

GROUP 3, 4, 7, 22 FUNGICIDES

# Zeltera Cereals SEED TREATMENT FUNGICIDE Suspension COMMERCIAL

#### **ACTIVE INGREDIENTS:**

Ethaboxam	15.4 g/L
Metalaxyl	9.2 g/L
Metconazole	
Inpyrfluxam	

Contains 1,2-benzisothiazolin-3-one as a preservative at 0.04%.

#### REGISTRATION NUMBER 34751 PEST CONTROL PRODUCTS ACT

# READ THE LABEL AND BOOKLET BEFORE USING KEEP OUT OF REACH OF CHILDREN

For all labelled seeds, commercial seed treatment (facilities and mobile treaters with closed transfer, including closed mixing, loading, calibrating, and closed treatment equipment only) is permitted.

For all labelled seeds, on-farm treatment (open transfer, including open mixing, loading, calibrating, and open treatment equipment) is permitted.

**NET CONTENTS: 50 mL** to bulk

Valent Canada, Inc. 201-230 Halon Creek Blvd. Guelph, ON N1C 0A1

Contact Phone Number: (519) 767-9262

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

#### **PRECAUTIONS:**

#### KEEP OUT OF THE REACH OF CHILDREN.

[OPTIONAL STATEMENT FOR SMALLER CONTAINER SIZE]

[Follow the personal protective equipment, engineering control, and restriction requirements for the appropriate mixer/loader and applicator scenario as described on the booklet label.]]

Wash hands thoroughly with soap and water after handling and 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.

Apply only in a way that this product will not contact workers or other persons, either directly or through drift. Only workers wearing the personal protective equipment may be in the area where treating, bagging, sewing and/or stacking is occurring.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Follow the personal protective equipment and engineering controls for the appropriate task and scenario:

Seed Types	Tasks	PPE/Engineering Controls	
For Commercia	For Commercial Seed Treatment (including mobile treaters)		
All labelled seeds	Mixing, loading, treating, calibrating, bagging, sewing and stacking	Use a closed transfer system only. Closed transfer includes closed mixing, loading, calibrating, and closed treatment equipment.  Wear coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, socks	
		and shoes.  In addition, when bagging or sewing bags of treated seeds or when transferring seeds to a storage bin, workers must wear a NIOSH-approved N95 filtering face piece respirator (dust mask) that is properly fit tested.	
	Cleaning and repairing	Wear chemical-resistant coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, chemical-resistant footwear and socks.	
For On-Farm S	For On-Farm Seed Treatment, Planting and Handling Treated Seeds		
All labelled seeds	Mixing, loading, treating and calibrating	Use an open or closed transfer system.	

	C1 ' 1 ' '	XX7 1 1 1 1 1 1
	Cleaning and repairing	Wear a long-sleeved shirt, long pants,
		chemical-resistant gloves, socks and shoes.
	Planting and handling	Use an open- or closed-cab planter.
	treated seeds	
		Wear a long-sleeved shirt, long pants,
		chemical-resistant gloves, socks and shoes.
For Planting Co	ommercially-Treated Seeds	
All labelled	Planting and handling	Use a closed-cab planter.
seeds, except	treated seeds	
teosinte		Wear a long-sleeved shirt, long pants,
		chemical-resistant gloves, socks and shoes.
		Gloves are not required within a closed-cab
		tractor.
Teosinte seeds		Use an open- or closed-cab planter.
		Wear a long-sleeved shirt, long pants,
		chemical-resistant gloves, socks and shoes.
		Gloves are not required within a closed-cab
		tractor.

Follow the 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.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., contact Valent Canada, Inc.

#### FIRST AID:

IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

IF IN EYES: 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 centre or doctor for treatment advice.

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 centre or doctor for further treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

#### TOXICOLOGICAL INFORMATION:

No specific antidote is available. Treat the patient symptomatically.

#### **ENVIRONMENTAL PRECAUTIONS:**

#### [OPTIONAL STATEMENT FOR SMALLER CONTAINER SIZE]

[Toxic to aquatic organisms, birds, small wild mammals and non-target terrestrial plants. See booklet for full user precautions and restrictions.]

Toxic to aquatic organisms, birds, small wild mammals and non-target terrestrial plants. Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil surface.

This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

#### **STORAGE:**

Keep pesticide in its original container. Store in a cool place. Do not store in direct sunlight. Protect from freezing temperatures. Store this product away from food or feed.

#### **DISPOSAL:**

DO NOT reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank
- 2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.



{Booklet Label}

GROUP 3, 4, 7, 22 FUNGICIDES

## **Zeltera Cereals** SEED TREATMENT FUNGICIDE **Suspension COMMERCIAL**

#### A FUNGICIDE SEED TREATMENT PRODUCT PROVIDING SYSTEMIC PROTECTION AGAINST LABELED DISEASES

An INDIFLIN ® brand

#### **ACTIVE INGREDIENTS:**

Ethaboxam	15.4 g/L
Metalaxyl	9.2 g/L
Metconazole	4.6 g/L
Inpyrfluxam	3.1 g/L

Contains 1,2-benzisothiazolin-3-one as a preservative at 0.04%.

