RESTRICTED USE PESTICIDE

Toxic to Fish and Aquatic Organisms

For retail sale to and use only by certified applicators, or persons under their direct supervision and only for those uses covered by the certified applicator's certification.

GROUP

INSECTICIDES



GRANULAR INSECTICIDE

For use to control pests, as listed, on golf courses, sodfarms, and lawns, and in landscaped areas and perimeters around residential, institutional, public, commercial and industrial buildings, parks, recreational areas, golf courses, and athletic fields.

DO NOT USE THIS PRODUCT ON GOLF COURSES AND SOD FARMS IN NASSAU COUNTY OR SUFFOLK COUNTY, NEW YORK.

EPA Reg. No. 1	279-9547	EPA Est.	279-IL-1

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

- Cis/trans isomer ratio: Max 75% (±) cis and Min. 25% (±) trans
- Cis isomers 97% minimum; trans isomers 3% maximum

KEEP OUT OF REACH OF CHILDREN CAUTION

See other panels for additional precautionary information.

FMC Corporation 1735 Market Street Agricultural Products Group Philadelphia PA 19103

Net Weight: 50 Pounds

	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

This product is a pyrethroid. If large amounts have been ingested, the stomach and intestine should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.

For Information Regarding the Use of this Product Call 1-(800)-321-1FMC (1362).

PRECAUTIONARY STATEMENTS Hazards to 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 effect here the treatment area of the lown or 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.

STORAGE AND DISPOSAL

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, preferably in a locked storage area and avoid excess heat. Carefully open containers. After partial use, close tightly.

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

To confine spill: Cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

Pesticide Disposal

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling

Non-refillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling, if available, or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke..

DIRECTIONS FOR USE

Restricted Use Pesticide

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirement specific to your State and Tribe, consult the State/Tribal agency responsible for pesticide regulation.

Apply this product directly to the lawn or garden area. Water treated area as directed on this label. Do not water 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.

Also for use as a perimeter or spot treatment to control pests outdoors, including areas surrounding residential, institutional, public, commercial and industrial buildings.

Do not apply more than 0.25 pound active ingredient per acre (2.3 pounds granules per 1000 square feet) per application on residential use sites (i.e., around private homes, apartment buildings, condominiums, non-agricultural outbuildings, non-commercial greenhouses, preschools or day-care facilities).

May be applied at up to 0.50 pound active ingredient per acre (4.6 pounds granules per 1000 square feet) per application on non-residential use sites (i.e., around institutional, public, commercial or industrial buildings; parks; recreational areas or athletic fields).

Do not broadcast apply more than 0.5 pound active ingredient per acre (4.6 pounds granules per 1000 square feet) per year.

AGRICULTURAL 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 interval. 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 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
- · Waterproof gloves
- · Shoes and socks

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.

If watering-in of the granules is necessary, do not allow people or pets on treated areas until the grass or soil is dry.

Do not touch treated surface until dry.

GRASS AND PERIMETER APPLICATIONS

(Including Golf Courses and Sod Farms)

LAWN APPLICATION: Broadcast Talstar XTRA GC Granular Insecticide with suitable application equipment to ensure uniform coverage over the treatment area.

PERIMETER APPLICATION: Apply to ground area 5 to 10 feet wide around and adjacent to the structure. See table below.

BOUNDARY APPLICATIONS: Apply to soil areas, ornamental gardens, pavement crevices, fence lines, planter areas, vegetation areas and mulch areas.

Applic. Rate:		Pounds of Talstar XTRA GC Granular for Perimeter Applications - Linear Distance (Feet) Around Structure							
Pounds Per 1,000 sq. ft.		100	<u>150</u>	200	<u>250</u>	300	400	500	1,000
2.3	5 feet	1.3	1.9	2.5	3.0	3.6	4.8	5.9	11.7
2.3	10 feet	3.0	4.2	5.3	6.5	7.6	9.9	12.2	23.7
3.0	5 feet	1.7	2.5	3.3	3.9	4.7	6.3	7.7	15.2
3.0	10 feet	3.9	5.4	6.9	8.5	9.9	12.9	15.9	30.9
3.5	5 feet	2.0	2.9	3.8	4.5	5.4	7.2	8.9	17.5
3.5	10 feet	4.5	6.3	8.0	9.8	11.4	14.9	18.3	35.5
4.6	5 feet	2.6	3.8	5.0	6.0	7.2	9.6	11.8	23.4
4.6	10 feet	6.0	8.4	10.6	13.0	15.2	19.8	24.4	47.4

Note: The amounts of Talstar XTRA GC Granular Insecticide listed in the above table are based on the total area being treated. This area is determined by multiplying the linear distance by the band width and then adding to that value the area of a circle whose radius is equal to the band width (to account for the area treated at the four corners of a rectangular structure).

