. For significant obstructions to termite occupying the structure, people present or residing in the structure during application must be advised to remove their pets and themselves from the structure if they see any signs of leakage. After application, the applicator is required to check for leaks. All leaks resulting in the deposition of termicide in locations other than those prescribed on this label must be cleaned up prior to leaving the application site. Do not allow people or pets to contact contaminated areas or to reoccupy contaminated areas of the structure until the clean-up is completed.

The use of this product prevents and controls termite infestations in and around structures and constructions.

The insecticidal dilution must be adequately dispersed in the soil to establish a barrier between the wood and the Termites in the soil. As a good practice: 1) all non-essential wood and cellulose containing materials, should be removed from around foundation walls, crawl spaces, and porches; 2) eliminate termite access to moisture by repairing faulty plumbing and/or construction grade. Soil around untreated structural wood in contact with soil should be treated as described below.

To establish an effective insecticidal barrier with this product the service technician must be familiar with current termite control practices such as: trenching, rodding, sub-slab injection, coarse fan spray of soil surfaces, crack and crevice (void) injection, excavated soil treatment, and brush or spray applications to infested or susceptible wood. These techniques must be correctly employed to prevent or control infestations by subterranean termites such as: Coptotermes, Heterotermes, Reticulitermes and Zootermopsis. The biology and behavior of the species involved should be considered by the service technician in determining which control practices to use to control or prevent the termite infestation.

Choice of appropriate procedures should include consideration of such variable factors as the design of the structure, location of heating, ventilation, and air conditioning (HVAC) systems, water table, soil type, soil compaction, grade conditions, and location and type of domestic water supplies and utilities.

For advice concerning current control practices with relation to specific local conditions, consult resources in structural pest control and state cooperative extension and regulatory agencies.

Important: Contamination of public and private water supplies must be avoided by following these precautions: Use anti-backflow equipment or procedures to prevent siphonage of insecticide into water supplies. Do not contaminate cisterns or wells. Do not treat soil that is water saturated or frozen or in any conditions where runoff or movement from the treatment area (site) is likely to occur. Consult state and local specifications for recommended distances of wells from treated areas, or if such regulations do not exist, refer to Federal Housing Administration Specifications (H.U.D.) for guidance.

Note: Crawl spaces are considered inside of the structure.

Critical Areas: Critical areas include areas where the foundation is penetrated by utility services, cracks and expansion joints, buried trade 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. Do not treat soil while it is beneath or within the foundation or along the exterior perimeter of a structure that contains a well or cistern. The treated backfill method must be used if soil is removed and treated outside/away from the foundation. The treated backfill technique is described below:
   a. Trench and remove soil to be treated onto heavy plastic sheeting or similar material or into a wheelbarrow.
   b. 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.
   c. 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, pond, 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 emplace as follows:
   a. Add appropriate amount of Talstar® Professional Insecticide. Add remaining amount of water. Let pump run and allow recirculation through the hose for 2 to 3 minutes.
   b. Talstar® 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® Professional Insecticide with 99.25 gallons of water.

