CRUISER MAXX® CEREALS

Seed Treatment

FUNGICIDES AND INSECTICIDE

SUSPENSION

AGRICULTURAL

A seed treatment for the control of certain insect pests and seed- and soil-borne diseases of cereal crops.

GUARANTEE:
Thiamethoxam ......................................................... 2.80 %
Difenoconazole ........................................................ 3.36 %
Metalaxyl-M (and S-isomer) ..................................... 0.56 %

Warning, contains the allergen sulfites.

Contains 1,2-benzisothiazolin-3-one at 0.019 % as a preservative.

READ THE LABEL AND PAMPHLET BEFORE USING
KEEP OUT OF THE REACH OF CHILDREN

REGISTRATION NUMBER: 29192
PEST CONTROL PRODUCTS ACT

Syngenta Canada Inc.
140 Research Lane, Research Park
Guelph, Ontario
N1G 4Z3
Telephone: 1-877-964-3682

For on-farm use only. All seed treated with this product must be conspicuously coloured at the time of treatment.

PAMPHLET
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. The user assumes the risk to persons or property that arises from any such use of this product.

FIRST AID

**IF POISONING IS SUSPECTED, IMMEDIATELY** contact a physician or a poison control centre. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**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 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 inhaled,** move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably 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.

TOXICOLOGICAL INFORMATION

Treat symptomatically.

PRECAUTIONS

**KEEP OUT OF THE REACH OF CHILDREN AND PREVENT ACCESS BY UNAUTHORIZED PERSONNEL and DOMESTIC ANIMALS.** Harmful if swallowed, inhaled or absorbed through skin. **DO NOT** get in eyes. Avoid prolonged contact with skin. Avoid inhalation of vapours, spray mist or treated seed dust. Wash hands and face after handling and before eating, using tobacco (including smoking), applying cosmetics, or using the toilet. Avoid contamination of feed and foodstuffs.

Treat seed in a well-ventilated area. All workers (treater, cleaner, repair, maintenance, bagger, sewer, stacker, forklift operator and others) must wear coveralls over long sleeve shirt and long pants, and chemical-resistant gloves. In addition, wear a NIOSH/MSHA-approved dust mask when bagging or sewing bags of treated seed or when transferring seed to a storage bin. During planting (including loading, sowing, maintenance, and clean-up) wear a long-sleeved shirt, long pants, chemical-resistant gloves, and a NIOSH/MSHA-approved dust mask. When
using closed-cab planting equipment, chemical-resistant gloves and NIOSH/MSHA-approved dust mask are not required inside cab. For good hygiene practice, it is also recommended to wear a suitable dust mask during all other job activities.

**NOTE:** In case of accident, take the product label to the emergency facility or physician.

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., visit CropLife Canada’s website at [www.croplife.ca](http://www.croplife.ca).

**ENVIRONMENTAL HAZARDS**

TOXIC to aquatic organisms.

TOXIC to bees. Bees can be exposed to product residues in flowers, leaves, pollen and/or nectar resulting from seed treatment applications.

Treated seed is 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 or other surfaces.

**USE RESTRICTIONS**

1. Treated seed must not be used for food, feed or oil processing.
2. To prevent contamination, store away from food and feed.
3. For seed treated with CRUISER MAXX® CEREALS Seed Treatment, do not graze or feed livestock on treated areas for 45 days after planting.
4. All bags containing treated seed for sale or use in Canada must be labelled or tagged as follows: “This seed has been treated with the insecticide, thiamethoxam and difenoconazole and metalaxyl-M (and S-isomer) fungicides. Wear long-sleeved shirt, long pants, chemical-resistant gloves, and NIOSH/MSHA-approved dust mask when handling treated seed, and during planting (including loading, sowing, maintenance, and clean-up). When using closed-cab planting equipment, chemical-resistant gloves and NIOSH/MSHA-approved dust mask are not required inside cab. Do not graze or feed livestock on seeded area for 45 days after planting. Do not use for food, feed or oil processing. Store away from food and feed. Any spilled or exposed seed must be incorporated into the soil or otherwise cleaned up from the soil surface.”

