



264-929

05-28-2009

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 <p align="center"><b>U.S. ENVIRONMENTAL PROTECTION AGENCY</b> Office of Pesticide Programs Registration Division (7505P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460</p> <p>NOTICE OF PESTICIDE: <input type="checkbox"/> Registration <input checked="" type="checkbox"/> Reregistration (under FIFRA, as amended)</p>	EPA Reg. Number: 264-929	Date of Issuance: <b>MAY 28 2009</b>
	Terms of Issuance: Conditional	
	Name of Pesticide Product: 42-S Thiram Fungicide	
Name and Address of Registrant (include ZIP Code): Bayer CropScience LP P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709		
<b>Note:</b> Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.		
On the basis of information furnished by the registrant, the above named pesticide is hereby reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.		
Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.		
Based on your response to the Reregistration Eligibility Document(s), EPA has reregistered the product listed above. Enclosed is a copy of your label stamped "Accepted with comments." This action is taken under the authority of section 4(g)(2)(c) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. Reregistration under this section does not eliminate the need for continual reassessment of pesticides. EPA may require submission of data at any time to maintain the registration of your product.		
Signature of Approving Official:  Shaja Joyner, Product Manager Team 20 Fungicide Branch Registration Division (7505P)	Date:  <b>MAY 28 2009</b>	

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Submit one copy of your final printed labels, with the changes herein, before you Release the product for shipment.

1. Under PPE chemical resistance gloves, delete "except for sewing bags of treated seed."
2. On page 4, you must delete bullet 2 under the Treated Seed section; it is previously stated on page 3, bullet number 2.
3. On page 5, revise the table for cotton as 4.5 ounces of product per 100 pounds of cotton seed exceeds the allowable rate of 1.6 oz ai/cwt.

The following SLN's associated with this product are found to be acceptable:

- CA970027 (for use on celery seeds for export only)
- WA060022 (for use on coriander seed for export to Mexico only)
- WA060023 (for use on parsley seed for export to Mexico only)

Please forward a copy of the SLN labeling to the appropriate State official(s) for their comment/approval. Any additional State-stipulated wording or limitations, including reference to applicable State Rules or Regulations or updates to them, must appear on the labeling. Please notify the Agency by e-mail to [kearns.rosemary@epa.gov](mailto:kearns.rosemary@epa.gov) when you actually do forward the SLN label(s) to the State(s). When submitting each label to the State, please request the State to forward a copy of the SLN label (including their additions, if any) to the Agency for official confirmation of their receipt and approval, since Agency approval of the State's notification is required to finalize the action.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec.6(E). Your release for shipment of the product constitutes acceptance of these conditions.

Enclosure: Product Label Review (dated February 17, 2009)  
Product Chemistry Review (dated March 9, 2009)  
Acute Tox Review (dated May 9, 2008)

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ACCEPTED  
with COMMENTS  
In EPA Letter Dated

MAY 28 2009  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

264-929

# 42-S Thiram Fungicide

Intended for use by professional applicators only.

Contains 4 lbs. thiram per gallon.

**ACTIVE INGREDIENT:**

Thiram (Tetramethylthiuram disulfide) ..... 42%

**INERT INGREDIENTS:** ..... 58%

**TOTAL** 100.00%

EPA Reg. No. 264-929

EPA Est.

## KEEP OUT OF REACH OF CHILDREN CAUTION

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577  
For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

### FIRST AID

<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 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>
<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 mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<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>
<p>In case of emergency call toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577. Have a product container or label with you when calling a poison control center or doctor, or going for treatment.</p>	

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Harmful if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Avoid contact with eyes, skin, or clothing. Avoid breathing spray mist or vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are made of any waterproof material. If you want more options, follow the instructions for category A on an EPA chemical resistance category selection chart.

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

- long-sleeved shirt and long pants,
- shoes plus socks,
- chemical resistant gloves, except for sewing bags of treated seed.
- chemical resistant apron when mixing, loading, participating in dip treatments, cleaning up spills, cleaning equipment, or otherwise exposed to the concentrate.

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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 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.

### **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 counties. 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.

### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish, aquatic invertebrates, oysters, and shrimp. Do not apply directly to water, or to 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 disposing of equipment washwater or rinsate or by disposal of wastes.