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

<table>
<thead>
<tr>
<th>Amount of Talstar® Professional Insecticide</th>
<th>Amount of Water</th>
<th>Desired Gallons of Finished Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.06%</td>
<td>1 oz</td>
<td>127 oz.</td>
</tr>
<tr>
<td></td>
<td>5 oz</td>
<td>4.9 oz</td>
</tr>
<tr>
<td></td>
<td>10 oz</td>
<td>9.9 oz</td>
</tr>
<tr>
<td></td>
<td>25 oz</td>
<td>24.8 oz</td>
</tr>
<tr>
<td></td>
<td>1.5 qt.</td>
<td>49.6 oz</td>
</tr>
<tr>
<td></td>
<td>2.25 qt.</td>
<td>74.4 oz</td>
</tr>
<tr>
<td></td>
<td>3 qt</td>
<td>99.25 oz</td>
</tr>
<tr>
<td>0.125%*</td>
<td>2 oz</td>
<td>126 oz.</td>
</tr>
<tr>
<td></td>
<td>10 oz</td>
<td>4.9 oz</td>
</tr>
<tr>
<td></td>
<td>15 oz</td>
<td>9.8 oz</td>
</tr>
<tr>
<td></td>
<td>1.5 qt.</td>
<td>24.6 oz</td>
</tr>
<tr>
<td></td>
<td>3 qt</td>
<td>49.2 oz</td>
</tr>
<tr>
<td></td>
<td>4.5 qt.</td>
<td>73.8 oz</td>
</tr>
<tr>
<td></td>
<td>6 qt</td>
<td>98.5 oz</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.
**Application Volume:** To provide maximum control and protection against termite infestation apply the specified volume of the finished water dilution and active ingredient as set forth in the directions for use section of this label. If soil will not accept the labeled application volume, the volume may be reduced provided there is a corresponding increase in concentration so that the amount of active ingredient applied to the soil remains the same.

**Note:** Large reductions of application volume reduce the ability to obtain a continuous barrier. Variance is allowed when volume and concentration are consistent with label directed rates and a continuous barrier can still be achieved.

Where desirable for pre and post construction treatments, the volume of the 0.12% dilution may be reduced by 1/2 the labeled volume. See **Volume Adjustment Chart below**.

**Note:** When volume is reduced, the hole spacing for subslab injection and soil rodding may require similar adjustment to account for lower volume dispersal of the termiticide in the soil.

### Volume Adjustment Chart

<table>
<thead>
<tr>
<th>Rate (% dilution)</th>
<th>Volume allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.06%</td>
<td>1.0 gallons</td>
</tr>
<tr>
<td>0.12%</td>
<td>0.5 gallons</td>
</tr>
</tbody>
</table>

**After Treatment:** All holes in commonly occupied areas into which Talstar® P Professional Insecticide has been applied must be plugged. Plugs must be of a non-cellulose material or covered by an impermeable, non-cellulose material.

**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 cover the soil himself or herself or provide 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 (such as polyethylene sheeting), and 2) the treated soil is covered if the fill is washed gravel or other coarse material, it is important that dilution reaches the top of the footing. Rod holes must be spaced so as to achieve a continuous termiticide barrier, no more than 12 inches apart.

Do not apply dilution until location of wells, radiant heat pipes, water and sewer lines and electrical conduits are known and identified. Coverage 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 trenching along the foundation walls and around pillars and other foundation elements, at the rate prescribed on the label directed rates and a continuous termiticide barrier, no more than 12 inches apart. 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 termiticide 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. Pre to each application, applicators must notify the general contractor, construction superintendent, or similar responsible party, of the intended termiticide application and instructed sites of application and instruct the responsible person to notify construction workers and other individual to leave the area to be treated during application and until the termiticide 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. Coverage must be taken to avoid puncturing and injection into these elements.

When the top of the footing is exposed, the applicator must treat the soil adjacent to the footing to a depth no 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 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 wherever 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 and along and along all crawl spaces and soil rodding joints. Horizontal barriers may be established where necessary by long-rodging 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 rodding 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 must 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 footing.

**Accessible Crawl Spaces:** For crawl spaces, apply vertical termitecide barriers at the rate of 4 gallons of dilution per 10 linear feet per foot of depth from grade to the top of the footing, or if the footing is more than...
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 con-
ditions 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 termiticide
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 run-
ning 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
termite has been absorbed by the soil.

Inaccessible Crawl Spaces: For inaccessible interior areas, such as
areas where there is insufficient clearance between floor joists and
ground surfaces to allow operator access, excavate if possible, and
record 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 over 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 powerspray with high-
er pressures.
2. To establish a horizontal barrier, drill through the foundation wall
or through the floor above per foot and soil the wall permitted at a rate of 1 gal-
on 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
termite has 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 surface, 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 foun-
dation walls must be closely examined: Applicators must inspect areas
of voids for a runoff as a precaution against application leakage in the
treated areas. Some areas may not be treatable or may require
mechanical alteration prior to treatment. All leaks resulting in the deposition of termiticide in locations other than
those prescribed on this label must be cleaned up prior to treatment.

