

Container

|       |   |   |    |           |
|-------|---|---|----|-----------|
| GROUP | 4 | 7 | 11 | FUNGICIDE |
|-------|---|---|----|-----------|

**INSURE® PULSE**  
**FUNGICIDE SEED TREATMENT**

SUSPENSION

COMMERCIAL

For seed treatment use in Crop Subgroup 6C Dried Shelled Pea and Bean (including but not limited to lentils, field pea, chickpeas and dry beans), mustard, soybeans and flax

**ACTIVE INGREDIENTS:**    Pyraclostrobin ..... 16.7 g/L  
                                 Fluxapyroxad ..... 16.7 g/L  
                                 Metalaxyl ..... 13.3 g/L

Contains 1,2-benzisothiazolin-3-one at 0.007%, 2-methyl-4-isothiazolin-3-one at 0.007%, 2-bromo-2-nitropropane-1,3-diol at 0.002%, 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00006%, as preservatives

**OR**

Contains 1,2-benzisothiazolin-3-one at 0.020% and 2-bromo-2-nitropropane-1,3-diol at 0.0018%, as preservatives

**Warning, contains the allergen soy**

**REGISTRATION NO. 32011**

**PEST CONTROL PRODUCTS ACT**

**READ THE LABEL AND ATTACHED BROCHURE BEFORE USING**

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION – SKIN IRRITANT**

**IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY  
INVOLVING THIS PRODUCT, CALL DAY OR NIGHT, 1-800-454-2673**

**NET CONTENTS: 1 L – 1000 L**

BASF Agricultural Solutions Canada Inc.  
510 - 28 Quarry Park Blvd. SE  
Calgary, Alberta T2C 5P9  
1-877-371-2273

INSURE is a registered trade-mark of BASF SE, used under license by BASF Agricultural Solutions Canada Inc.

## PRECAUTIONS

1. **KEEP OUT OF REACH OF CHILDREN.**
2. Harmful if swallowed. Do not take internally.
3. May irritate the skin. Avoid contact with skin. Avoid contact with eyes, skin and clothing.
4. Wash thoroughly after handling and before eating, drinking or smoking.
5. Applicators, other handlers, and handlers of treated seed must wear coveralls over long-sleeved shirt and long pants, chemical resistant gloves made of any waterproof material (such as nitrile, butyl, neoprene and/or barrier laminate), a NIOSH approved N95 filtering facepiece respirator (dust mask) that is properly fit tested and shoes plus socks.
6. If clothing becomes contaminated, remove and wash separately from household laundry before reuse.
7. Clean equipment thoroughly after use.

## 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 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.

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

## TOXICOLOGICAL INFORMATION

The patient should be treated symptomatically.

## **STORAGE**

1. Store this product away from food or feed. Store in original tightly closed container. Prevent from freezing.
2. Do not ship or store near food, feed, seed and fertilizers.
3. Store in cool, dry, locked, well-ventilated area without floor drain.

## **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.

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3. Make the empty container unsuitable for further use.
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5. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill, and for clean-up of spills.

### **For Returnable or 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.

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## **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.

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## **GENERAL INFORMATION**

**INSURE PULSE** is a broad spectrum fungicide that provides preventive seed and seedling protection against various seed and soil-borne pathogens. Make all applications according to the use directions in this label.

## **APPLICATION INSTRUCTIONS**

For use on farm and for commercial treatment (facilities and mobile treaters).

Uniform application on seed and complete seed coverage are necessary for seed safety and best disease protection. Seed should be sound and well cleaned prior to treatment.

Apply **INSURE PULSE** using standard slurry or mist-type seed treatment application equipment. When applied at the recommended rate, no additional dyes or dilutions with water are needed unless recommended by the manufacturer of the seed treatment application equipment/machines. Please consult the seed treatment application equipment manufacturer in question for further directions.

