Talstar®

GRANULAR INSECTICIDE

For use to control pests, as listed, outdoors, including areas surrounding residential, institutional, public, commercial and industrial buildings.

For use on lawns and landscaped areas around residential, institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields.

EPA Reg. No. 279-3343  EPA Est. 279-IL-1

Active Ingredients: By Wt.
Zeta-Cypermethrin* .......................................... 0.05%
Bifenthrin** ....................................................... 0.20%
Other Ingredients: ..............................................99.75%
100.0%

*Cis/trans isomer ratio: Max 75% (±) cis and Min. 25% (±) trans
**Cis isomers 97% minimum; trans isomers 3% maximum.
U.S. Patent pending

KEEP OUT OF REACH OF CHILDREN

See other panels for additional precautionary information.

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 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.

HOTLINE NUMBER
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-(800)-331-3148 for Emergency Assistance.

NOTE TO PHYSICIAN
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.

Precautionary Statements

Hazards to Human (and Domestic Animals)

CAUTION
Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear long-sleeved shirt and long pants, socks, shoes and gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Environmental Hazards
This pesticide is extremely toxic to fish, aquatic invertebrates, oysters and shrimp. 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. Sweeping any product that lands on a driveway, sidewalk, or street, back onto the treated area of the lawn or garden will help to prevent run off to water bodies or drainage systems. Do not apply when weather conditions favor drift from treated areas. Drift and run-off from treated areas may be hazardous to aquatic organisms in neighboring areas.

FMC Corporation
1735 Market Street
Agricultural Products Group
Philadelphia PA 19103

Net Contents: 25 Pounds

01-13-11
APPLICATION RATES

The application rates listed in the following table will provide control of the respective pests under typical conditions.

<table>
<thead>
<tr>
<th>Pest</th>
<th>Lb of Talstar XTRA Granular per 1000 sq ft</th>
<th>Usage per Application</th>
<th>Lb of Talstar XTRA Granular per Acre</th>
<th>Lb of Total Active Ingredient per Acre</th>
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</thead>
<tbody>
<tr>
<td>Annual Bluegrass Weevil (Hyperodex) (adults)</td>
<td>1.15 to 2.3 Lbs/1000 sq ft</td>
<td>50 to 100 lbs per acre</td>
<td>0.125 to 0.25 Lbs AI/Acre</td>
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<tr>
<td>Armyworms</td>
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<tr>
<td>Billbugs</td>
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<tr>
<td>Black Turfgrass Ataenius (adults)</td>
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<td></td>
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<tr>
<td>Cutworms</td>
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<tr>
<td>Leafhoppers</td>
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<tr>
<td>Mealies/bugs</td>
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<tr>
<td>Sod Webworms</td>
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<tr>
<td>Ants (except Carpenter and Pavement ants)</td>
<td>2.3 to 4.6 Lbs/1000 sq ft</td>
<td>100 to 200 lbs per Acre</td>
<td>0.25 to 0.50 Lbs AI/Acre</td>
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<tr>
<td>Fleas (larvae &amp; adults)</td>
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<tr>
<td>Chinch Bugs</td>
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<tr>
<td>Millipedes</td>
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<tr>
<td>Mole Crickets (nymphs &amp; adults)</td>
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<tr>
<td>Pillbugs</td>
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<tr>
<td>Scorpions</td>
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<tr>
<td>Sowbugs</td>
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<tr>
<td>Ticks</td>
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</tbody>
</table>

Resistance Management Recommendations. Talstar XTRA Granular Insecticide contains Group 3 Insecticides. Insects with acquired resistance to Group 3 Insecticides may eventually dominate the insect population if Group 3 Insecticides are used repeatedly for successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Talstar XTRA Granular Insecticide or other Group 3 Insecticides.

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 not make a single repeat application of Talstar XTRA Granular if there are signs of renewed insect activity, but not sooner than two weeks after the first application.

SPECIFIC PEST INSTRUCTIONS

For optimum control of particular pests, follow recommended procedures outlined below:

**Armyworms, Cutworms, and Sod Webworms:** To ensure optimum control, irrigate the treated area with water immediately after application to activate (release from the granule) the insecticide.

**Annual Bluegrass Weevil (Hyperodex) adults:** Applications should be timed to control adult weevils as they leave their overwintering sites and move into grass areas. This movement generally begins when Forsythia is in full bloom and concludes when flowering dogwood is in full bloom. 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.