Localized Application:

4. 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 situa-
tions, along fieldstone or rubble walls, along faulty foundation walls,
and around pipes and utility lines which lead downward from the struc-
ture to a well or pond, application may be made in the following man-
ner:

a. Trench and remove soil to be treated onto heavy plastic sheeting or
trash can be filled with builder’s or play box sand and the sand treated with
Talstar Professional. The sand should be treated as soil following the
termite rate listed on the Talstar Professional Insecticide label.

b. Retreatment for subterranean termites can only be performed if there is
clear evidence of reinfestation or disruption of the barrier due to con-
struction, excavation, or landscaping and/or evidence of the breakdown
of the termiticide barrier in the soil. These vulnerable or reinfested
areas may be retreated in accordance with application techniques
developed in this product’s labeling. Type and type of these
retreatments will vary depending on factors such as termite pressure,
soil types, soil conditions and other factors which may reduce the effec-
tiveness of the barrier.

Annual retreatment of the structure is prohibited unless there is clear
evidence that reinfestation or barrier disruption has

APPLICATION IN CONJUNCTION WITH THE USE OF TER-
MITE BAITS

As part of the integrated pest management (IPM) program for termite
control, Talstar® P Professional Insecticide may be applied to critical and
adjacent areas and structural elements of utility entry sites, bath
traps, expansion joints, foundation cracks and areas with known or sus-
pected infestations at a rate of 0.06% as a spot treatment or complete
baiting treatment. The termite rate may be matched as described in the
Postconstruction treatment section of this label.

TERMITE CONTROL (ABOVE GROUND ONLY)

The purpose of the applications described below are to kill termite work-
ers or winged reproducers that may be present at the time of treat-
ment. These applications are intended as supplements to, and not sub-
stitutes for, mechanical alteration, soil treatment or foundation treat-
ment.

To control exposed workers and winged reproductive termites in local-
ized areas, dilute 1.0 fluid oz. of Talstar® P Professional Insecticide per
gallon of water and apply as a course fan spray at the rate of one gal-
on per 1,000 square feet to attics, crawl spaces, unfinished basements
and other void areas. Treat swarming termites as well as the areas in
which they congregate.

To control above-ground termites in localized areas of infested wood,
dilute 1.0 fluid oz. of Talstar® P Professional Insecticide per gallon of
water and apply as a liquid or foam using a pointed injection tool. Multiple injection points and varying depths of injection may be necessary to achieve control. When possible, the carton nest material should be removed from the building void after treatment.

Depending on the circumstances, foam applications may be used alone
or in combination with liquid dilution applications. Applications may be
made behind veneers, piers, chimney bases, into rubble foundations,
into block voids or structural voids, under slabs, stoops, porches, or to
the voids in brick or stone. Applications must be made with the remem-
bered foam dilution rate of 4 ounces of foam per 10 linear feet. A

Foam and liquid application must be consistent with volume and active
ingredient instructions in order to insure proper application has been
made. The volume and amount of active ingredient are essential to an
effective treatment. At least 75% of the labeled liquid dilution volume of
preparation must be reached. Treatment density varied to appro-
priate areas using foam application. Refer to label and use recommend-
ations of the foam manufacturer and the foaming equipment
manufacturer.

Foam applications are generally a good supplement to liquid treat-
ments in difficult areas, but may be used alone in difficult spots.