#### REGISTRATION NUMBER 34751 PEST CONTROL PRODUCTS ACT

### READ THE LABEL AND BOOKLET BEFORE USING KEEP OUT OF REACH OF CHILDREN

For all labelled seeds, commercial seed treatment (facilities and mobile treaters with closed transfer, including closed mixing, loading, calibrating, and closed treatment equipment only) is permitted.

For all labelled seeds, on-farm treatment (open transfer, including open mixing, loading, calibrating, and open treatment equipment) is permitted.

This product contains red colourant for application to cereal grains, according to regulations pertaining to the "Seeds Act".

**NET CONTENTS: 50 mL** to bulk

Valent Canada, Inc. 201-230 Halon Creek Blvd. Guelph, ON N1C 0A1

Contact Phone Number: (519) 767-9262

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

#### **PRECAUTIONS:**

#### KEEP OUT OF THE REACH OF CHILDREN.

Wash hands thoroughly with soap and water after handling and 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.

Apply only in a way that this product will not contact workers or other persons, either directly or through drift. Only workers wearing the personal protective equipment may be in the area where treating, bagging, sewing and/or stacking is occurring.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Follow the personal protective equipment and engineering controls for the appropriate task and scenario:

Seed Types	Tasks	PPE/Engineering Controls	
For Commercial Seed Treatment (including mobile treaters)			
All labelled	Mixing, loading, treating,	Use a closed transfer system only.	
seeds	calibrating, bagging, sewing and stacking	Closed transfer includes closed mixing, loading, calibrating, and closed treatment equipment.	
		Wear coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, socks and shoes.	
		In addition, when bagging or sewing bags of treated seeds or when transferring seeds to a storage bin, workers must wear a NIOSH-approved N95 filtering face piece respirator (dust mask) that is properly fit tested.	
	Cleaning and repairing	Wear chemical-resistant coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, chemical-resistant footwear and socks.	
For On-Farm Seed Treatment, Planting and Handling Treated Seeds			
All labelled seeds	Mixing, loading, treating and calibrating	Use an open or closed transfer system.	
	Cleaning and repairing	Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes.	
	Planting and handling treated seeds	Use an open- or closed-cab planter.	

		Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes.
For Planting Co	ommercially-Treated Seeds	
All labelled	Planting and handling	Use a closed-cab planter.
seeds, except	treated seeds	
teosinte		Wear a long-sleeved shirt, long pants,
		chemical-resistant gloves, socks and shoes.
		Gloves are not required within a closed-cab
		tractor.
Teosinte seeds		Use an open- or closed-cab planter.
		Wear a long-sleeved shirt, long pants,
		chemical-resistant gloves, socks and shoes.
		Gloves are not required within a closed-cab
		tractor.

Follow the 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.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., contact Valent Canada, Inc.

#### FIRST AID:

IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

IF IN EYES: 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 centre or doctor for treatment advice.

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 centre or doctor for further treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

#### **TOXICOLOGICAL INFORMATION:**

No specific antidote is available. Treat the patient symptomatically.

#### **ENVIRONMENTAL PRECAUTIONS:**

Toxic to aquatic organisms, birds, small wild mammals and non-target terrestrial plants. Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil surface.

This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

#### **MODE OF ACTION:**

Zeltera Cereals contains the active ingredients ethaboxam, inpyrfluxam, metconazole, and metalaxyl. Ethaboxam is a Group 22 fungicide as classified by the Fungicide Resistance Action Committee (FRAC); it's mode of action is the inhibition of cell division. Inpyrfluxam, belongs to FRAC Group 7, the succinate dehydrogenase inhibitor (SDHI) group of fungicides. Metconazole belongs to the triazole class (Group 3) of fungicides as classified by the FRAC. Metalaxyl is a member of the acylalanine chemical group (FRAC Code 4) and interrupts fungal nucleic acid synthesis.

#### SEED QUALITY AND STORAGE OF TREATED SEED:

Use proper storage conditions for treated seed. Due to seed quality and seed storage conditions beyond the control of Valent Canada, Inc., no claims are made to guarantee the germination of carry-over treated seed.

#### **USE RESTRICTIONS:**

- Do not use treated seed for food, feed, or oil processing.
- Due to seed quality conditions beyond the control of Valent Canada, Inc., no claims are made to guarantee germination of carry-over seed.

#### LABELLING OF TREATED SEED:

All containers or packages containing treated seed for sale or use in Canada must be labeled or tagged as follows:

- This seed has been treated with a product containing the active ingredients ethaboxam, inpyrfluxam, metconazole, and metalaxyl.
- Do not use treated seed for feed, food or oil processing.
- Excess seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in ethanol by-products that are used in agronomic practices.
- Store away from feeds and other foodstuffs.
- A closed-cab planter is required when planting treated cereal grain seeds. An open-cab planter may be used when planting teosinte seeds.
- Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes when handling and planting treated seeds. Gloves are not required within a closed-cab tractor.
- Dispose of all excess treated seed. Left over treated seed may be double-sown around the headland or buried away from water sources in accordance with local requirements. Do not contaminate water bodies when disposing of planting equipment washwaters.
- Dispose of seed packaging in accordance with local requirements.
- Toxic to aquatic organisms.

