

# ST-METHYL 540 FS

## Seed Treatment Fungicide

### ACTIVE INGREDIENT:

Thiophanate-methyl (Dimethyl [(1,2-phenylene)  
bis-(iminocarbonothioyl)]bis[Carbamate])\* ..... 46.2%

**OTHER INGREDIENTS:** ..... 53.8%

**TOTAL:** ..... 100.0%

\*Also known as Dimethyl 4,4'-o-phenylenebis[3-thioallophanate]

Contains 4.5 pounds thiophanate-methyl per gallon.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION / PRECAUCION**

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300

For Medical Emergencies Only, Call (877) 325-1840

EPA REG. NO. 55146-127

Manufactured for  
Nufarm Americas Inc.  
AGT Division  
11901 S. Austin Avenue  
Alsip, IL 60803



Grow a better tomorrow.



1 91662 01303 0

Net Contents

**1 Gal.**

**(3.79 L)**

**Nonrefillable Container**

1 4526000

## FIRST AID

<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>

## HOT LINE 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 1-877-325-1840 for emergency medical treatment information.

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION / PRECAUCION

Causes moderate eye irritation. Harmful if swallowed or inhaled. Harmful if absorbed through skin. Avoid breathing spray mist. Avoid contact with eyes, skin, or clothing. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, polyvinyl chloride (PVC)  $\geq$  14 mils, and viton  $\geq$  14 mils.

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Chemical-resistant gloves for all mixers and loaders and for applicators using hand held equipment, and
- Chemical-resistant apron for mixers, loaders and other handlers exposed to the 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.

## USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining 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:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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.

## ENVIRONMENTAL HAZARDS

**DO NOT** apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. **DO NOT** contaminate water by disposing of equipment washwater or rinsate.

## PHYSICAL AND CHEMICAL HAZARDS

**DO NOT** use or store near oxidizing agents.

## 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.

For use by commercial seed treaters only in liquid or slurry treaters. Not for use on agricultural establishments in hopper-box, planter-box, slurry-box or other seed treatment applications at or immediately before planting.

Mix thoroughly before use or use entire container at one time.

**TANK MIXTURES:** Pre-Test all tank mixes prior to use to determine physical compatibility between formulations. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

**NOTE:** The purchaser of this product is responsible for ensuring that all seed treated with this product is adequately dyed with a suitable colorant to prevent its accidental use as food for man or feed for animals. Refer to 21 CFR, Part 2.25. Any dye or colorant added to treated seed must be cleared for use under 40 CFR, Part 180.900. Federal regulations have established official tolerances for certain pesticide residues. In order that residues on food and forage crops will not exceed established tolerances, use only at specified rates.

Treated seed must not be used for or mixed with food or animal feed or processed for oil. Seed commercially treated with this product must be labeled in accordance with all applicable requirements of the Federal Seed Act.

## SEED LABELING

THE FEDERAL SEED ACT REQUIRES THAT BAGS CONTAINING TREATED SEED BE LABELED WITH THE FOLLOWING INFORMATION:

*"This seed has been treated with ST-METHYL 540 FS (thiophanate-methyl) seed treatment. **DO NOT** use for food, feed, or oil processing. Store away from feeds and other foodstuffs."*

LABELS FOR COMMERCIALY TREATED SEED MUST INCLUDE THE FOLLOWING ADDITION TO THE ENVIRONMENTAL HAZARDS STATEMENTS:

*"Exposed treated seed may be hazardous to birds and wildlife. Dispose of all excess treated seed and seed packaging or containers by burial away from bodies of water in accordance with any local requirements. Cover, incorporate, or collect treated seeds spilled during loading and planting. **DO NOT** contaminate bodies of water when disposing of planting equipment wash water."*

THE U.S. ENVIRONMENTAL PROTECTION AGENCY REQUIRES THE FOLLOWING STATEMENTS ON CONTAINERS CONTAINING TREATED SEED:

*"**DO NOT** allow children, pets or livestock to have access to treated seeds."*

*"**DO NOT** graze or feed livestock on treated areas for 45 days after planting."*

*"Wear long pants, long-sleeved shirt, shoes, socks, and chemical-resistant gloves when opening this bag or loading/pouring the treated seed."*

*"After the seeds have been planted, do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI) of 12 hours**. Exception: If the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. 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, including plants, soil or water is: coveralls, chemical-resistant gloves made of any waterproof material, and chemical-resistant footwear."*

## PRODUCT INFORMATION

Apply as a seed treatment using standard slurry or mist-type seed treatment equipment. Uniform application to seed is necessary to ensure seed safety and best disease protection. Seed must be sound and well cured prior to treatment. Product must be diluted with sufficient water to ensure complete seed coverage. Consult a seed treatment specialist regarding slurry rates for the crop to be treated with this product.

When used in combination with other fungicides having a similar biological spectrum, this product will add to the systemic protection of the seed and seedling and improve control under high disease pressure.