Application Under Slabs or To Soils in Crawlspacesto Prevent or
Control Termites

Application may be made using Talstar® P Professional Insecticide
foam alone or in combination with liquid dilution. The equivalent of at
least 4 gallons (4 ounces of Talstar® P Professional Insecticide con-
centrate) of 0.06% dilution per 10 linear feet (vertical barrier), or at
least 1 gallon (1 ounce of Talstar® P Professional Insecticide concentrate)
of 0.06% dilution per 10 square feet (horizontal barrier) must be applied
either as a dilution, foam, or a combination of both. For a foam only appli-
cation, apply Talstar® P Professional Insecticide concentrate in suffi-
cient foam concentration and foam volume to deposit 4 ounces of con-
tent per 10 linear feet or 1 ounce of concentrate per 10 square feet.
For example, 2 gallons of 0.12% dilution generated as foam to cover 10
linear feet is equal to the application of 4 gallons of 0.06% dilution per
10 linear feet.

Sand Barrier Installation and Treatment

Talstar® P Professional Insecticide dilution, from 0.06 to 0.12 % may be
used as a solid material and applied by injection to critical

Talstar® P Professional Insecticide concentrate in suffi-
cient foam concentration and foam volume to deposit 4 ounces of con-
tent per 10 linear feet or 1 ounce of concentrate per 10 square feet.
For example, 2 gallons of 0.12% dilution generated as foam to cover 10
linear feet is equal to the application of 4 gallons of 0.06% dilution per
10 linear feet.

P Professional Insecticide may be applied to critical

and other similar voids.

The dilution may be converted to a foam and
used as a liquid or foam with the remaining percent delivered to appro-
riate areas using foam application. Refer to label and use recommend-
ations of the foam manufacturer and the foaming equipment
manufacturer.

To control termite carton nests in building voids, dilute 1.0 fluid oz. of
Talstar® P Professional Insecticide concentrate in sufficient foam con-
centration and foam volume to deposit 4 ounces of content per 10
linear feet or 1 ounce of concentrate per 10 square feet. The purpose of the applica-
tions described below are to kill termite work-
ers or winged reproducers that may be present at the time of treat-
ment. These applications are intended as supplements to, and not sub-
stitutes for, mechanical alteration, soil treatment or foundation treat-
ment.

To control exposed workers and winged reproductive termites in local-
ized areas, dilute 1.0 fluid oz. of Talstar® P Professional Insecticide per
gallon of water and apply as a course fan spray at the rate of one gal-
on per 1,000 square feet to attics, crawl spaces, unfinished basements
and other void areas. Treat swarming termites as well as the areas in
which they congregate.

To control above-ground termites in localized areas of infested wood,
dilute 1.0 fluid oz. of Talstar® P Professional Insecticide per gallon of
water and apply as a liquid or foam using a pointed injection tool. Multiple injection points and varying depths of injection may be necessary to achieve control. When possible, the carton nest material should be removed from the building void after treatment.
The application rates listed in the following table will provide excellent control of nymphs and adults during the middle of the summer. Application timing is critical 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. 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).

1Mole 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.

1Ticks (including ticks that may transmit Lyme Disease and Rocky Mountain Spotted fever): Do not make spot applications. Treat the entire area where exposure to ticks may occur. Use higher spray volumes when treating areas with dense ground cover or heavy leaf litter. Ticks may be reintroduced from surrounding areas on host animals. Retreatment may be necessary to achieve and maintain control during periods of high pest pressure. Repeat application is necessary only if there are signs of renewed activity. Limit repeat application to no more than once per seven days.

1Deer ticks (Ixodes sp.) have a complicated life cycle that ranges over a two year period and involves four life stages. Applications should be made in the late fall and/or early spring to control adult ticks that are usually located on grass above the soil surface and in mid to late spring to control larvae and nymphs that reside in the soil and leaf litter. American dog ticks may be a considerable nuisance in suburban settings, particularly where homes are built on land that was previously field or forest. These ticks commonly congregate along paths or roadways where humans are likely to be encountered. Applications should be made as necessary from mid-spring to early fall to control American dog tick larvae, nymphs and adults.

