

PM 21 7501-42 1045



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (H7505C)  
401 "M" St., S.W.  
Washington, D.C. 20460

EPA Reg. Number:  7501-42	Date of Issuance:  
Term of Issuance: Unconditional	
Name of Pesticide Product: Apron-FL Seed Treatment Fungicide	

NOTICE OF PESTICIDE:  
\_\_\_\_ Registration  
X Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):  
Dennis L. McFadden, Manager  
Toxicology & Regulatory Affairs  
GUSTAFSON, INC.  
P. O. Box 660065  
Dallas, TX 75266-0065

Note: 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 registered/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, EPA has reregistratered the product listed above with the following provisions:

1. Signal word: "WARNING".
2. Change "Precautionary Statements" to the following:  
  
"Causes skin irritation. Harmful if swallow or absorbed through skin. Causes moderate eye irritation. Do not get on skin or on clothing. Avoid contact with eyes. Wear coveralls over short-sleeved shirt and short pants, socks and chemical resistant footwear and chemical resistant gloves. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse."

3. Under the "Environmental Hazards statement" section make a separate heading as follows:

Groundwater Advisory: "This chemical is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination."

Signature of Approving Official: Connie B. Welch, PM-21 Fungicide, Herbicide Branch Registration Division (7505C)	Date: 4/1/97
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4. The "Statement of Practical Treatment" should be revised as follows:

IF SWALLOWED: Call a physician or Poison Control Center. Do not induce vomiting. Drink promptly a large quantity of milk, egg whites, gelation solution, or if these are not available, drink large quantities of water. Avoid alcohol.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

5. Submit two copies of the revised final printed label for the record.

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 registration of your product.

Enclosure

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ACCEPTED  
with COMMENTS  
In EPA Letter Dated  
APR 1 1997

# Gustafson APRON® -FL

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
7501-42

## Seed Treatment Fungicide

A SEED TREATMENT CHEMICAL FOR CONTROL OF SEED  
ROT AND DAMPING OFF DISEASES OF CERTAIN CROPS

### ACTIVE INGREDIENT:

Metalaxyl: N-(2,6-dimethylphenyl)- N-(methoxyacetyl)alanine methyl ester .....	28.35%
INERT INGREDIENTS: .....	71.65%
TOTAL .....	100.0%

Contains 2.65 pounds Metalaxyl per gallon.

### KEEP OUT OF REACH OF CHILDREN CAUTION

See Additional Precautionary Statements.

EPA Reg. No. 7501-42

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

Harmful if absorbed through the skin. May cause eye irritation. Do not get in eyes or on clothing. Avoid contact with skin. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category E on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear long-sleeved shirt and long pants, chemical-resistant gloves, such as barrier laminate or nitrile rubber or neoprene rubber or Viton, and shoes plus socks. Follow manufacturer's instructions for cleaning / maintaining PPE. If no such instructions for washables, 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 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 clothing.

### STATEMENT OF PRACTICAL TREATMENT

If in **eyes**: Flush with plenty of water. Get medical attention if irritation persists.

If **swallowed**: Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol.

If on **skin**: Wash affected area with soap and warm water.

### ENVIRONMENTAL HAZARDS

For terrestrial uses, 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 apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

This chemical is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

### STORAGE AND DISPOSAL

**PROHIBITIONS**—Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Open dumping is prohibited. Do not reuse empty containers.

**STORAGE**—Store in a cool dry location. Do not store in direct hot sunlight. Do not store above 90°F for prolonged periods of time. After prolonged storage in intense cold, allow product to return to approximately 75°F before using.

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

**CONTAINER DISPOSAL**—Triple rinse (or equivalent). 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.

### DIRECTIONS FOR USE

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

# Gustafson



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.

**IMPORTANT:** Read the entire Directions for Use and the Limited Warranty Statement before using this product.

#### 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: If the seed is treated with the product and 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, such as plants, soil, or water, is: coveralls, chemical resistant gloves, such as barrier laminate or nitrile rubber or neoprene rubber or Viton and protective eyewear.