APPLICATION RATES

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

	Application Rate						
Pest	Pounds Active Ingredient Per Acre		Pounds RA GC Granular Insecticide				
Annual Bluegrass Weevil (Hyperodes) (Adult) Armyworms Billbugs (Adult) Black Turfgrass Ataenius (Adult) Cutworms Leafhoppers Mealybugs Sod Webworm	0.125 - 0.25 pounds	50 - 100 pounds per	1.15 - 2.3 pounds per				
	active per acre	acre	1000 square feet				
Ants (except Carpenter and Pharoah ants) Imported Fire Ants (Adults) Imported Fire Ants (Mounds) Chinch Bugs Crane Flies (larvae) Earwigs Fleas (Adults and Larvae) Millipedes Mole Cricket (Adults and Nymphs) Pillbugs Scorpions Sowbugs Ticks	0.25 - 0.5 pounds	100 - 200 pounds per	2.3 – 4.6 pounds per				
	active per acre	acre	1000 square feet				

Resistance Management Recommendations. Talstar XTRA GC 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 in 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 GC 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 make a single repeat application of F6132 GC Granular Insecticide 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 listed pests, follow 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 (Hyperodes) 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. You may 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. You may 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 turgrass ataenius adults, respectively. The May application should be timed to coincide with the full bloom stage of Vanhoutte spiraea (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. It is recommended to irrigate the treated area with 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 dur-

Crane Flies: Treatments should 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. You may consult your local extension agent for specific recommendations for your area.

Flea (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 granule) the

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 control existing colonies. If the soil is not moist, then it is important to irrigate before or soon after application. Apply broadcast treatments at no more than 0.50 pounds active ingredient per acre (4.6 pounds granules per 1000 square feet). Treat mounds by applying 1/2 cup of Talstar XTRA GC Granular Insecticide per mound and then drenching the mound with 1 to 2 gallons of water. The mounds 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. This treatment will control the mound within four hours and kill the queen within 24 hours of application. Application of at least 125 pounds granules per acre (2.8 pounds granules per 1000 square feet) of Talstar XTRA GC Granular Insecticide will provide four months residual activity for control of foraging Imported Fire Ants and newly mated fly-in Queens. Food utensits such as teaspoons and measuring cups should not be used for food purposes after use with insecticide.

Mole Cricket adults: Achieving acceptable control of adult mole crickets is difficult because preferred grass areas are subject to continuous invasion during the early spring by this extremely active stage. Applications should be made as late in the day as possible and should be watered in with 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).

Mole Cricket nymphs: Grass areas that received intense adult mole cricket pressure in the spring should be treated immediately prior to peak egg hatch. Optimal control is achieved at this time because young nymphs are more susceptible to insecticides and they are located near the soil surface where the insecticide is most concentrated. Control of larger, more damaging, nymphs later in the year may require both higher application rates and more frequent applications to maintain acceptable control. Applications should be made as late in the day as possible and should be watered in 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 resting 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. Retreat as necessary to maintain adequate control. 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 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.

SPOT TREATMENT APPLICATIONS

Mound Ant Treatment, including Fire Ants: Apply 1/2 cup of Talstar XTRA GC 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. Talstar XTRA GC Granular Insecticide will provide control of ant mounds within four hours. Food utensils such as teaspoons and measuring cups should not be used for food purposes after use with insecticide

INDUSTRIAL NON-AGRICULTURAL APPLI-CATIONS

(Including 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 pounds Talstar XTRA GC Granular Insecticide per 1000 square feet (0.25 to 0.5 pounds active ingredient per acre). See comments section under Grass Applications for additional rate recommendations.

Pad Mounted Electrical Sites: To reduce or prevent ant mound building activity on electrical pads, uniformly distribute 1.0 to 1.5 Tablespoons (0.06 to 0.09 pounds) of Talstar XTRA GC Granular Insecticide per 4 square feet of mounting 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. cation. Food utensils such as tablespoons must not be used for food purposes after use in measuring 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.

SPREADER EQUIPMENT SETTINGS

Broadcast application should be performed with a calibrated commercial broadcast spreader to evenly distribute the granules. Approximate settings for several models are provided in the table below.

Talstar® XTRA GC Granular Insecticide - Spreader Setting Guide							
Application Rate lbs/1,000 sq.ft.	Lesco® Broadcast - New	Lesco® Broadcast - Old	Scotts® HandyGreen® II	Scotts® SpeedyGreen® 2000	Scotts® Standard Broadcast	Gandy® Models 42, 36, 30, 24"	Spyker® All Models (Push)
1.15 lbs	5	A + 1/2	2		**	10.5	2
2.3 lbs	7	B + 1/4	3	2*	**	12	2.6
4.6 lbs	9	C + 1/2	5	3 1/4	3	16	3.1
Width Ft.	10	10	10	10	10		

Ground Speed at ~3.1 mph for all settings

*2 is the lowest setting for this model
**This model does not have settings fine enough for this application

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

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

Conditions of Sale and Limitation of Warranty and Liability:

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

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

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the Directions for Use when used in accordance with the directions under normal conditions of use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, FMC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE SELECTION, PURCHASE, OR USE OF THIS PRODUCT. Any warranties, express or implied, having been made are inapplicable if this product has been used contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to (or beyond the control of) seller or FMC, and, to the extent permitted by applicable law, buyer assumes the risk of any such use.

To the extent permitted by applicable law, FMC or seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF FMC AND SELLER FOR ANY AND ALL CLAIMS. LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHER-WISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF FMC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

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