**Black Turfgrass Ataenius adults:** Applications should be made during May and July to control the first and second generation of black turfgrass Ataenius adults, respectively. The May application should be timed to coincide with the full bloom stage of Vanhoute 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).

**Chinch Bugs:** Chinch bugs infest the base of grass plants and are often found in the thatch layer. Irrigate the treated area with up to 0.25 inches of water immediately after application to activate (release from the granule) the insecticide. Chinch bugs can be one of the most difficult pests to control in grasses and the higher applications rates may be required to control populations that contain both nymphs and adults during the summer.

**Crane Flies:** Treatments should be made to control early to mid-season larva (approximately August – February) as they feed on plant crowns. Treatments made to late-season larvae (approximately March - April) may only provide suppression. Consult your local extensions agent for specific recommendations for your area.

**Fleas (adults and larvae):** Control is provided for up to seven days. Flea larvae develop in the soil of shaded areas that are accessible to pets or other animals. Irrigate the treated area with up to 0.5 inches of
water immediately after application to activate (release from the gran-  
ule) the insecticide.

**Imported Fire ants:** Control will be optimized by combining broadcast applications that will control foraging workers and newly mated fly-in queens with mound treatments that will eliminate existing colonies. If the soil is not moist, then it is important to irrigate before or soon after application. Broadcast treatments should apply no more than 0.50 lbs ai per acre (4.6 lbs/1000 square feet). Mounds should be treated by applying 1/2 cup of Talstar XTRA Granular per mound and then drenching the mound with 2.0 gallons of water. The mound should be treated with sufficient force to break their apex and allow the insecticide solution to flow into the ant tunnels. Treat three feet out around the mound. For best results, apply in cool weather (65 – 80°F) or in early morning or late evening hours.

**Mole Cricket adults:** Achieving acceptable control of adult mole crick- ets 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. Grass areas that received pressure from adult mole crickets should be treated at peak egg hatch to ensure optimum control of subsequent nymph populations (see below).

**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 high-  
er application rates and more frequent applications to maintain accept-  
able 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.

**Scorpions:** To ensure optimum control, treat the building perimeter at dusk to prevent outdoor scorpions from entering the building. Scorpions reside hidden in cracks and voids during the day and are active at night at temperatures above 77°F/25°C. Resting areas can be identified at night using a blacklight (UV bulb) as scorpions will fluoresce. These areas should also be treated. Prior to treatment, to increase treatment efficacy, remove trash, debris, or firewood that scorpions may use as  
nesting sites.

**Ticks (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 application rates when treating areas with dense ground cover or heavy leaf litter. Ticks may be reintroduced from surrounding areas on host animals. Do not allow public use of treated areas during application.

**Deer 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 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 set-  
tings, particularly where homes are built on land that was previously field or forest. These ticks commonly congregate along paths or road-  
ways and in areas 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.

**SPOT TREATMENT APPLICATIONS**

**Mound Ant Treatment, including Fire Ants:** Apply 1/2 cup of Talstar  
XTRA Granular Insecticide per mound and then drench the mound with 1 to 2 gallons of water. The mound should be drenched with sufficient force to break its apex and allow the insecticide to flow into the ant tunnels. Treat three feet out around the mound. For best results, apply in cool weather (65 to 80°F) or in early morning or late evening hours. Treat new mounds as they appear. Food utensils such as teaspoons and measuring cups should not be used for food purposes after use with insecticide.

**INDUSTRIAL NON-AGRICULTURAL APPLICATIONS**

(Incuding Industrial Sites, Parks, Ball Fields and Cemeteries)

**Broadcast and Spot Applications:** For the control of actively foraging ants (including Imported Fire Ants) broadcast uniformly 2.3 to 4.6 lbs Talstar XTRA Granular Insecticide per 1000 sq. ft.

**Pad Mounted Electrical Sites:** To reduce or prevent ant mound build- 
ing around electrical pads, uniformly distribute 1.0 to 1.5 Tablespoons of Talstar XTRA Granular Insecticide per 4 sq. ft. of mount- 
ing pad. Where existing transformers are completely or partially filled with soil excavated by resident ants, remove any excess fill and level the remaining soil prior to application. Food utensils such as table- 
spoons must not be used for food purposes after use in measur- 
ing pesticides.

**Note:** Electrical transformers appear to be more attractive to ants during the cooler months. For best results treat in the Fall or early Spring.

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

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate con-  

If you experience difficulty with control and suspect that resistance is a reasonable cause, immediately consult your local company representa-  

**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.