**DECONTAMINATION AND DISPOSAL**

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.
CONTAINER DISPOSAL:

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 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 Returnable Containers:
Do not reuse this container for any purpose. For disposal, the 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.

IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING,
CALL 1-800-327-8633 (FASTMED)

GENERAL INFORMATION

CRUISER MAXX CEREALS Seed Treatment is a combination of the insecticide, thiamethoxam, and the fungicides, difenoconazole and metalaxyl-M (and S-isomer) that controls or suppresses certain insect pests and seed- and soil-borne diseases of cereal crops, as listed below.

When seed is treated for post-planting protection against registered pests, CRUISER MAXX CEREALS Seed Treatment will also provide protection during post-treatment storage of the seed against damage from many storage insect pests. Seed treated with thiamethoxam has been tested and found to be effective against rusty grain beetle, saw-toothed grain beetle, red flour beetle, rice weevil, lesser grain borer, European corn borer and Indian meal moth. It is recommended that seed with existing populations of storage pests be fumigated prior to treating and storage of that seed.

Thiamethoxam is a Group 4 Insecticide. Do not apply any subsequent application of a Group 4 Insecticide (i.e. in-furrow or foliar application) following treatment with CRUISER MAXX CEREALS Seed Treatment.

Note: Treatment of highly mechanically scarred or damaged seed, or seed known to be of low vigour and poor quality, may result in reduced germination and/or reduction of seed and seedling vigour. Treat a small quantity of seed using equipment similar to that planned for treating the total seed lot. Conduct germination tests on a small portion of the seed before
committing the total seed lot to a selected seed treatment. Due to seed quality and seed storage conditions beyond the control of Syngenta Canada Inc., no claims are made to guarantee the germination of carry-over seed.

**Note:** Experience has shown that strains of fungus resistant to metalaxyl-M (and S-isomer) may develop. Failure to control the disease will result in crop damage and/or yield losses. Since the occurrence of the resistance cannot be foreseen, Syngenta Canada Inc. accepts no responsibility for any loss of, or damage to, crops resulting from the failure of CRUISER MAXX CEREALS Seed Treatment to control the resistant fungus strains. If disease appears in a treated field, consult the government extension specialist immediately.

**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.

CRUISER MAXX CEREALS Seed Treatment is a ready-to-use water-based formulation for on-farm treatment of small-grained cereals for disease and insect protection. Treatment equipment must provide uniform coverage of CRUISER MAXX CEREALS Seed Treatment on the seed. Thorough seed coverage will offer the best protection of the seed from insect damage and disease. Uneven seed coverage may not give the desired level of disease/insect protection.

This product does not require the addition of water for application. Consult the manufacturer of the application equipment planned to be used for suitability for this application and for instructions on operation and calibration of the equipment.

Ideal storage temperature is above freezing and below 30 °C. Repeated freeze-thawing of CRUISER MAXX CEREALS Seed Treatment will not affect the physical integrity of the product. If the product should freeze, bring the product back to room temperature and ensure the contents are mixed well prior to application.

This product contains a pigment, which will adequately colour the treated seed. However, users are responsible for ensuring that the treated seed, when dried and ready for bagging, has an unnatural colour. If the pigment contained in the formulation does not colour the seed adequately, additional colourant must be added to the mixture while treating the seed. Follow instructions on the colourant package for mixing. Regulations pertaining to colouration of treated seed enforced under the “Seeds Act” must be strictly adhered to when using this product.

