



GROUP	28	INSECTICIDE
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\*\*\*Container Label\*\*\*

## REATIS

REATIS is a systemic seed treatment insecticide for protection of listed cereal crops against damage caused by wireworms.

Insecticide

COMMERCIAL

Suspension

ACTIVE INGREDIENT: Tetraniliprole ..... 380 g/L

Contains 1,2 benzisothiazolin-3-one at 0.035% and 5-chloro-2-methyl-4-isothiazolin-3-one at 0.0009% and 2-methyl-4-isothiazolin-3-one at 0.00030% as preservatives.

REGISTRATION NO. 34618 PEST CONTROL PRODUCTS ACT

READ THE LABEL AND BROCHURE BEFORE USING

PROTECT FROM FREEZING

NET CONTENTS: 0.25 - 1000 L

BAYER CROPSCIENCE INC.  
200-160 Quarry Park Blvd., SE  
Calgary, Alberta T2C 3G3

24 HOUR EMERGENCY PHONE: 1-800-334-7577

GROWER INFORMATION: 1-888-283-6847

SPECIAL USE RESTRICTIONS: Seed treated with REATIS must be conspicuously coloured. Regulations pertaining to the *Seeds Act* must be strictly adhered to when using this product.

REATIS is a systemic seed treatment insecticide that provides protection of listed cereal crops from damage caused by wireworms. Thorough seed coverage is required for maximum protection of seed. Within the stated rate range, use the higher rate when insect pressure is expected to be high.

**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 REACH OF CHILDREN.**

When handling REATIS or seed treated with REATIS, work in a well-ventilated area.

Seed Types	Tasks	PPE/ Engineering Controls
<b>For Commercial Seed Treatment (including mobile treaters)</b>		
All seed types	Treating / Bagging / Sewing / Stacking / Driving a forklift	Closed transfer system only. Closed transfer includes closed mixing, loading, calibrating, and closed treatment equipment. During mixing, loading, treating, calibrating, bagging, sewing seed bags, stacking, driving a forklift and any other activities involving handling treated seeds, wear a long-sleeved shirt, long pants, chemical-resistant gloves, shoes and socks.
	Cleaning and repairing	During cleaning and repairing, wear chemical-resistant coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and chemical-resistant footwear.
<b>For On-Farm Seed Treatment and Planting of Treated Seeds</b>		
All seed types	Treating / Handling / Planting / Cleaning and repairing	Open or closed transfer.  During mixing, loading, treating, calibrating, cleaning, repairing, planting and any other activities involving handling treated seeds, wear long-sleeved shirt, long pants, chemical-resistant gloves, socks, shoes.
<b>For Planting Commercially Treated Seeds</b>		
All seed types	Planting	During handling and planting of commercially treated seeds, wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves socks and shoes.  Use a closed-cab tractor when planting. Gloves are not required within the closed cab.

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

Use good personal hygiene, washing hands and exposed skin before eating, drinking or smoking. No food, drink or tobacco should be allowed in areas of chemical storage or use.

If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for an importing country, please contact Bayer CropScience Canada Inc. at 1-888-283-6847 or [www.cropscience.bayer.ca](http://www.cropscience.bayer.ca).

**FIRST AID:**

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

If swallowed	Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.
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.
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 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.

**TOXICOLOGICAL INFORMATION:**

Treat symptomatically.

**ENVIRONMENTAL PRECAUTIONS:**

Toxic to aquatic organisms.

Tetraniliprole is toxic to bees. Dust generated during planting of treated seed may be harmful to bees and other pollinators. To help minimize the dust generated during planting, refer to the “Pollinator Protection and Responsible Use of Treated Seed - Best Management Practices” on the Health Canada webpage on pollinator protection at [www.canada.ca/pollinators](http://www.canada.ca/pollinators).

Do not load or clean planting equipment near bee colonies, and avoid places where bees may be foraging, such as flowering crops or weeds.

When turning on the planter, avoid engaging the system where emitted dust may contact honey bee colonies.

Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil surface. Left over treated seed should be double-sown around the headland, or buried away from water sources.