1Crane Flies: Treatments can be made to control early to mid-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 trees, shrubs, ground covers, bedding plants, and 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**

1Use Talstar® 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.
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 pest 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 amount of system spray can be used to make foliar spray applications.

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

<table>
<thead>
<tr>
<th>Pest</th>
<th>Application Rate Talstar® P Professional Insecticide</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Fluid Ounces per 1,000 square feet</td>
</tr>
<tr>
<td>Bagworms12</td>
<td>0.125 - 0.25</td>
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<tr>
<td>Cutworms</td>
<td></td>
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<tr>
<td>Elm Leaf Beetles</td>
<td></td>
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<tr>
<td>Fall Webworms</td>
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<tr>
<td>Gypsy Moth Caterpillars</td>
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<tr>
<td>Lace Bugs</td>
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<tr>
<td>Leaf Feeding Caterpillars</td>
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<tr>
<td>Tent Caterpillars</td>
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<tr>
<td>Aphids1</td>
<td>0.25 - 0.5</td>
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<tr>
<td>Black Vine Weevil (Adults)</td>
<td></td>
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<tr>
<td>Beetles13, 14</td>
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<tr>
<td>Brown Soft Scales</td>
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<tr>
<td>Budworms</td>
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<tr>
<td>California Red Scale</td>
<td></td>
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<tr>
<td>(Crawlers)13</td>
<td></td>
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<tr>
<td>Centipedes</td>
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<tr>
<td>Cicadas1</td>
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<tr>
<td>Citrus Thrips</td>
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<tr>
<td>Clover Mites</td>
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<td>Crickets</td>
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<td>Diaprepes (Adults)</td>
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<tr>
<td>Earwigs</td>
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<tr>
<td>European Red Mite</td>
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<tr>
<td>Flea Beetles</td>
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<td>Fungus Gnats (Adults)</td>
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<td>Grasshoppers</td>
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<tr>
<td>Japanese Beetle (Adult)1</td>
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<tr>
<td>Leafhoppers</td>
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<tr>
<td>Leafrollers</td>
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<tr>
<td>Mealybugs</td>
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<td>Millipedes</td>
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<tr>
<td>Mites</td>
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<tr>
<td>Orchard Weevil</td>
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<tr>
<td>Pillbugs</td>
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<tr>
<td>Plant Bugs (including Lygus</td>
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<tr>
<td>spp.)</td>
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<tr>
<td>Psyllids1</td>
<td></td>
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<tr>
<td>Scorpions</td>
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<tr>
<td>Scale crawlers, such as</td>
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<tr>
<td>California scale, San Jose</td>
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<tr>
<td>scale, etc.13</td>
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<tr>
<td>Slugs</td>
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<tr>
<td>Spiders</td>
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<tr>
<td>Spider Mites14</td>
<td></td>
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<tr>
<td>Spittlebugs1</td>
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<tr>
<td>Thrips</td>
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<tr>
<td>Tip Moths</td>
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<tr>
<td>Treehoppers15</td>
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<tr>
<td>Twig Borers15</td>
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<tr>
<td>Wasps</td>
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<tr>
<td>Weevils15</td>
<td></td>
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<tr>
<td>Whiteflies</td>
<td></td>
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<tr>
<td>Ants</td>
<td>0.5 - 1.0</td>
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<tr>
<td>Imported Fire Ants**</td>
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<tr>
<td>Leafminers</td>
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<tr>
<td>Pecan Leaf Scorch Mite</td>
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<tr>
<td>Pine Shoot Beetle (Adults)</td>
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<tr>
<td>Sawfly larvae</td>
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<tr>
<td>Spider Mites14</td>
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<tr>
<td>Slink Bugs</td>
<td></td>
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<tr>
<td>Mosquitoes</td>
<td></td>
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</tbody>
</table>

†Not for use in California.
‡For grazing ants.

**For foraging ants.

Attention

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

Do not apply to plants, 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.

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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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