

PEEL HERE  
TO OPEN ►

# Vitavax®-34

*seed treatment*

Active Ingredient:	(% by weight)
carboxin (5,6-dihydro-2-methyl-N-phenyl-1,4-oxathiin-3-carboxamide) . . . . .	34%*
Other Ingredients: . . . . .	66%
Total: . . . . .	100%

\*Contains 3.34 lbs. active ingredient per gallon, or 400 grams active ingredient per liter.

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

**See inside booklet for additional First Aid, Precautionary Statements, and Directions for Use.**

**For PRODUCT USE INFORMATION: Call 1-866-761-9397**

EPA REG. NO. 400-107

Ⓢ EPA EST. NO. 070815-GA-001

Ⓢ EPA EST. NO. 089332-GA-002

The EPA Establishment Number is identified by the circled letters that match the first two letters in the batch number.

009/082511a

522815-B

Manufactured for:

MacDermid Agricultural Solutions, Inc.

245 Freight Street

Waterbury, CT 06702

**NET CONTENTS:** \_\_\_\_\_

## FIRST AID

### IF INHALED:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
- Call a poison control center or doctor for further treatment advice.

**EMERGENCY ASSISTANCE:** Have the product container or label with you when calling a poison control center or doctor, or going for treatment:

**FOR 24-HOUR MEDICAL EMERGENCY ASSISTANCE CALL PROPHARMA:** 1-866-303-6952 or +1-651-603-3432.

**FOR 24-HOUR CHEMICAL EMERGENCY (Spills, leaks, fire, exposure or accident) CALL CHEMTREC:** 1-800-424-9300 or +1-703-527-3887.

For PRODUCT USE INFORMATION: Call 1-866-761-9397

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Harmful if inhaled. Avoid breathing vapor or spray mist.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

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.

**All Mixers, Loaders, Applicators and Other Handlers Must Wear:** long-sleeved shirt and long pants; socks plus shoes; chemical-resistant gloves made of barrier laminate, neoprene or rubber *except* when bagging or sewing bags of treated seeds; and chemical-resistant aprons when mixing, loading or participating in dip treatments.

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems in a manner that meet the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-5)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### ENGINEERING CONTROLS

When handlers use closed systems designed by the manufacturer to enclose the pesticide to prevent it from contacting handlers or other people AND the system is functioning properly and is used and maintained in accordance with the manufacturer's written operating instructions, the handlers need not wear the chemical-resistant apron or gloves. However, the chemical-resistant apron and gloves must be immediately available, for use in an emergency, such as a spill or equipment breakdown.

### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- 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 to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate or by disposal of wastes. Treated seed exposed on soil surface may be hazardous to birds. Cover or collect spilled seeds.

This product may have effects on federally listed threatened or 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/esp> before each season's use of this product.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all label directions carefully before use. 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.

## 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 intervals. 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 12 hours**.

*Exception:* Once the seeds, corms, 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 soil/media subsurface.

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, or treated seed is: coveralls; chemical-resistant gloves made of barrier laminate, neoprene or rubber; shoes plus socks.

## PRODUCT INFORMATION

**VITAVAX®-34** Seed Treatment Fungicide is a systemic broad-spectrum fungicide for seed treatment that protects against a wide variety of seed- and soil-borne diseases. **VITAVAX-34** Seed Treatment Fungicide is effective against loose smuts, covered smut, common bunt, *Rhizoctonia* and other diseases. See the Disease Control table for details. Seed should be sound and well-cured before treatment.

Do not use **VITAVAX-34** Seed Treatment Fungicide in combination with other seed treatment products unless compatibility has been verified. Read and follow carefully all label directions of each combination product before use. When using combinations of products, the most restrictive of label limitations and precautions must be followed. Do not tank mix with any product that has a label prohibition against tank mixing.

## SEED TREATMENT EQUIPMENT

**VITAVAX-34** Seed Treatment Fungicide may be applied with mechanical, slurry, or mist-type seed treating equipment, provided that the equipment can be calibrated to accurately and uniformly apply the product to seed. DO NOT apply this product as a planter box or hopper box treatment. Uniform application to seed is necessary to assure best disease protection and optimum performance. Seed should be sound and well-cured before treatment. Refer to the label rates below.

**VITAVAX-34** Seed Treatment Fungicide may be diluted with water to achieve more uniform seed coverage (depending on rate, treater and crop). When diluted, **VITAVAX-34** Seed Treatment Fungicide and water should be mixed thoroughly into a slurry prior to treating seed. Recalibrate treating equipment to compensate for the addition of water. The amount of dilution water that is most suitable depends on the seed, treater type and temperature. Contact your local MacDermid representative or supplier for specific recommendations.