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

#### STORAGE:

Store product in original container only, away from food or feed. Keep container closed. Storage of REATIS at low temperatures is not recommended. Due to the viscosity of the material, it should be kept above 10 °C prior to and during application. Do not apply direct heat to container.

#### DISPOSAL:

##### Disposal of Container

For non-returnable containers:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the mixture in the tank.
2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.

For recyclable containers:

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 slurry in the mix 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 returnable containers:

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

For refillable containers:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

Triple rinse instructions for container disposal (for recyclable and disposable containers only): This container should be triple-rinsed prior to its disposal. The rinsate can be added to the seed treatment in the mix tank. Add rinse water to the container and swish the contents thoroughly. Empty the rinsate into the seed treater mix tank and repeat this process two more times. Close the container. Make sure rinsate is thoroughly mixed with seed treatment before treating. Maintain agitation of the slurry in the mix tank to prevent any potential settling of the seed treatment products. Adjust the application rate to account for the additional water volume in the slurry.

**CAUTION:** Additional water volumes may affect seed wetness and seed handling.

Disposal of unused, unwanted product:

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.



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\*\*\*Booklet Label\*\*\*

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Insecticide

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Suspension

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## GENERAL INFORMATION

### Section 1: 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.

### Section 2: The Product

REATIS is a systemic seed treatment insecticide that provides protection of listed cereal crops from damage caused by wireworms. Thorough seed coverage is required for maximum protection of seed. Within the stated rate range, use the higher rate when insect pressure is expected to be high.

## SAFETY AND HANDLING

### Section 3: Precautions, Protective Clothing and Equipment

#### PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN.

When handling REATIS or seed treated with REATIS, work in a well-ventilated area.

Seed Types	Tasks	PPE/ Engineering Controls
<b>For Commercial Seed Treatment (including mobile treaters)</b>		
All seed types	Treating / Bagging / Sewing / Stacking / Driving a forklift	Closed transfer system only. Closed transfer includes closed mixing, loading, calibrating, and closed treatment equipment. During mixing, loading, treating, calibrating, bagging, sewing seed bags, stacking, driving a forklift and any other activities involving handling treated seeds, wear a long-sleeved shirt, long pants, chemical-resistant gloves, shoes and socks.
	Cleaning and repairing	During cleaning and repairing, wear chemical-resistant coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and chemical-resistant footwear.
<b>For On-Farm Seed Treatment and Planting of Treated Seeds</b>		
All seed types	Treating / Handling / Planting / Cleaning and repairing	Open or closed transfer.  During mixing, loading, treating, calibrating, cleaning, repairing, planting and any other activities involving handling treated seeds, wear long-sleeved shirt, long pants, chemical-resistant gloves, socks, shoes.



Seed Types	Tasks	PPE/ Engineering Controls
<b>For Planting Commercially Treated Seeds</b>		
All seed types	Planting	<p>During handling and planting of commercially treated seeds, wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves socks and shoes.</p> <p>Use a closed-cab tractor when planting. Gloves are not required within the closed cab.</p>

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

Use good personal hygiene, washing hands and exposed skin before eating, drinking or smoking. No food, drink or tobacco should be allowed in areas of chemical storage or use.

If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for an importing country, please contact Bayer CropScience Canada Inc. at 1-888-283-6847 or [www.cropscience.bayer.ca](http://www.cropscience.bayer.ca).

#### Section 4: First Aid and Toxicological Information

##### FIRST AID:

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

If swallowed	<p>Call a poison control centre or doctor immediately for treatment advice.</p> <p>Have person sip a glass of water if able to swallow.</p> <p>Do not induce vomiting unless told to do so by a poison control centre or doctor.</p> <p>Do not give anything by mouth to an unconscious person.</p>
If on skin or clothing	<p>Take off contaminated clothing.</p> <p>Rinse skin immediately with plenty of water for 15–20 minutes.</p> <p>Call a poison control centre or doctor for treatment advice.</p>
If inhaled	<p>Move person to fresh air.</p> <p>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</p> <p>Call a poison control centre or doctor for further treatment advice.</p>
If in eyes	<p>Hold eye open and rinse slowly and gently with water for 15–20 minutes.</p>

	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.
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#### TOXICOLOGICAL INFORMATION:

Treat symptomatically.