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

### **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. 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.

### STORAGE AND DISPOSAL

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

#### PESTICIDE STORAGE

Store in a cool place. Keep container tightly closed to prevent evaporation. Stir before using. DO NOT SUBJECT TO TEMPERATURES BELOW 32°F.

#### 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 disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or Hazardous Waste representative at the nearest EPA Regional Office for guidance

#### CONTAINER DISPOSAL

Rigid, Non-refillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons).

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. 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 incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Rigid Non-refillable containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs).

50 gal and 200 gal

Non-refillable container. Do not reuse or refill this container. After emptying product from container, contact Bayer CropScience Customer Service Center (1-800-527-4781) with return authorization for container return instructions.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Offer for recycling, if available.

Dispose of rinsed empty container in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned stay out of smoke.

### 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 the restricted entry interval (REI) of 24 hours.

Exception: Once treated seeds or bulbs 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 or bulbs. PPE required for early reentry 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 any waterproof material, and protective eyewear.

### TREATED SEED

Seeds or Bulbs that are treated with this product and are then packaged or bagged for future use by growers or researchers must contain the following labeling on the outside of the seed or bulb package or bag:

- This bag contains seeds or bulbs treated with thiram fungicide (42-S Thiram). When opening this bag or loading/pouring the treated seeds or bulbs wear long-sleeved shirt, long pants, shoes, socks and chemical resistant gloves.
- Treated seeds or bulbs. Do Not Use for Food, Feed or Oil Purposes.
- Store treated seed away from food and feedstuffs.
- Do not allow children, pets or livestock to have access to treated seeds.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading and planting.
- Dispose of all excess treated seed by burying seed away from bodies of water.
- Dispose of seed packaging or containers in accordance with local requirements.
- Endangered Species" section of this label must be included on the seed tag.
- After the seeds or bulbs 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 or bulbs are planted in soil or other planting media, the Worker Protection Standard allows workers to enter the treated area with out restriction if there will be no worker contact with the seeds or bulbs.
- Treated seeds or bulbs are hazardous to fish, birds and mammals. Do not plant treated seeds or bulbs by broadcasting to the soil surface. Ensure that all seeds or bulbs are thoroughly covered with soil, especially in turn areas. If seeds or bulbs are not thoroughly incorporated by the planter during planting, additional incorporation may be required to thoroughly cover exposed seeds

or bulbs. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of planting equipment washwater or rinsate or by disposal of wastes.

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

Seeds or Bulbs that are treated with this product and are then packaged or bagged for future use by homeowners or other residential users must contain the following labeling on the outside of the seed or bulb package or bag:

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

### USE PRECAUTIONS AND RESTRICTIONS

When using formulations that do not contain dye, to comply with 40 CFR 153.155, all seed treated with an economic poison must be colored to distinguish and prevent subsequent inadvertent use as a food for man or feed for animals.

#### For Treatment of Coniferous Seed

**Damping-off protection:** Use 2 quarts of 42-S Thiram per 100 pounds of seed. Slowly add to the seed while turning in a tumbler such as a concrete mixer. Tumble seed for approximately 2 minutes and then spread coated seed on a screen to dry.

#### For the Treatment of Ornamental Bulbs, Corms and Tubers:

Treat any time after drying. Dip in a suspension made by mixing 1-1/2 pints of 42-S Thiram in 8 gallons of water. Agitate the suspension. If bulbs are to be stored, spread out to dry. Bulbs or tubers that are treated with this product must bear distinct labeling that instructs:

**CAUTION:** Treated with thiram. Wear rubber gloves and protective clothing when handling products treated with thiram. Direct exposure to skin may result in severe dermatitis.

**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.

### RECOMMENDATIONS FOR USE AS A COMMERCIAL SEED TREATMENT

42-S Thiram Fungicide is a liquid fungicide recommended for the treatment of seeds listed in the following table. Used according to directions, 42-S Thiram will usually increase stands and yields by reducing losses from seed decay, damping-off and seedling blights caused by many seedborne and soilborne organisms. 42-S Thiram will usually control covered smuts or bunt of wheat, barley and rye and covered kernel smut of sorghum and will usually prevent basal rot and decay of ornamental bulbs and tubers. 42-S Thiram aids in the control of *Alternaria* and *Phoma* on canola. 42-S Thiram aids in the control of seedborne conidia produced from the honeydew inoculum from field infection of *Claviceps africana* (ergot) on sorghum seed.