**NOTE:** Federal law requires that bags containing treated seeds shall be labeled with the following information. "This seed has been treated with Gustafson APRON-FL fungicide. Do not use for feed, food or oil purposes. Store away from feeds and foodstuffs." Use with an EPA approved dye that imparts an unnatural color to the seed. **NOTE:** Containers or bags containing APRON treated spinach seed must be labeled with the restriction "Do not use seed for spinach destined to be grown in the greenhouse." **NOTE:** If using APRON treated rice seed, do not use Ridomil for control of *Pythium* in water-seeded rice. Gustafson APRON-FL is a systemic fungicide seed dressing specifically for control of systemic downy mildews, *Pythium* and *Phytophthora* spp. For control of other soilborne diseases, combination of Gustafson Captan and VITAVAX® registered formulations are compatible. Do not use with other seed treatment products unless previous experience assures compatibility. Gustafson APRON-FL may be applied as a water-based slurry with other registered seed treatment insecticides and fungicides through standard slurry or mist-type seed treatment equipment.

**Note:** Gustafson APRON-FL is a systemic fungicide having a specific mode of action. Gustafson APRON-FL could be subject to development of resistant strains of fungi. Development of resistance cannot be predicted. Therefore, Gustafson, Inc. cannot assume liability for crop damage resulting from resistant strains of fungi. Consult your State Agricultural Experiment Station or Extension Service Specialist for guidance and ways to control any possible Gustafson APRON-FL resistant strains of fungi which may occur.

#### FAILURE TO FOLLOW DIRECTIONS ON THIS LABEL MAY RESULT IN CROP INJURY OR POOR DISEASE CONTROL

Carrots	For <i>Pythium</i> damping-off control: Apply Gustafson APRON-FL as a seed treatment at 0.75-1.5 fl. oz. per 100 lbs. of seed.
Cotton	For <i>Pythium</i> seed rot and damping-off: Apply Gustafson APRON-FL as a seed treatment at the rate of 0.75-1.50 fluid ounces per 100 lbs. of seed.
Soybeans	For <i>Pythium</i> damping-off and early season <i>Phytophthora</i> control: Apply Gustafson APRON-FL as a seed treatment at the rate of 0.75-1.50 fluid ounces per 100 lbs. of seed.
Spinach	For <i>Pythium</i> damping-off control: Apply Gustafson APRON-FL as a seed treatment at 0.75-1.5 fl. oz. per 100 lbs. of seed. Do not apply APRON-FL to spinach which is destined to be grown in the greenhouse. Containers or bags containing Apron-treated spinach seed must be labeled with this restriction.
Peanuts	For <i>Pythium</i> seed rot and damping-off control: Apply Gustafson APRON-FL as a seed treatment at 1.5 fl. oz. per 100 lbs. of seed.
Sorghum	For control of <i>Pythium</i> damping-off apply 0.75-1.5 fluid ounces of Gustafson APRON-FL per 100 lbs. of seed applied as a seed treatment. For control of systemic downy mildew, apply 1.5 fluid ounces Gustafson APRON-FL per 100 lbs. of seed on cultivars which possess sorghum downy mildew resistance. To those cultivars which do not possess resistance to a particular race of sorghum downy mildew in heavily infected areas with recent severe history, apply 3.0 fluid ounces of Gustafson APRON-FL per 100 lbs. of seed as a seed treatment. Seed treated with the 3.0 fluid ounce rate should be planted and not carried over to the following year. Only high quality sorghum seed (90% germination and above) should be treated with Gustafson APRON-FL.
Sunflowers	For control of systemic downy mildew: Apply Gustafson APRON-FL as a seed treatment at the rate of 3.0 fluid ounces per 100 lbs. of seed.
Beets, Garden Sugar Beets	For control of <i>Pythium</i> damping-off: Apply Gustafson APRON-FL as a seed treatment at the rate of 1.50 fluid ounces per 100 lbs. of seed.
Forage Legumes	Alfalfa, clover, lespedeza beans (for forage), soybeans (for forage), soybean hay, peanuts (for forage), peanut hay, peas (for forage), pea vine hay, cowpeas (for forage), cowpea hay, trefoil, vetch and velvet beans (for forage). For <i>Pythium</i> damping-off and early season <i>Phytophthora</i> control: Apply Gustafson APRON-FL as a seed treatment at the rate of 1.50 fluid ounces per 100 lbs. of seed.
Grain Crops	Wheat, barley, rye, oats, millet, milo, rice, corn (field corn, sweet corn and popcorn), buckwheat and triticale. For <i>Pythium</i> damping-off control: Apply Gustafson APRON-FL as a seed treatment at the rate of 0.75-1.50 fluid ounces per 100 lbs. of seed.  For systemic downy mildew control of sweet corn: Apply Gustafson APRON-FL as a seed treatment at the rate of 3.0 fl. oz. per 100 lbs. of seed.  If using APRON-FL treated rice do not use Ridomil for control of <i>Pythium</i> in water seeded rice.
Seed and Pod Vegetables	Black-eyed peas, chickpeas (Garbanzos), cowpeas, dill, edible soybeans, field beans, field peas, garden peas, green beans, kidney beans, lima beans, lupines, navy beans, okra, peas, pole beans, snap beans, string beans, wax beans, and lentils. For <i>Pythium</i> damping-off control: Apply Gustafson APRON-FL as a seed treatment at the rate of 0.75-1.50 fl. oz. per 100 lbs. of