Section 5: Environmental Precautions
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Toxic to aquatic organisms.

Tetraniliprole is toxic to bees. Dust generated during planting of treated seed may be harmful to bees and other pollinators. To help minimize the dust generated during planting, refer to the “Pollinator Protection and Responsible Use of Treated Seed - Best Management Practices” on the Health Canada webpage on pollinator protection at [www.canada.ca/pollinators](http://www.canada.ca/pollinators).

Do not load or clean planting equipment near bee colonies, and avoid places where bees may be foraging, such as flowering crops or weeds.

When turning on the planter, avoid engaging the system where emitted dust may contact honey bee colonies.

Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil surface. Left over treated seed should be double-sown around the headland, or buried away from water sources.

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

Section 6: Storage
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Store product in original container only, away from food or feed. Keep container closed. Storage of REATIS at low temperatures is not recommended. Due to the viscosity of the material, it should be kept above 10 °C prior to and during application. Do not apply direct heat to container.

Section 7: Disposal
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Disposal of Container

For non-returnable containers:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the mixture in the tank.
2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.

For recyclable containers:

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:

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For returnable containers:

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

For refillable containers:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

Triple rinse instructions for container disposal (for recyclable and disposable containers only): This container should be triple-rinsed prior to its disposal. The rinsate can be added to the seed treatment in the mix tank. Add rinse water to the container and swish the contents thoroughly. Empty the rinsate into the seed treater mix tank and repeat this process two more times. Close the container. Make sure rinsate is thoroughly mixed with seed treatment before treating. Maintain agitation of the slurry in the mix tank to prevent any potential settling of the seed treatment products. Adjust the application rate to account for the additional water volume in the slurry.

**CAUTION:** Additional water volumes may affect seed wetness and seed handling.

Disposal of unused, unwanted product:

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.

## DIRECTIONS FOR USE

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests. DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

### Section 8: Crops and Pests

#### 8.1 CEREALS: Wheat, barley, oats, rye, triticale.

For use in commercial and on-farm seed treatment equipment, including mobile treaters. Mix thoroughly before use or use entire container at one time. Seed treated with REATIS may reduce seed flow in the seed drill. Recalibration of the seed drill may be required to obtain correct seeding rate before planting.

Crop	Pest	Use Rate / 100 kg seed		Remarks
		ml product	grams a.i.	
Wheat, barley, oats, rye, triticale	Wireworm	26 - 66	10 - 25	Dilute in sufficient liquid to achieve uniform distribution on the seed.  Use the high rate in fields with a history of wireworm and where stand loss is expected to be high. Use the low rate when wireworms are present but fields do not have a history of wireworm and stand loss is expected to be low to moderate.  Do not make a subsequent foliar application of any Group 28 insecticide for a minimum of 60 days after planting seed treated with REATIS. If a foliar spray is required during this window it must be made with an insecticide other than Group 28.

Pre-test the germination of a small sample of each seed lot with REATIS prior to commercial application to the whole lot. REATIS can be used as an over-treatment (refer to Section 8.2 below).

## 8.2 TANK MIXTURES AND OVER-TREATMENT:

In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include, but are not limited to: reduced pest efficacy or increased host crop injury. The user should contact Bayer CropScience Inc. at 1-888-283-6847 for information before mixing any pesticide that is not specifically recommended on this label.

Over-treatment: REATIS can be applied to seed treated with one or more registered seed treatment products.

## SECTION 9: USE RESTRICTIONS AND LIMITATIONS

### 9.1 USE RESTRICTIONS:

Do not use treated seed for food, feed or oil processing.

### 9.2 SEED QUALITY:

Laboratory and field studies have shown that REATIS will not adversely affect germination of treated seeds. Treatment of highly mechanically damaged seed, or seed of known low vigour and poor quality may result in reduced germination and/or reduction of seed and seedling vigour. If seed lot quality is unknown, conduct a germination test 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.

