



Thiram Granuflo®

Agricultural Fungicide

(The Original 75% Water Dispersible Granules)

ACTIVE INGREDIENT:
 Thiram (Tetramethylthiuram disulfide)..... 75.0%
 OTHER INGREDIENTS: 25.0%
 TOTAL:..... 100.0%

For sale to and use by professional applicators only. Not for sale to or use by homeowners/consumers.

EPA Reg. No. 45728-21

EPA Est. No. 32557-BEL-1

NET CONTENTS:

**KEEP OUT OF REACH OF CHILDREN
 CAUTION - AVISO**

**Si Usted no entiende la etiqueta, busque a alguien para que se la explique a Usted en detalle.
 (If you do not understand the label, find someone to explain it to you in detail.)**

FIRST AID	
IF SWALLOWED	<ul style="list-style-type: none"> ◆ Call a 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 a poison control center or doctor. ◆ Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> ◆ Take off contaminated clothing. ◆ Rinse skin immediately with plenty of water for 15-20 minutes. ◆ Call a poison control center or doctor for treatment advice.
IF INHALED	<ul style="list-style-type: none"> ◆ Move person to fresh air. ◆ If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. ◆ Call a poison control center or doctor for further treatment advice.
IF IN EYES	<ul style="list-style-type: none"> ◆ Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. ◆ Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For Emergencies involving a Spill, Leak, Fire, Exposure, or Accident, Contact: CHEMTREC at (800) 424-9300. For product usage information, phone Taminco US Inc., toll free at (800) 223-3258 from 9:00 AM to 5:00 PM Eastern time.</p>	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed, inhaled or absorbed through skin. Do not get in eyes, on skin or on clothing. Avoid inhaling spray mist. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. The consumption of alcoholic beverages increases the toxic effects of Thiram.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton ≥14 mils. If you want more options, follow the instructions for category C on an EPA chemical resistance selection chart.

All mixers/loaders, applicators and other handlers must wear:

*Long-sleeved shirt and long pants

*Shoes plus socks

*Chemical-resistant gloves except when flagging to support aerial applications and applying with aerial equipment.

*Chemical-resistant apron when mixing, loading, cleaning up spills, cleaning equipment, or otherwise exposed to concentrate.

NOTE: Persons involved in bagging treated seed, sewing or moving bags of treated seed, or cleaning up bagging areas or seed treatment equipment are pesticide handlers and must wear the PPE required on this label for pesticide handlers.

See engineering controls for additional requirements and options. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining Personal Protection Equipment (PPE). If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations:

*Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

*Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

*Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Engineering control statements:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS. Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(6)].

ENVIRONMENTAL HAZARDS

This chemical is toxic to fish, aquatic invertebrates, oysters and shrimp. Do not apply directly to water, or areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

Treated seeds are hazardous to fish, birds and mammals. Do not plant treated seeds by broadcasting to the soil surface. Ensure that all seeds are thoroughly covered with soil, especially in turn areas. If seeds are not thoroughly incorporated by the planter during planting, additional incorporation may be required to thoroughly cover exposed seeds.

PRODUCT INFORMATION

Thiram Granuflo® is a broad-spectrum fungicide for plant disease control in the culture of **Peaches** and **Strawberries**. Thiram Granuflo® is a broad-spectrum fungicide for use on **Turf** (golf courses) to control Dollar Spot, Brown Patch and Fusarium Patch. When used as a **Seed Protectant**, Thiram Granuflo® may increase crop stands and yields by reducing seedling losses from seed decay, damping-off or seedling blights. When used as a **Repellent**, Thiram Granuflo® can protect trees, vines, nursery stock, shrubs and ornamentals from rabbit, deer and rodent depredation.

Taminco US Inc.'s recommendations for the use of this product are based upon tests believed to be reliable. FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, OR ILLEGAL RESIDUES.

DIRECTIONS FOR USE

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 requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Do not apply this product using a high pressure wand or a rights-of-way sprayer.