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	seed. For early season <i>Phytophthora</i> control: Apply Gustafson APRON-FL as a seed treatment at 1.50 fl. oz. per 100 lbs. of seed. For control of <i>Pythium</i> damping-off and systemic downy mildew of peas: Apply Gustafson APRON-FL as a seed treatment at the rate of 3.4 fluid ounces per 100 lbs. of seed.
Turf Grasses	For <i>Pythium</i> damping-off control on golf courses home lawns, reclamation and erosion control projects: Apply Gustafson APRON-FL as a seed treatment at the rate of 1.50 fluid ounces per 100 lbs. of seed.
Forage Grasses	Grasses grown for hay grazing or silage, corn (fodder or silage), sorghum (hay or silage), and small grain grown for hay grazing or silage. For <i>Pythium</i> damping-off control: Apply Gustafson APRON-FL as a seed treatment at the rate of 0.75-1.50 fluid ounces per 100 lbs. of seed.

**Seed Treatment-Export Use:**

For treatment of the following seed for export only to countries requiring treatment with metalaxyl before importation.

Brassica (Cole) Leafy Vegetables	For <i>Pythium</i> damping-off control: Apply Gustafson APRON-FL as a seed treatment at the rate of 0.75-1.50 fl. oz. per 100 lbs. of seed.
Corn	For <i>Pythium</i> damping-off control: Apply Gustafson APRON-FL as a seed treatment at 0.75-1.50 fl. oz. per 100 lbs. of seed. For systemic downy mildew control: Apply Gustafson APRON-FL as a seed treatment at 5.25 fl. oz. per 100 lbs. of seed.
Cucurbit Vegetables	For <i>Pythium</i> damping-off control: Apply Gustafson APRON-FL as a seed treatment at 0.75-1.50 fl. oz. per 100 lbs. of seed.
Fruiting Vegetables	For <i>Pythium</i> damping-off control: Apply Gustafson APRON-FL as a seed treatment at 0.75-1.50 fl. oz. per 100 lbs. of seed.
Leafy Vegetables	For <i>Pythium</i> damping-off control: Apply Gustafson APRON-FL as a seed treatment at 0.75-1.5 fl. oz. per 100 lbs. of seed. Note: Do not apply to spinach which is destined to be grown in the greenhouse.
Onions	For <i>Pythium</i> damping-off control: Apply APRON-FL as a seed treatment at 0.75-1.50 fl. oz. per 100 lbs. of seed.
Millet	For <i>Pythium</i> damping-off control: Apply Gustafson APRON-FL as a seed treatment at 0.75-1.50 fl. oz. per 100 lbs. of seed. For systemic downy mildew control: Apply Gustafson APRON-FL as a seed treatment at 6.65 fl. oz. per 100 lbs. of seed.
Peas	For <i>Pythium</i> damping-off and early season <i>Phytophthora</i> control: Apply Gustafson APRON-FL as a seed treatment at 3.5 fl. oz. per 100 lbs. of seed.
Root and Tuber Vegetables	For <i>Pythium</i> damping-off control: Apply APRON-FL as a seed treatment at 0.75-1.50 fl. oz. per 100 lbs. of seed. Do not apply APRON-FL to potatoes.
Sorghum	For <i>Pythium</i> damping-off control: Apply Gustafson APRON-FL as a seed treatment at 0.75-1.50 fl. oz. per 100 lbs. of seed. For systemic downy mildew control: Apply Gustafson APRON-FL as a seed treatment at 5.25 fl. oz. per 100 lbs. of seed.
Sunflower	For systemic downy mildew control: Apply APRON-FL as a seed treatment at 8.65-10.35 fl. oz. per 100 lbs. of seed.