**For Slurry-Type Treater:** 42-S Thiram should be applied with water as a suspension in the slurry-type treater specifically designed and approved for this purpose.

**For Film-Coating Operations:** 42-S Thiram has demonstrated good to excellent compatibility with most commercial film-coating products. Coating procedures identified by polymer/coating companies and film-coating equipment manufacturers should be followed when preparing coating preparations containing 42-S Thiram. If it is desirable to prepare slurries in large containers for addition to the slurry tank, entire contents should be thoroughly agitated before withdrawing any of the slurry.

SEEDS	42-S Thiram Treating Rate Fluid Ounces Per Bushel Or 100 pound Weight
Barley, Millet, Oats**, Rye, Sorghum, Triticale**, Wheat	2/Bu.
Beans (Lima) and Peas	3/100 lbs
Beans (Snap & Dry, Soybeans, Cowpeas)	2/100 lbs.
Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Collards, Kale, Kohlrabi, Mustard, Turnip	8/100 lbs.
Beet (Garden), Swiss Chard	8/100 lbs.
Canola**	6.4/100 lbs.
Cantaloupe, Cucumber, Pumpkin, Squash, Watermelon	4.5/100 lbs.
Carrot, Endive, Lettuce, Pepper, Radish, Spinach	8/100 lbs.
Castor beans**	4.5/100 lbs.
Chicory**	5.2/100 lbs.
Corn (Field)	1.5/Bu
Corn (Sweet)	5/100 lbs.
Cotton – acid – delinted	4.5/100 lbs.
Cotton – reginned and fuzzy	4.5/100 lbs.
Eggplant	6.5/100 lbs.
Flax	3/Bu.
Grasses	8/100 lbs.
Okra	6/100 lbs.
Onion	6/100 lbs.
Ornamental flower seed	8/100 lbs.
Peanuts*	3/100 lbs.
Rice (see For the Treatment of Rice Seed in CA specific directions)	1.5/Bu.
Safflower, Sunflower	2/Bu.
Sesame	3/100 lbs.
Small seed legumes	8/100 lbs.
Sugar beets	8/100 lbs.
Tomato	6/100 lbs.

\*Note: In the treatment of peanuts, do not dilute with water

\*\*Not registered for use in California

**For the Treatment of Rice Seed in California**

42-S Thiram Fungicide is a liquid fungicide recommended for the treatment of rice seed in California. Used according to directions, 42-S Thiram will usually increase stands and yields by reducing losses from seed decay, damping-off and seedling blights caused by Seedborne and soilborne organisms.

42-S Thiram is recommended for use on well cured rice seed in California prior to pre-plant soaking. 42-S Thiram should be used with water as a suspension in treaters suitable for adequate mixing and accurate application to the seed. If it is desirable to prepare slurries in large containers for addition to treater tanks, entire contents should be thoroughly agitated before withdrawing any of the slurry for seed treatment.

**How to Use:** Rice seed treatment in California

**SLURRY TREATERS:**

**Treater Tank Concentration**

Mix 1 gallon of 42-S with 1 gallon of water

**Application Rate**

4 fluid ounces per 100 pounds seed

**MIST-O-MATIC TREATER:**

**Treater Tank Concentration**

Mix 1 gallon of 42-S with 1 gallon of water.

**Application Rate**

4 fluid ounces per 100 pounds seed

Note: To prevent water contamination in irrigation or drainage canals soak water should be retained in settling basins.

**IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, disclaimer of Warranties and Limitations of Liability.

Treatment of highly mechanically damaged seed, or seed of known low vigor and poor quality, may result in reduced germination and/or reduction of seed and seedling vigor. Treat and conduct germination tests on a small portion of seed before committing the total seed lot to a selected chemical treatment. Due to seed quality conditions beyond the control of Bayer CropScience, no claims are made to guarantee germination of carry-over seed.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

**LIMITATIONS OF LIABILITY:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

**NOTICE TO BUYER**

Purchase of this material does not confer any rights under patents governing this product or the use thereof in countries outside of the United States.

**NET CONTENTS:**

Produced for



**Bayer CropScience**

**Bayer CropScience LP  
P.O. Box 12014, 2 T.W. Alexander Drive  
Research Triangle Park, North Carolina 27709  
1-866-99BAYER (1-866-992-2937)**

42-S Thiram Fungicide (PENDING) 01/31/08, resubmitted 05/04/09