Not for use on turf being grown for sale or other commercial use such as sod, or for commercial seed production, or for research purposes.

Do not use on residential lawns or turf.

Do not use on peaches in California or Arizona except for dormant applications to control Peach Leaf Curl.

CHEMIGATION: Do not apply this product through any type of irrigation system.

SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. Apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter or 300 microns or greater for spinning atomizer nozzles. Apply only when wind speed is 2-10 mph at the application site.

Additional requirements for aerial applications:

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 15 feet above the crop canopy. When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind. Do not make applications into temperature inversions

Additional requirements for ground boom applications:

Do not apply with a nozzle height greater 4 feet above the crop canopy.

GENERAL RECOMMENDATIONS

Be sure spray equipment is clean before use. If it is contaminated with any material, crop injury or sprayer clogging may result. Calibrate spray equipment before use.

For agricultural foliar applications use recommended rates for dilute, concentrate and aerial applications. Ground application is preferred, especially when full canopy of foliage exists. For dilute application, use Thiram Granuflo® at the recommended rate listed in the "per 100 gallons" column of the Specific Applications table. For concentrate ground application, apply the recommended rate listed in the "per acre" column of the Specific Applications table in a minimum of 20 gallons per acre. For aerial application, apply the recommended rate listed in the "per acre" column of the Specific Applications table in a minimum of 10 gallons per acre. Applications of Thiram Granuflo® fungicide are most effective when made before infection periods. Under low disease conditions, minimum label rates should be used; however, maximum label rates and shortened spray schedules are recommended for severe or threatening disease conditions. If you are not familiar with such conditions, get advice from your state agricultural extension service.

IMPORTANT: When spraying, thorough coverage is necessary to provide good disease control. Addition of a spreader/sticker to the finished spray mixture may improve coverage. Make fresh spray mixtures for each application.

MIXING INSTRUCTIONS

To mix, fill the spray tank about 2/3 full of water, and with agitator running, slowly sift in the recommended amount of Thiram Granuflo®. Finish filling the tank with water and continue agitation until thoroughly mixed. Continue agitation and apply immediately.

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 (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 the restricted-entry interval (REI) of 24 hours. Exception: Once treated seeds are planted in soil or other planting media, the Worker Protection Standard allows workers to enter the treated area without restriction, if there will be no contact with the treated seeds.

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,
- shoes plus socks,
- chemical-resistant gloves made of waterproof material

NON-AGRICULTURAL USE REQUIREMENTS

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

Keep unprotected persons out of treated area until sprays have dried.

AGRICULTURAL APPLICATIONS (FOLIAR):

SPECIFIC APPLICATIONS FOR THIRAM GRANUFLO® AGRICULTURAL FUNGICIDE

FRUIT CROPS	DISEASES	POUNDS THIRAM GRANUFLO®		DIRECTIONS FOR USE
		per acre	per 100 gal	
PEACHES	Brown Rot Blossom Blight and Fruit Rot ⁽⁴⁾ (Monilinia spp.)	3.50 lbs	1.17 lbs ⁽¹⁾	For Blossom Blight, apply at 3-4 day intervals during bloom to protect blossoms. For Fruit Rot, apply at petal-fall, two weeks after petal-fall and in cover sprays at 7 day intervals if rot is apparent on green fruit. Do not apply within 7 days of harvest. Do not apply more than 17.5 lbs (13.1 lbs A.I.)/A per crop cycle.
	Peach Leaf Curl (Taphrina deformans)	3.50 lbs	1.17 lbs ⁽¹⁾	Apply dormant applications post-harvest in late fall and/ or in late winter prior to bud swell, at bloom and petal-fall.
	Rhizopus Rot ⁽⁴⁾ (Rhizopus spp.)	3.50 lbs	1.17 lbs ⁽¹⁾	Apply at petal-fall, two weeks after petal-fall and in cover sprays at 7 day intervals if rot is apparent on green fruit. Do not apply within 7 days of harvest. Do not apply more than 17.5 lbs (13.1 lbs A.I.)/A per crop cycle.
	Peach Scab ⁽⁴⁾ (Cladosporium carpophilum)	3.50 lbs	1.17 lbs ⁽¹⁾	Apply at petal-fall and repeat 3 to 5 times at 10 to 14 day intervals as needed. Do not apply within 7 days of harvest. Do not apply more than 17.5 lbs (13.1 lbs A.I.)/A per crop cycle.
STRAWBERRIES	Gray Mold (Botrytis cinerea)	4.4 lbs	2.2 lbs ⁽²⁾	Broadcast 3 to 5 applications at 10 day intervals per crop cycle ⁽³⁾ beginning at early blossom stage. Good coverage of strawberry buds, blossoms and developing fruit is required for best results. Do not apply within 3 days of picking.