Seed treated in accordance with the export use pattern must be labeled as follows:

**FOR EXPORT ONLY-  
NOT FOR DOMESTIC SALES OR USE.**

**DIRECTIONS FOR USE AT REDUCED RATES IN  
COMBINATION WITH OTHER FUNGICIDES**

Gustafson APRON-FL is a systemic fungicide seed dressing which may be applied in combination with other EPA-registered fungicides to aid in control of *Pythium*. Gustafson APRON-FL may be applied as a water-based slurry through standard slurry or mist-type commercial seed treatment equipment.

Corn, Field Sorghum, Grain Wheat, Oats Barley, Rye	To aid in control of seed decay and damping-off caused by <i>Pythium</i> : Apply Gustafson APRON-FL as a commercial seed treatment at the rate 0.10-0.375 fluid ounces per 100 lbs. of seed. Apply only in combination with EPA registered rates of broad spectrum seed treatment fungicides.
Soybeans, Field beans, Kidney beans, Navy beans, Pinto beans, Lentils	To aid in control of seed decay and damping-off caused by <i>Pythium</i> : Apply Gustafson APRON-FL as a commercial seed treatment at the rate 0.10-0.375 fl. oz. per 100 lbs. of seed. Apply in combination with EPA registered rates of broad spectrum seed treatment fungicides.
Rice	To aid in control of seed decay and damping-off caused by <i>Pythium</i> : Apply APRON-FL as commercial seed treatment at the rate of 0.10 to 0.15 fluid ounces per 100 lbs. of seed. Apply only in combination with EPA registered rates of VITAVAX-200 Flowable or Gustafson 42-S Thiram or RTU-VITAVAX-Thiram Fungicides. Recommended use rates in combination with Gustafson APRON-FL are: VITAVAX-200 FF: 3.0 to 4.0 fluid ounces per 100 lbs. of seed. Gustafson 42-S Thiram: 2.0 to 3.3 fluid ounces per 100 lbs. of seed. RTU-VITAVAX-Thiram: 5.0 to 6.8 fluid ounces per 100 lbs. of seed.

**NOTICE - READ CAREFULLY**

**CONDITIONS OF SALE AND LIMITED WARRANTY STATEMENT**

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 Gustafson, Inc., no claims are made to guarantee germination of carry-over seed.

As its sole express warranty, Gustafson, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for purposes stated on the label only when used in accordance with directions and instructions specified on the label, subject to the inherent risks set forth above. ONLY AS PERMITTED BY APPLICABLE LAW, IN THE EVENT OF A BREACH OF THIS LIMITED WARRANTY, GUSTAFSON, INC. SHALL NOT BE LIABLE FOR CONSEQUENTIAL DAMAGES. SUBJECT TO APPLICABLE LAW, GUSTAFSON, INC. NEITHER MAKES NOR AUTHORIZES ANY OF ITS AGENTS OR REPRESENTATIVES TO MAKE ANY WARRANTY OF FITNESS OR MERCHANTABILITY, GUARANTY OR REPRESENTATION, EXPRESS OR IMPLIED, CONCERNING THIS MATERIAL. Buyer assumes the responsibility to handle, use and store this product in accordance with the safety instructions and use directions contained on the label. Buyer/User purchases this product subject to the foregoing Conditions of Sale and Limited Warranty, which, subject to applicable law, may be varied only by a written agreement signed by a duly authorized representative of Gustafson, Inc. If these terms are not acceptable, return all products to the place of purchase, unopened for a full refund.

A quality product manufactured by:  
**Gustafson, Inc.**

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