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

## CROP SPECIFIC RECOMMENDATIONS FOR SEED TREATMENT

### Soybean and Crop Subgroup 6C: Dried Shelled Pea and Bean

| Crop   | Target Diseases Controlled or Suppressed   | Product use rate in mL/100 kg seed |
|--|--|------------------------------------|
| <p><b>Crop Subgroup 6C*:</b><br/>Dried shelled pea and bean subgroup</p> <p>Soybean</p>  | <p>Seed rot and seedling blight caused by soil-borne <i>Fusarium</i> spp.</p> <p>Suppression of root rot caused by soil-borne <i>Fusarium</i> spp.</p> <p>Seed rot, seedling blight and root rot caused by soil-borne <i>Rhizoctonia solani</i></p> <p>Seed rot and seedling blight caused by soil-borne <i>Pythium</i> spp.</p> <p>Suppression of seed rot and seedling blight caused by seed-borne <i>Botrytis cinerea</i></p> <p>Seedling blight caused by seed-borne <i>Ascochyta</i> spp.</p> <p>Suppression of anthracnose seedling blight caused by seed-borne <i>Colletotrichum lindemuthianum</i></p> | <p>300</p>                         |
| <p>*Bean (<i>Lupinus spp.</i>) (includes grain lupin, sweet lupin, white lupin and white sweet lupin); Bean (<i>Phaseolus spp.</i>) (includes field bean, kidney bean, lima bean [dry], navy bean, pinto bean, runner bean, snap bean, tepary bean and wax bean); Bean (<i>Vigna spp.</i>) (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese long bean, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, and yard long bean); Broad bean (fava bean) (<i>Vicia faba</i>); Chickpea (garbanzo bean) (<i>Cicer arietinum</i>); Guar (<i>Cyamopsis tetragonoloba</i>); Lablab bean (hyacinth bean) (<i>Lablab purpureus</i>); Lentil (<i>Lens esculenta</i>); Pea (<i>Pisum spp.</i>) (includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea and sugar snap pea); Pigeon pea (<i>Cajanus cajan</i>)</p> |  |                                    |

## Flax and Mustard

| Crop  | Target Diseases Controlled  | Product use rate in mL/100 kg seed |
|---|---|------------------------------------|
| Flax seed<br>( <i>Linum usitatissimum</i> ) | Seed rot, seedling blight, and root rot caused by soil-borne <i>Fusarium</i> spp.<br>Seed rot, seedling blight, and root rot caused by soil-borne <i>Rhizoctonia solani</i>   | 300 - 600*                         |
| Mustard<br>( <i>Brassica hirta</i> spp.)    | Seed rot, seedling blight, and root rot caused by soil-borne <i>Fusarium</i> spp.<br>Seed rot, seedling blight, and root rot caused by soil-borne <i>Rhizoctonia solani</i><br>Seed rot and seedling blight caused by soil-borne <i>Pythium</i> spp.<br>Seed- and soil-borne blackleg ( <i>Leptosphaeria maculans</i> )<br>Seed- and soil-borne alternaria spot ( <i>Alternaria</i> spp.) | 600                                |

\*Use the lower rate under normal field conditions. Use the higher rate if: (a) there is a history of high disease pressures in the field; OR (b) where field conditions favour seed and soil-borne pathogens. If using the 600 mL per 100 kg rate, it is highly recommended that the seed be treated into a bin or truck box to allow the treated seed to dry prior to placing into the seeder hopper. This will prevent clumping and bridging in the seeder.

## TANK MIXES

This product may be tank mixed with a fertilizer, 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 BASF Agricultural Solutions Canada Inc. ("BASF") at 1-877-371-2273 for information before applying any tank mix that is not specifically recommended on this label.

## USE RESTRICTIONS

- Do not use treated seed for food, feed or oil processing.
- Do not store **INSURE PULSE** near feed or foodstuffs.
- Do not contaminate feed or foodstuffs.

**INSURE PULSE** contains sufficient pigment to conspicuously color and coat treated seed. Regulations pertaining to the coloration of treated seed enforced under the “*Seeds Act*” must be strictly adhered to when using this product.

When planting treated seeds, a closed cab planter is required at all times. All workers outside the closed cab must wear long-sleeved shirt and long pants, coveralls, chemical-resistant gloves made of any waterproof material (such as nitrile, butyl, neoprene and/or barrier laminate), shoes plus socks and a respirator with a NIOSH approved organic-vapour-removing cartridge with a pre-filter approved for pesticides OR a NIOSH approved canister approved for pesticides.