### 9.3 LABELLING TREATED SEED:

All bags containing treated seed must be labelled or tagged as follows:

- This seed has been treated with REATIS seed protectant which contains tetraniliprole. Do not use for feed, food or oil processing. Store away from feeds and other foodstuffs. During handling and planting of commercially treated seeds, wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Use a closed-cab tractor when planting. Gloves are not required within the closed cab.
- Tetraniliprole is toxic to bees. Dust generated during planting of treated seed may be harmful to bees and other pollinators. To help minimize the dust generated during planting, refer to the "Pollinator Protection and Responsible Use of Treated Seed - Best Management Practices" on the Health Canada webpage on pollinator protection at [www.canada.ca/pollinators](http://www.canada.ca/pollinators). Do not load or clean planting equipment near bee colonies, and avoid places where bees may be foraging, such as flowering crops or weeds. When turning on the planter,

avoid engaging the system where emitted dust may contact honey bee colonies. Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil surface.

- Left over treated seed should be double-sown around the headland, or buried away from water sources.
- Do not make a subsequent foliar application of any Group 28 insecticide for a minimum of 60 days after planting seed treated with REATIS. If a foliar spray is required during this window it must be made with an insecticide other than Group 28.

#### 9.4 SPECIAL USE RESTRICTIONS:

This product contains colourant. Seed treated with this product must be conspicuously coloured. Regulations pertaining to the *Seeds Act* must be strictly adhered to when using this product.

SECTION 10: MIXING INSTRUCTIONS
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Storage of REATIS at low temperatures is not recommended. Prior to and during application, REATIS must be thoroughly agitated to ensure uniform mixing of the product. Due to the viscosity of the material, it should be kept above 10 °C prior to and during application. Do not apply direct heat to container.

When creating a seed treatment slurry first determine if water will be required to achieve the correct slurry application volume. Add approximately  $\frac{1}{2}$  to  $\frac{2}{3}$  of the required water to the treatment slurry tank followed by the accompanying seed treatment products and REATIS. The order of product addition is dependent on the accompanying seed treatment products and application equipment used. In general, add the lower density products first. Allow each slurry component to disperse completely prior to the next addition until a uniform suspension is obtained. After all slurry components have been added and dispersed completely, add the remaining water for proper slurry volume and mix until uniform. Do not store mixed slurries for greater than 72 hours. Maintain adequate agitation until treatment slurry is applied. For additional instructions for use, slurry component mixing order, and other application suggestions contact your Bayer CropScience representative.

Prior to and during application, REATIS must be thoroughly agitated to ensure uniform mixing of the product. Due to the viscosity of the material, it should be kept above 10 °C prior to and during application. Do not apply direct heat to container.

## SECTION 11: ROTATIONAL CROPS

Treated areas may be replanted immediately (0 days) with any crop specified on the REATIS label or crops that have a Maximum Residue Limit (MRL) for tetraniliprole. This includes tuberous and corm vegetables (CSG 1C), leafy vegetables (CG 4-13), Brassica stem vegetables (CG 5-13), fruiting vegetables (CG 8-09), cereal grains (CSG 15-21A/B/C/D/E) and forage, stover, hay, and straw of cereal grains (CG 16-20), and soybeans.

Crops that can be planted 30 days after the last application: Root and tuber vegetables (CSG 1A, leaves of root and tuber vegetables (CG 2), bulb onions (CG 3-07A), legume vegetables except soybeans (CG 6-21), forage and hay of legume vegetables, except soybeans (CG 7-21), cucurbit vegetables (CG 9), oilseeds (CSG 20A and 20B), and alfalfa.

All other crops can be planted 120 days after the last application.

## SECTION 12: RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, please note that REATIS contains a Group 28 insecticide. Any insect population may contain individuals naturally resistant to REATIS and other Group 28 insecticides. The resistant individuals may dominate the insect population if this group of insecticides 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 insecticide resistance:

- Where possible, rotate the use of REATIS or other Group 28 insecticides with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group when such use is permitted.
- Insecticide use should be based on an IPM program that includes scouting and record keeping, and considers cultural, biological and other chemical control practices.
- Monitor treated pest populations for resistance development.
- 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 Bayer CropScience Inc. via internet at [www.cropscience.bayer.ca](http://www.cropscience.bayer.ca) or phone 1-888-283-6847.

For more information contact:

Bayer CropScience Inc.  
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