- (1) Based on dilute sprays of 300 gallons per acre.
- (2) Based on dilute sprays of 200 gallons per acre.
- (3) Crop cycle is defined as pre-bloom through harvest.
- (4) Not for use in California or Arizona.

DO NOT graze or feed cover crops from treated orchards.

Strawberries

Leave 25 foot buffer between treatment area and native plant communities and water bodies.

The maximum single application rate for strawberries is 4.4 lbs product/acre. Limit to 5 applications per year areas west of the Mississippi River (maximum 22 lbs product/year/acre). Limit 5 applications per year areas east of the Mississippi River (maximum 22 lbs product).

TURF APPLICATIONS:

Thiram Granuflo® prevents infestation of common turf diseases such as Dollar Spot, Brown Patch and Fusarium Patch during the Summer growing season and Snow Mold during the cool weather seasons. When used at curative rates, Thiram Granuflo® will cure diseased turf infected with Dollar Spot and Brown Patch and can also prevent Fusarium Patch when two applications are made during the Fall through the Spring season. Apply Thiram Granuflo® with properly calibrated mechanical or motorized spray equipment such as ground boom.

SPECIFIC APPLICATIONS FOR THIRAM GRANUFLO®

TURF	DISEASES	OUNCES THIRAM GRANUFLO® per 1000 square feet	DIRECTIONS FOR USE
TURF	Dollar Spot (Sclerotinia homeocarpa) Brown Patch (Rhizoctonia Blight) (Rhizoctonia solani)	Prevent Rate: 2.5 to 3.0 oz	Apply recommended rate in 5 to 10 gallons water/1000 sq. ft. beginning in early Spring <u>before</u> Disease symptoms appear. Repeat at 7 to 10 day intervals as needed when environmental conditions favor disease development. Do not apply more than 40 oz per 1000 sq. ft. during the Summer growing season.
		Curative Rate: 4.5 to 5.0 oz	Apply recommended rate in 5 to 10 gallons water/1000 sq. ft. after disease symptoms first appear. Repeat at 7 to 10 day intervals as needed. Do not apply more than 40 oz per 1000 sq. ft. during the Summer growing season.
	Fusarium Patch (Fusarium nivale) (Pink Snow Mold and Gerlachia Patch)	Preventative Rate: 8.0 oz	Apply recommended rate in 2 to 5 gallons water/ 1000 sq.ft. in late Fall immediately before expected permanent snow cover. As a follow-up to the late Fall application, a Spring application of 3.0 oz/ 1000 sq.ft. during Spring thaw and after runoff has ended may be necessary to aid in the prevention of Spring disease.

DO NOT graze or feed treated turf.

Golf Course Tees and Greens

The maximum winter application rate for turf is a single application of 16.3 lbs ai/acre or 0.374 lbs. ai/1000 sq ft. The maximum summer application rate for turf is 3 applications of 10.2 lbs. ai/acre or 0.234 ai/1000 sq ft. The maximum annual application rate is 47 lbs ai/acre or 1.08 lbs ai/1000 sq ft.