## **SEED LABELLING**

TREATED SEED MUST BE LABELLED AS FOLLOWS:

"This seed has been treated with **INSURE PULSE** containing pyraclostrobin, fluxapyroxad and metalaxyl. DO NOT use for food, feed or oil processing."

When handling treated seed, wear coveralls over long-sleeved shirt and long pants, chemical resistant gloves made of any waterproof material (such as nitrile, butyl, neoprene and/or barrier laminate), a NIOSH approved N95 filtering facepiece respirator (dust mask) that is properly fit tested and shoes plus socks.

Toxic to small wild mammals. Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil surface.

Thoroughly clean auger after handling treated seed before using same auger for handling commercial or feed grains.

Leftover treated seed should not be stored where there is a chance of it becoming mixed with untreated seed.

Store treated seed in cool, dry conditions.

When planting treated seeds, a closed cab planter is required at all times. All workers outside the closed cab must wear long-sleeved shirt and long pants, coveralls, chemical-resistant gloves made of any waterproof material (such as nitrile, butyl, neoprene and/or barrier laminate), shoes plus socks and a respirator with a NIOSH approved organic-vapour-removing cartridge with a pre-filter approved for pesticides OR a NIOSH approved canister approved for pesticides.

## **RESISTANCE-MANAGEMENT RECOMMENDATIONS**

### **Mode of Action**

**INSURE PULSE** contains three active ingredients from different fungicide groups that have distinct modes of action. Pyraclostrobin is classified as a Target Site of Action Group 11 fungicide. Fluxapyroxad is classified as a Target Site of Action Group 7 fungicide. Metalaxyl is classified as a Target Site of Action Group 4 fungicide. Due to the minimal amounts of **INSURE PULSE** applied to the seed that relocate to the upper parts of the plant and the multiple modes of action, the potential for development of resistance is extremely low. Seed treatments of **INSURE PULSE**

can therefore be followed by foliar use and resistance management guidelines of foliar use fungicides containing the same modes of action as specified on the respective labels.

### **Resistance Management**

**INSURE PULSE** contains three active ingredients with three distinct modes of action. Any fungal population may contain individuals naturally resistant to **INSURE PULSE**, and other Group 4, 7 and 11 fungicides. A gradual or total loss of pest control may occur over time if these fungicides 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 the development of fungicide resistance:

- Where possible, rotate the use of **INSURE PULSE** with different groups that control the same pathogens.
- Use tank mixtures with fungicide 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 BASF if reduced sensitivity of the pathogen to (product name) is suspected.
- 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 with a different 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 pathogens.
- For further information and to report suspected resistance, contact BASF at 1-877-371-2273.

### **ENVIRONMENTAL PRECAUTIONS**

Toxic to aquatic organisms, non-target terrestrial plants and small wild animals. Treated seed is toxic to small wild mammals.

Ensure proper soil incorporation of the seeds. **DO NOT** feed treated seed to, or otherwise expose to, wildlife or domestic birds. If treated seed is spilled outdoors or in areas accessible to birds, promptly clean up or bury to prevent ingestion. Ensure proper disposal of any surplus treated seed not intended for later planting. **DO NOT** contaminate domestic or irrigation water supplies, lakes, streams, ponds or any body of water with the chemical, used containers, treated seed or bags, which have held treated seed. **DO NOT** contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Unused or leftover treated seed should not be stored where there is a chance of it becoming mixed with untreated seed.

## PRECAUTIONS

1. **KEEP OUT OF REACH OF CHILDREN.**
2. Harmful if swallowed. Do not take internally.
3. May irritate the skin. Avoid contact with skin. Avoid contact with eyes, skin and clothing.
4. Wash thoroughly after handling and before eating, drinking or smoking.
5. Applicators, other handlers, and handlers of treated seed must wear coveralls over long-sleeved shirt and long pants, chemical resistant gloves made of any waterproof material (such as nitrile, butyl, neoprene and/or barrier laminate), a NIOSH approved N95 filtering facepiece respirator (dust mask) that is properly fit tested and shoes plus socks.
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**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.

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

## TOXICOLOGICAL INFORMATION

The patient should be treated symptomatically.

## **STORAGE**

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## **DISPOSAL**

### **For Recyclable Containers**

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