**USE RATES:**

For control or suppression of certain seed- and soil-borne diseases and insects on small-grained cereals, apply 325 mL or 650 mL of CRUISER MAXX CEREALS Seed Treatment per 100 kg of seed to the crops listed below. Use the higher rate if: (a) there is a history of high disease pressures in the field, (b) where field conditions favour seed-borne and soil-borne pathogens, or (c) when controlling seed-borne Septoria or early season Septoria leaf blotch
and/or (d) when control of wireworm is required or when wireworm populations are expected to be moderate to high. Thiamethoxam is a Group 4 Insecticide. Do not apply any subsequent application of a Group 4 Insecticide (i.e. in-furrow or foliar application) following treatment with CRUISER MAXX CEREALS Seed Treatment

<table>
<thead>
<tr>
<th>Crop</th>
<th>Pests 1</th>
<th>Diseases Controlled</th>
<th>Diseases Suppressed 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barley</td>
<td>Insects</td>
<td>General Seed Rots 3</td>
<td>Common Root Rot (Cochliobolus spp.)</td>
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<tr>
<td></td>
<td>Wireworms 2</td>
<td>Seedling Blight, Root Rot, and Damping-Off caused by seed- and soil-borne <em>Fusarium</em> and soil-borne <em>Pythium</em></td>
<td><em>Fusarium</em> Crown and Foot Rot</td>
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<td></td>
<td></td>
<td>Covered and False Loose Smut</td>
<td>Take-All</td>
</tr>
<tr>
<td>Winter Wheat</td>
<td>Insects</td>
<td>General Seed Rots 3</td>
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<tr>
<td></td>
<td></td>
<td>Common and Dwarf Bunt 5</td>
<td>Take-All</td>
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<tr>
<td></td>
<td></td>
<td>Loose Smut</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td>Common Bunt 4</td>
<td>Take-All</td>
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<tr>
<td></td>
<td></td>
<td>Loose Smut</td>
<td></td>
</tr>
<tr>
<td>Oats 6</td>
<td>Insects</td>
<td>General Seed Rots 3</td>
<td>Common Root Rot (Cochliobolus spp.)</td>
</tr>
<tr>
<td></td>
<td>Wireworms 2 (suppression)</td>
<td>Seedling Blight caused by seed- and soil-borne <em>Fusarium</em> and soil-borne <em>Pythium</em></td>
<td>Take-All</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Seedling Root Rot caused by seed- and soil-borne <em>Fusarium</em> and soil-borne <em>Pythium</em></td>
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<tr>
<td></td>
<td></td>
<td><em>Pythium</em> and <em>Fusarium</em> Damping-Off</td>
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<td></td>
<td></td>
<td>Covered Smut</td>
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</tr>
<tr>
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<td></td>
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storage insect pests. Seed treated with thiamethoxam has been tested and found to be effective against rusty grain beetle, saw-toothed grain beetle, red flour beetle, rice weevil, lesser grain borer, European corn borer and Indian meal moth.

2. CRUISER MAXX CEREALS Seed Treatment provides suppression of wireworm activity when applied at a rate of 325 mL/100 kg seed. If pressure is moderate to high or control is required, use 650 mL/100 kg seed to apply 20 g thiamethoxam per 100 kg seed.

3. General seed rots controlled include those caused by saprophytic organisms such as *Fusarium*, *Pythium*, *Penicillium* and *Aspergillus*.

4. Suppression means consistent control at a level which is not optimal but is still of commercial benefit.

5. Controls both seed- and soil-borne bunts (common, dwarf).

6. Oats must be treated at the lower rate of 325 mL of CRUISER MAXX CEREALS Seed Treatment per 100 kg of seed.

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**NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS:** the DIRECTIONS FOR USE for this product for uses described below were developed by persons other than Syngenta Canada Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Syngenta Canada Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crop(s) listed below. Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Syngenta Canada Inc. harmless from any claims based on efficacy or phytotoxicity in connection with the use(s) described below.