ANIMAL REPELLANCY APPLICATIONS:

When used according to label directions, Thiram Granuflo® can protect trees, vines, nursery stock, shrubs and ornamentals from rabbit, deer and rodent depredation. One application will protect treated parts from 1 to 3 months, depending upon weather conditions. Thiram Granuflo® can also be used as a repellent in deterring deer from moving into important areas such as airport runways as a result of local feeding and browsing. It can also deter migratory birds such as geese on golf courses and other turf areas. The addition of a latex based sticker prolongs the residual effectiveness of the treatment. Repellency is the result of rendering the treated plant parts distasteful. The maximum application rate for products applied as a mammal (deer) repellent is one pound of product in 3 - 7 gallons of water applied in an area of 1000 square feet. Applications to ornamentals will be restricted to cold weather areas, climate zones 1 through 7, in the following states (MA, NH, VT, ME, RI, CT, NY, NJ, PA, MD, DE, WV, OH, KY, MI, IN, IL, WI, MN, IA, MO, ND, SD, NE, KS, MT, WY, CO, ID, UT, WA, OR, NV, and AK) during the winter season only (October through March).

Applications To Vines, Tree Trunks and Dormant Plants:

Prepare a slurry of 1.33 pounds of Thiram Granuflo® in 3 gallons of water and apply as a full coverage spray to all portions of the plant to be protected. For greater retention and residual efficacy, add 1 pint of a latex based sticker to the spray solution.

Brush On Application:

Prepare a slurry of 1.33 pounds of Thiram Granuflo® in 3 gallons of water and apply with a paint-brush to stem parts and trunk parts to be protected. For greater retention and residual efficacy, add 1 fluid ounce of a latex based sticker into each quart volume of solution prepared.

Foliar Applications:

Prepare a slurry of 1.33 pounds of Thiram Granuflo® in 6 gallons of water and apply as a full coverage spray to all portions of the plant to be protected. For greater retention and residual efficacy, add 1 pint of a latex based sticker to the spray solution. **DO NOT** use wetting agents or surfactants as foliar damage may result. For best results, spray when temperatures are greater than 40° F and relative humidity is less than 70 percent. **DO NOT USE ON FRUIT FOR HUMAN CONSUMPTION.**

SEED PROTECTANT APPLICATIONS:

For control of damping-off, seed decay, seedling blights, covered kernel smut of sorghum and loose smut and bunt of wheat, etc., apply Thiram Granuflo® at recommended dosages as a dry treatment or as a water-based slurry. Apply with other registered seed treatment insecticides and fungicides through commercial slurry or mist-type seed treatment equipment.

Treated seed must not be used for or mixed with food or animal feed, or processed for oil. Treat only those seeds needed for immediate use, minimizing the interval between treatment and planting. Do not store excess treated seeds beyond planting time. Seed treated with this product must be labeled in accord with all applicable requirements of the Federal Seed Act. An EPA approved dye must be applied to all treated seeds to impart an unnatural color to them.

Thiram Granuflo® Seed Protectant Dose Rates

TYPE OF SEED	OUNCES THIRAM GRANUFLO® per 100 lbs
Barley	2.7
Beans (dry and succulent)	1.3
Beans (Lima)	2.2
Beans (snap)	1.3
Beets (garden)	5.3
Canola	4.3
Cantaloupe, Cucumber, Pumpkin, Squash, Watermelon	3.0
Castor beans	3.0
Chicory	3.5
Conifers	21.5
Corn (field and sweet)	2.0
Cottonseed (reginned, fuzzy and acid-delinted)	3.0
Cowpeas	1.3
Eggplant	4.0
Flax	3.5
Grasses	5.3
Legumes (small-seeded)	5.3
Lentils	2.0
Millet	2.7
Oats	2.2
Okra	4.0
Onions	4.0
Peanuts (shelled and unshelled)	3.0
Peas	2.0
Rice	2.9
Rye	2.5
Safflower	2.7
Sesame	2.0
Sorghum	1.8
Soybeans	2.2
Sugar beets	5.3
Sunflowers	5.4
Triticale	2.2
Tomatoes	4.0
Wheat	2.2
Broccoli, Brussels Sprouts, Cabbage, Carrots, Cauliflower, Collards, Endive, Kale, Kohlrabi, Lettuce, Mustard, Peppers, Radish, Spinach, Swiss Chard, Turnip	5.3
Ornamental flower seeds, Ornamental foliage plants in the families Araliaceae (scheffleras), Araceae (philodendrons) and Palmaceae (palms)	5.4