- Toxic to birds and small wild mammals. Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil surface.
- KEEP TREATED SEED OUT OF REACH OF CHILDREN AND ANIMALS.

#### **GENERAL INFORMATION:**

Zeltera Cereals is a systemic fungicide seed protection product for use on cereal grains. The product provides protection against seed-borne and soil-borne pathogens.

#### **DIRECTIONS FOR USE:**

Zeltera Cereals must be used only in accordance with use instructions on this label utilizing standard mechanical or slurry seed treating equipment that is calibrated to accurately and uniformly apply the product to seed. This product is for both commercial and on-farm application. Do not apply this product in a hopper-box or planter-box at planting time. Always mix product thoroughly before use.

#### Tank mixing

This product may be tank mixed with a supplement or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Valent Canada, Inc. at 1-800-682-5368 for information before applying any tank mix that is not specifically recommended on this label.

Pre-test tank mixtures with other seed treatment products to evaluate formulation compatibility and to ensure proper physical compatibility of products. Follow more restrictive limitations or cautions on labels of all products used in a seed treatment mixture. Do not tank mix with any products which contain a prohibition on tank mixing.

Accurate application of Zeltera Cereals to seed is required for best performance. Thoroughly mix Zeltera Cereals in the desired seed slurry mixture, prior to application to seed. DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

The following table provides use rates of Zeltera Cereals by labeled crop, with disease protection guidelines.

When applied as directed, Zeltera Cereals can be expected to control or suppress the diseases listed below.

Cereal grain crops: specifically, barley, buckwheat, pearl millet, proso millet, oats, rye, teosinte, triticale, wheat		
Diseases Controlled	Application Rate (mL/100 kg seed)	
Seed decay/pre-emergence damping-off (Rhizoctonia solani)	325	
Post-emergence damping-off and seedling blight ( <i>Rhizoctonia solani</i> ) under low to moderate disease pressure	(ethaboxam at 5 g a.i./100 kg seed inpyrfluxam at 1 g a.i./100 kg seed metconazole at 1.5 g a.i./100 kg seed metalaxyl at 3 g a.i./100 kg seed)	
Early season seed rot/pre-emergence damping-off (Fusarium spp. and Rhizoctonia solani)		
Early season seed rot/pre-emergence damping-off, post-emergence damping-off, seedling blight and seedling root rot ( <i>Pythium</i> spp.)		
Barley: Covered smut ( <i>Ustilago hordei</i> ) False loose smut ( <i>Ustilago nigra</i> ) True loose smut ( <i>Ustilago nuda</i> )		
Oats: Loose smut ( <i>Ustilago avenae</i> )		
Wheat: Wheat loose smut ( <i>Ustilago tritici</i> )		
Wheat, Triticale, Rye: Common bunt ( <i>Tilletia laevis</i> and <i>T. caries</i> syn. <i>T. tritici</i> )		
Diseases Suppressed	Application Rate (mL/100 kg seed)	
Root rot ( <i>Rhizoctonia solani</i> ) under low to moderate disease pressure  Wheat Triticale Ryo Barley Oct	325 (ethaboxam at 5 g a.i./100 kg seed inpyrfluxam at 1 g a.i./100 kg seed	
Wheat, Triticale, Rye, Barley Oat: Common root rot ( <i>Bipolaris sorokiniana</i> syn. <i>Cochliobolus sativus</i> )	metconazole at 1.5 g a.i./100 kg seed metalaxyl at 3 g a.i./100 kg seed)	

#### **RESISTANCE MANAGEMENT RECOMMENDATIONS:**

For resistance management, please note that Zeltera Cereals contains Group 3, 4, 7 and 22 fungicides. Any fungal population may contain individuals naturally resistant to Zeltera Cereals and other Group 3, 4, 7, and 22 fungicides. A gradual or total loss of pest control may occur over time if this fungicide is used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance:

- Where possible, rotate the use of Zeltera Cereals or other Group 3, 4, 7 and 22 fungicides with different chemical groups that control the same pathogens.
- Use tank mixtures with fungicides from a different group that is effective on the target pathogen when such use is permitted.
- Fungicide use should be based on an integrated disease management program that
  includes scouting, historical information related to pesticide use and crop rotation and
  considers host plant resistance, impact of environmental conditions on disease
  development, disease thresholds, as well as cultural, biological and other chemical
  control practices.
- Monitor treated fungal populations for resistance development. Notify Valent Canada, Inc. if reduced sensitivity of the pathogen to Zeltera Cereals is suspected.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.

For further information or to report suspected resistance contact Valent Canada, Inc. at 1-800-682-5368.

#### **STORAGE:**

Keep pesticide in its original container. Store in a cool place. Do not store in direct sunlight. Protect from freezing temperatures. Store this product away from food or feed.

#### **DISPOSAL:**

DO NOT reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

<sup>®</sup> Zeltera is a registered trademark of Valent U.S.A. LLC.

<sup>®</sup>INDIFLIN is a registered trademark of Sumitomo Chemical Company, Ltd.