### APPLICATION AND DISEASE CONTROL - SEEDS

Crop	Disease	Application Rate (fl. oz. /100 lb seed)	Comments
Wheat	Loose smut ( <i>Ustilago tritici</i> ) Common bunt ( <i>Tilletia caries</i> , <i>T. foetida</i> ) Flag smut *( <i>Urocystis agropyri</i> ) Seed rots, damping off and seedling blight caused by <i>Cochliobolus sativus</i>	2 – 3	The higher rate will provide increased protection on highly infected seed. Do not graze or feed livestock on treated areas for 6 weeks after planting. *Use for control of flag smut not registered by the California Department of Pesticide Regulation.
Barley	True loose smut ( <i>Ustilago nuda</i> ) Covered smut ( <i>U. hordei</i> ) False loose smut ( <i>U. nigra</i> ) Seed rots, damping off and seedling blight caused by <i>C. sativus</i>	2 – 3	The higher rate will provide increased protection on highly infected seed. Do not graze or feed livestock on treated areas for 6 weeks after planting.
Oats	Loose smut ( <i>U. avenae</i> ) Covered smut ( <i>U. kollerii</i> ) Seed rots, damping off and seedling blight caused by <i>C. sativus</i>	2 – 3	The higher rate will provide increased protection when high disease pressure is expected. Do not graze or feed livestock on treated areas for six weeks after planting.
Triticale	Seed rots, damping off and seedling blight caused by <i>C. sativus</i>	2 – 3	The higher rate will provide increased protection when high disease pressure is expected. Do not graze or feed livestock on treated areas for 6 weeks after planting.

Crop	Disease	Application Rate (fl. oz. /100 lb seed)	Comments
Corn (field & sweet)	<i>Rhizoctonia solani</i> seed rots, damping off and seedling blight	2 - 4	The higher rate will provide increased protection on highly infected seed, or use for control of seed borne head smut as described below. <b>VITAVAX-34</b> Seed Treatment Fungicide may be used for application to seed that has been or will be treated with protectant fungicides such as captan or thiram to obtain a wider spectrum of control. Follow the more restrictive labeling of any tank mix partner. Do not tank mix with any product that has a label prohibition against tank mixing. Do not graze or feed livestock on treated areas for 6 weeks after planting.
	Seed-borne head smut ( <i>Sphacelotheca reiliana</i> )	4	Provides systemic control of seedborne head smut. Avoid planting corn under cool, wet conditions, because the incidence of head smut may increase during the first few weeks after planting under such conditions. Do not graze or feed livestock on treated areas for 6 weeks after planting.
Cotton	<i>Rhizoctonia solani</i> seed rots, damping off and seedling blight	4 - 8	Use the higher rate when planting cottonseed early season in cold soils, or to achieve a higher level of control. Mix with enough water to apply mixture (slurry) at the rate of 20 fluid ounces per 100 pounds of seed. Do not graze or feed livestock on cotton hay grown from treated seed.
Soybeans	<i>Rhizoctonia solani</i> seed rots and seedling blight	3 - 4	The higher rate will provide increased protection when high disease pressure is expected. Do not graze or feed livestock on soybean forage or hay grown from treated seed.
Safflower*	<i>Rhizoctonia solani</i> seed rots, damping off and seedling blight	2	*Use on safflower not registered by the California Department of Pesticide Regulation
Beans	<i>Rhizoctonia solani</i> seed rots, damping off and seedling blight	3 - 4	The higher rate will provide increased protection when high disease pressure is expected. Do not allow livestock to graze or feed on bean forage until 60 days after treated seed is planted.

## APPLICATION AND DISEASE CONTROL – ORNAMENTAL BULBS AND CORMS\*

Crop	Disease	Dip Mixture (Quarts VITAVAX-34 Seed Treatment Fungicide /100 gallons water)	Comments
Easter Lilies *	<i>Rhizoctonia</i> root rot	1.5 - 3	Dip bulbs for at least 5 to 15 minutes in solution. A sticking agent may be added. Maintain good agitation in dip tanks. Use higher rate for increased disease control.
Other Ornamental Bulbs / Corms *	<i>Rhizoctonia</i> root rot	1.5 - 3	A preliminary trial must be conducted prior to large scale dipping to determine individual plant tolerance. Dip bulbs for at least 5 to 15 minutes in solution. A sticking agent may be added. Maintain good agitation in dip tanks. Use higher rate for increased disease control.