<table>
<thead>
<tr>
<th>Crop</th>
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</thead>
<tbody>
<tr>
<td><strong>Buckwheat</strong></td>
<td></td>
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<tr>
<td>Insects</td>
<td></td>
</tr>
<tr>
<td>Wireworms 2</td>
<td></td>
</tr>
<tr>
<td><strong>Diseases Controlled</strong></td>
<td></td>
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<td>Seedling Blight, Root Rot, and Damping-Off caused by seed- and soil-borne <em>Fusarium</em> and soil-borne <em>Pythium</em></td>
<td></td>
</tr>
<tr>
<td><strong>Millet</strong> (Pearl, Proso)</td>
<td></td>
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<tr>
<td>Insects</td>
<td></td>
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<tr>
<td>Wireworms 2</td>
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</tr>
<tr>
<td><strong>Rye</strong></td>
<td></td>
</tr>
<tr>
<td>Insects</td>
<td></td>
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<tr>
<td>Wireworms 2</td>
<td></td>
</tr>
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<td>Common and Dwarf Bunt 4</td>
<td></td>
</tr>
<tr>
<td><strong>Diseases Suppressed</strong></td>
<td></td>
</tr>
<tr>
<td>Common Root Rot (<em>Cochliobolus</em> spp.)</td>
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</tr>
<tr>
<td>Take-All</td>
<td></td>
</tr>
</tbody>
</table>
Crop  | Pests
---|---
**Sorghum** | **Insects**  
| Wireworms  
**Diseases Controlled**  
| General Seed Rots  
| Seedling Blight, Root Rot, and Damping-Off caused by seed- and soil-borne *Fusarium* and soil-borne *Pythium*

**Triticale** | **Insects**  
| Wireworms  
**Diseases Controlled**  
| General Seed Rots  
| Seedling Blight, Root Rot, and Damping-Off caused by seed- and soil-borne *Fusarium* and soil-borne *Pythium*
**Diseases Suppressed**  
| Common Root Rot (*Cochliobolus* spp.)  
| *Fusarium* Crown and Foot Rot  
| Take-All

1. When seed is treated for post-planting protection against registered pests, CRUISER MAXX CEREALS Seed Treatment will also provide protection during post-treatment storage of the seed against damage from many storage insect pests. Seed treated with thiamethoxam has been tested and found to be effective against rusty grain beetle, saw-toothed grain beetle, red flour beetle, rice weevil, lesser grain borer, European corn borer and Indian meal moth.
2. Suppression means consistent control at a level which is not optimal but is still of commercial benefit.
3. General seed rots controlled include those caused by saprophytic organisms such as *Fusarium*, *Pythium*, *Penicillium* and *Aspergillus*.
4. Controls both seed- and soil-borne bunts (common, dwarf).

**TANK MIXTURES:**

CRUISER MAXX CEREALS Seed Treatment applied at a rate of 325 mL/100 kg seed may be mixed with 325 mL of DIVIDEND XL RTA® if a) there is a history of high disease pressures in the field, b) where field conditions favour seed-borne and soil-borne pathogens, or c) when controlling seed-borne *Septoria* or early season *Septoria* leaf blotch. Consult each product and follow the most restrictive label precautions and limitations.

**Resistance Management Recommendations**

For resistance management, please note that CRUISER MAXX CEREALS Seed Treatment contains Group 3 and Group 4 fungicides and a Group 4 insecticide. Any fungal and (or) insect population may contain individuals naturally resistant to CRUISER MAXX CEREALS Seed Treatment and other Group 3 and Group 4 fungicides and Group 4 insecticides. A gradual or total loss of pest control may occur over time if these fungicides/insecticides are 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 and fungicide resistance:**

Where possible, rotate the use of CRUISER MAXX CEREALS Seed Treatment or other Group 3 and Group 4 fungicides and Group 4 insecticides with different groups that control the same
pathogens/insect pests.

Fungicide and insecticide use should be based on an Integrated Pest Management (IPM) program that includes scouting, historical information related to pesticide use and crop rotation and considers cultural, biological and other chemical control practices.

Monitor treated fungal and insecticide populations for sign of resistance development. If disease continues to progress after treatment with this product, do not increase the use rate. Discontinue use of this product, and switch to another fungicide and insecticide product with a different target site of action, if available.

Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and (or) IPM recommendations for specific crops and disease problems in your area.

For further information and to report suspected resistance, contact Syngenta Canada Inc. at 1-87-SYNGENTA (1-877-965-3683) or at www.syngenta.ca.

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