Cotton Seed: The maximum application rate for cotton seed is 1.6 oz ai/cwt (1,000 ppm). Plant treated cotton seed a minimum of 1 inch deep.

Barley Seed: Plant barley seed a minimum of 1 inch deep.

Oat Seed: Plant oat seed a minimum of 1 inch deep.

Sugar Beet Seed: Plant sugar beet seed a minimum of 1 inch deep.

Wheat Seed: Plant wheat seed a minimum of 1 inch deep.

Onion Seed: When 1.5 lbs ai/cwt is used, the onion seed must undergo pelletized treatment.

Seeds that are treated with this product and are then packaged or bagged for future use must contain the following labeling on the package or bag:

“Endangered species

This bag contains seed treated with thiram. This product may have effects on federally listed threatened endangered species or their critical habitat in some countries. It is a violation of federal law to kill, harm or harass listed animal species without authorization. To limit the potential for such impacts when using this product, consult and follow the instructions provided in the EPA Endangered Species Bulletin for the County or Parish in which you are applying the seed. To determine whether your County or Parish has a Bulletin consult <http://www.epa.gov/espp> before each season's use of this product.

This bag contains seeds treated with thiram. When opening this bag or loading/pouring the treated seed, wear long-sleeved shirt, long pants, shoes, socks and chemical resistant gloves.

Treated Seeds - Do Not Use for Food, Feed, or Oil Purposes.

After the seed have been planted, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours. Exception: Once the seeds are planted in soil or other planting media, the Worker Protection Standard allows workers to enter the treated area without restriction if there will be no worker contact with the seeds.

Treated seeds are hazardous to fish, birds and mammals. Do not plant treated seeds by broadcasting to the soil surface. Ensure that all seeds are thoroughly covered with soil, especially in turn areas. If seeds are not thoroughly incorporated by the planter during planting, additional incorporation may be required to thoroughly cover exposed seeds. Do not apply directly to water, or areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate or by disposal of wastes.

Plant cotton, wheat, barley, oats and sugar beet seed a minimum of 1 inch deep.”

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment.

Pesticide Storage

Store unused product in original container only. Store in a cool, dry area preferably locked and out of the reach of children and animals. Not for the use or storage in or around the home. Protect from excess heat.

Pesticide Disposal

Pesticide wastes are toxic. Open dumping is prohibited. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Handling (44 lb. bags)

Nonrefillable 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.

Container Handling (10 lb. lined cardboard boxes)

Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then offer for recycling, if available, or dispose of liner in a sanitary landfill or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. If box is contaminated and cannot be reused, dispose of it in the manner required for its liner.

TERMS OF SALE OR USE

On purchase of this product, buyer and user agree to the following conditions:

Warranty: Taminco US Inc. makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Except as so warranted, the product is sold as is. To the extent permitted by law, buyer and user assume all risk of use and/or handling and/or storage of this material when such use and/or handling and/or storage is contrary to label instructions.

Damages: To the extent consistent with applicable law, buyer's or user's exclusive remedy for damages for breach of warranty or negligence shall be limited to direct damages not exceeding the purchase price paid and shall not include incidental or consequential damages.

Thiram Granuflo® is a Registered Trademark of Taminco BVBA, a Belgian corporation.

For Emergencies Involving a Spill, Leak, Fire, Exposure, or Accident, contact: CHEMTREC at (800) 424-9300.
For product usage information, phone Taminco US Inc., toll free at (800) 223-3258 from 9:00 AM to 5:00 PM Eastern time.



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