### USE PRECAUTIONS AND RESTRICTIONS FOR BULB AND CORM DIPS:

- Do not mix insecticides in this dipping solution.

\*Use on bulbs and corms not registered by the California Department of Pesticide Regulation.

### COMPATIBILITY

**VITAVAX-34** Seed Treatment Fungicide can be used in combination with other flowable seed protectant fungicides and insecticides. Consult a seed treatment specialist regarding combining of products with **VITAVAX-34** Seed Treatment Fungicide for specific seed crop applications and slurry compatibility. Pretest tank mixes to determine physical compatibility between formulations, and to assure there will be no adverse phytotoxic reactions.

When using combinations of products, the most restrictive of label limitations and precautions must be followed. Do not tank mix with any product that has a label prohibition against tank mixing.

### USE RESTRICTIONS

When using formulations that do not contain dye, to comply with 21CFR, Part 2.25, treated seed must be colored with an approved dye (40 CFR, Part 153.155) to distinguish and prevent subsequent and inadvertent use as food for man or feed for animals. 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.

## TREATED SEED LABELING

Seed, bulbs or corms treated with this product that are then packaged or bagged for future use must contain the following labeling on the outside of the seed package or bag:

“This bag contains seed, bulbs or corms treated with carboxin. Treated Seed, Bulbs or Corms - Do Not Use for Food, Feed or Oil Purposes. Care must be exercised in the handling of treated seed. When opening this bag or loading/pouring the treated seeds, bulbs or corms, wear long-sleeved shirt, long pants, shoes, socks and chemical resistant gloves.

This product may have effects on federally listed threatened or 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.

Treated seeds exposed on soil surface may be hazardous to birds. Cover or collect spilled seeds.

After the seeds, bulbs or corms have been planted, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. Exception: Once the seeds, bulbs or corms 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 or soil/media subsurface.

Do not graze or feed livestock on treated areas for six weeks after planting.

Exceptions: Do not allow livestock to graze or feed on bean forage until 60 days after treated seed is planted. Do not graze or feed livestock on soybean forage or hay grown from treated seed.

Do not graze or feed livestock on cotton hay grown from treated seed.”

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in original container only. Store in a secure location that is cool and dry. Do not store in direct sunlight. Protect from extreme temperatures.

**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:

#### Nonrefillable container:

**Plastic Containers:** Do not reuse or refill this container. Triple rinse (or equivalent) container promptly after emptying.

**Triple rinse** as follows:

*For containers small enough to shake:* 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.

**Recycling:** Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer or contact the Ag Container Recycling Council (ACRC) at 1-877-952-2272 (toll free) or [www.acrecycle.org](http://www.acrecycle.org).

IMPORTANT NOTICE - Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions and instructions specified on the label under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product, contrary to label instructions, or under conditions not reasonably foreseeable to seller, and, to the extent consistent with applicable law, the buyer assumes the risk of any such use.

VITAVAX is a registered trademark of MacDermid Agricultural Solutions, Inc.

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# Vitavax®-34

## seed treatment

Active Ingredient: \_\_\_\_\_ (% by weight)  
 carboxin (5,6-dihydro-2-methyl-N-phenyl-1,4-oxathiin-3-carboxamide) . . . . 34%\*  
 Other Ingredients: . . . . . 66%  
 Total: . . . . . 100%  
 \*Contains 3.34 lbs. active ingredient per gallon, or 400 grams active ingredient per liter.

## KEEP OUT OF REACH OF CHILDREN CAUTION

See inside booklet for additional First Aid, Precautionary Statements, and Directions for Use.

For PRODUCT USE INFORMATION: Call 1-866-761-9397

FIRST AID	
<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>
<p><b>EMERGENCY ASSISTANCE:</b> Have the product container or label with you when calling a poison control center or doctor, or going for treatment:  <b>FOR 24-HOUR MEDICAL EMERGENCY ASSISTANCE</b>            CALL PROPHARMA: 1-866-303-6952 or +1-651-603-3432.  <b>FOR 24-HOUR CHEMICAL EMERGENCY (Spills, leaks, fire, exposure or accident)</b>            CALL CHEMTREC: 1-800-424-9300 or +1-703-527-3887.</p>	

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Harmful if inhaled. Avoid breathing vapor or spray mist.

#### ENVIRONMENTAL HAZARDS

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