PEANUTS	
DISEASE	RATE (Fl. Oz. / 100 lbs. of Seed)
Seed Decay (for example <i>Aspergillus</i> spp.) Seedling Blight (suppression of <i>Fusarium</i> spp. and <i>Rhizoctonia</i> spp.)	0.14 to 0.28 (0.005 - 0.01 lbs AI)
Seed borne <i>Sclerotinia</i> spp.	0.94 to 1.12 (0.033 - 0.04 lbs AI)

SOYBEANS				
DISEASE	RATE			MG AI / SEED
	Fl. Oz. OF PRODUCT /			
Seed Decay (including <i>Phomopsis</i> spp., <i>Fusarium</i> spp.) Seedling Blight (soilborne <i>Fusarium</i> spp. and <i>Rhizoctonia</i> spp.)	100 lb seed*	1000 seeds	140,000 seeds	0.008 to 0.015
	0.14 to 0.28	0.0005 to 0.0010	0.065 to 0.130	
This product contains 15,970 mg ai / fluid ounce.				
* Based on a standard number of 3000 seeds / lb (150,000 seeds / 50 lb bu)				
<b>NOTE:</b> To maintain mg ai / seed, adjust fluid ounces / 100 lb in proportion to the actual seeds / lb compared to the standard number of seeds / lb for that crop; fluid ounces per number of seeds (i.e., 1000, 140,000) does not need to be adjusted. For example if there are 2800 soybean seeds / lb and the targeted rate is 0.0075 mg ai / seed at a non adjusted rate of 0.14 fl. oz / 100 lb. of seed, use: $(2800 \div 3000) \times 0.14 = 0.13$ fl. oz / 100 lb of seed.				

<b>CROP GROUP 6 (Beans, Dry and Succulent):</b> <i>Cicer arietinum</i> (chickpea, garbanzo bean); <i>Lupinus</i> spp. (including sweet lupine, white sweet lupine, white lupine, and grain lupine); <i>Phaseolus</i> spp. (including kidney bean, lima bean, mung bean, navy bean, pinto bean, snap bean, and waxbean); <i>Vicia faba</i> (including broad bean, fava bean); <i>Vigna</i> spp. (including asparagus bean, blackeyed pea and cowpea).	
DISEASE	RATE (Fl. Oz. / 100 lbs. of Seed)
Seed Decay (including <i>Phomopsis</i> spp., <i>Fusarium</i> spp.) Seedling Blight (soilborne <i>Fusarium</i> spp. and <i>Rhizoctonia</i> spp.)	0.14 to 0.28 (0.005 - 0.01 lbs AI)

WHEAT	
DISEASE	RATE (Fl. Oz. / 100 lbs. of Seed)
Seed Decay (for example <i>Fusarium</i> spp.) Seedling Blight (soilborne <i>Fusarium</i> spp. and <i>Rhizoctonia</i> spp.)	0.14 to 0.28 (0.005 - 0.01 lbs AI)

## POTATO SEED-PIECE TREATMENT

Use ST-METHYL 540 FS to suppress potato seed-piece diseases cause by Fusarium (dry rot), Rhizoctonia (black scurf and stem canker), and Helminthosporium solani (silver scurf). ST-Methyl 540 FS is not effective against systemic seed-piece infections or airborne (secondary) inoculum. Ensure that cut seed-pieces are thoroughly coated with ST-Methyl 540 FS at the rate specified below. Thoroughly clean and sanitize cutting machines, knives, trays, tables, barrels, equipment, trucks and planters before cutting and planting seed-pieces. Consult your local extension specialist for detailed information about Silver Scurf treatments in your area.

POTATOES	
DISEASE	RATE (Fl. Oz./100 lbs. of Seed-Pieces)
Dry Rot (Fusarium spp.) Black Scurf and Stem Canker (Rhizoctonia solani) Silver Scurf (Helminthosporium solani)	0.5 to 0.7 (0.018 – 0.025 lbs AI)
	0.35* (0.012 lbs AI)
	tank mix rate
* Use ST-METHYL 540 FS at the tank mix rate when potato seed pieces are treated with additional fungicide(s) products labeled for seed piece treatment to control the above diseases.	
<b>NOTE:</b> For improved protection against the listed diseases that originate from surface infestations of potato seed-pieces apply this product in combination with a product that is active on the targeted disease(s) and use a treatment following application to absorb liquid from the seed-piece. This product will not provide consistent control when used alone and is not active on existing systemic infections.	

# STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

**PESTICIDE STORAGE:** Store in original container in a dry, temperature controlled, secure place.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be used 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:**

**NOTE:** This product is available in multiple containers. Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable" or "Refillable" designation. Follow the container handling instructions below that apply to your container type / size.

### **Nonrefillable Containers 5 Gallons or Less**

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a 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 or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

### **Nonrefillable containers larger than 5 gallons**

Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure-rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

### **Refillable containers**

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. 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. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Return to point of sale for reconditioning, recycling, or disposal.

## WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

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