



GROUP	4		INSECTICIDE
GROUP	1	Μ	FUNGICIDES

# $\operatorname{GENESIS}^{^{\mathrm{TM}}}\operatorname{XT}$

# INSECTICIDE-FUNGICIDE

Potato Seed-Piece Treatment

Seed applied treatment for use on potatoes to control Colorado potato beetle, potato leafhopper, aphids and over wintering adult flea beetles. Controls *Fusarium* (dry rot) and suppresses *Rhizoctonia* (black scurf and stolon canker). For on-farm use only.

DUST

# AGRICULTURAL

GUARANTEE: Imidacloprid.....1.25% Thiophanate-methyl ......3.0% Mancozeb:......6.0%

# CAUTION - EYE IRRITANT

# READ THE LABEL BEFORE USING

# REGISTRATION NO. 28160 PEST CONTROL PRODUCTS ACT

Bayer CropScience Inc. 200-160 Quarry Park Blvd. S.E. Calgary, Alberta T2C 3G3

Product Information: 1 888 283 6847

NET CONTENTS: 10kg, 15kg, 18.144kg, 20 kg

Genesis<sup>™</sup> is a trademark of Bayer CropScience.

#### GENERAL INFORMATION:

GENESIS XT is an insecticide and fungicide seed-piece treatment for use on potatoes to control or suppress certain insects and diseases. GENESIS XT controls Colorado potato beetle, potato leafhopper, and aphids including green peach, buckthorn, foxglove and potato aphid. GENESIS XT also provides control of over wintering adult potato flea beetles. GENESIS XT controls Fusarium Dry Rot (*Fusarium spp.*), and suppresses black scurf and stolon canker (*Rhizoctonia solani*).

# DIRECTIONS FOR USE:

Apply 500 g of GENESIS XT per 100 kilograms of cut seed pieces for control of Colorado potato beetle, potato leafhopper, aphids and control of over wintering adult potato flea beetles. This rate will also suppress Fusarium Dry Rot (*Fusarium spp.*).

Apply 750 g of GENESIS XT per 100 kilograms of cut seed pieces for control of Colorado potato beetle, potato leafhopper, aphids and control of over wintering adult potato flea beetles. This rate will also control Fusarium dry rot (*Fusarium spp.*) and suppress black scurf and stolon canker (*Rhizoctonia solani*).

Apply using a seed dust metering applicator so that cut seed-pieces are thoroughly covered with the mixture. Thoroughly clean and sanitize cutting machines, knives, trays, tables, barrels, equipment, trucks, and planters before cutting and planting seed-pieces. Plant seed-pieces as soon as possible after cutting and treating. For optimal control of insects and diseases, good coverage of the seed-piece is required.

The length of insect control will vary depending on the rate used. Consult your local extension personnel, Bayer CropScience representative or dealer for information relevant to your area. The higher rate of GENESIS XT is recommended when extended length of insect control is needed.

#### **USE LIMITATIONS:**

Do not mix, load or clean application equipment within 30 metres of well-heads or aquatic systems. This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of GENESIS XT in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Avoid prolonged exposure of GENESIS XT-treated seed-pieces to sunlight. Do not use treated seed-pieces for food, feed, or fodder.

Do not apply any subsequent application of imidacloprid (i.e. ADMIRE 240 Flowable Systemic Insecticide in-furrow or foliar application) or other group 4 insecticide following GENESIS XT potato seed-piece treatment.

Do not apply more than 22.4 kg of GENESIS XT (0.280 kg imidacloprid) per hectare per year. Thus for seeding rates higher than 2985 kg seed/ha, the highest application rate (750 g/100 kg of seed) can not be used. For seeding rates between 2985 kg seed/ha and 4480 kg seed/ha, ensure that

the application rate does not exceed 22.4 kg of Genesis XT per hectare. The lower application rate (500 g/100 kg of seed) may be used for seeding rates up to 4480 kg seed/ha. Do not use GENESIS XT for seeding rates higher than 4480 kg seed/ha.

Under high insect pressures, a foliar insecticide may be required, therefore monitor crop regularly for insect infestation levels.

A limit of 40,000 kg potato seed pieces may be treated per day on farm.

#### **ROTATIONAL CROPS:**

Treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exists for the active ingredient, as soon as practical following the last application.

Rotation of fields treated with GENESIS XT to cereal grains (wheat, barley, oats) is acceptable after a minimum plant-back interval of 30 days and to peas and beans (including faba beans, soybeans, adzuki beans, mung beans, lima beans, scarlet runners, dry common beans, snap common beans) is acceptable after a minimum plant-back interval of 9 months. Rotation to all other food and feed crops will require a 12 month plant-back interval be observed. Green manure and other cover crops not intended for human or animal consumption are acceptable rotational crops which do not require a plant-back interval following treatment. Do not graze or harvest such cover crops for food or feed.

Imidacloprid is persistent and has a high potential for carryover; it is not recommended that this product be used in fields treated with GENESIS XT, or ADMIRE 240 Flowable Systemic Insecticide during the previous season.

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

For resistance management, please note that GENESIS XT contains both a Group 4 insecticide and Groups 1 and M fungicides. Any insect or fungal population may contain individuals naturally resistant to GENESIS XT and other Group 4 insecticide or Groups 1 and M fungicides. A gradual or total loss of pest control may occur over time if these insecticides and 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 insecticide and fungicide resistance:

- Where possible, rotate the use of GENESIS XT or other Group 4 insecticides and Groups 1 and M fungicides with different groups that control the same insects or pathogens.
- Insecticide and fungicide use should be based on an 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 insect and fungal 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 <u>www.bayercropscience.ca</u> or phone 1-888-283-6847.

### ENVIRONMENTAL HAZARDS:

Keep out of lakes, streams, ponds or other aquatic systems. DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes. This product is highly toxic to aquatic invertebrates. This product is toxic to birds. Apply this product only in accordance with this label. Dispose of all excess and any spilled treated seed pieces by covering or incorporating into the soil.

### PRECAUTIONS:

# KEEP OUT OF REACH OF CHILDREN

Harmful if swallowed, absorbed through skin or inhaled. Avoid breathing dust. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Avoid contact with skin, eyes, or clothing.

Wear coveralls over long sleeved shirt and long pants, chemical resistant gloves, shoes and socks, a chemical resistant apron, goggles or a faceshield and a NIOSH-approved respirator when:

i) Handling the product

- ii) Handling treated seed
- iii) Dusting at the hopper and treatment barrel
- iv) Loading the planter.

\* For exposure in enclosed areas, use a NIOSH approved respirator with an organic vapour (OV) cartridge or canister with any N, R, P, or HE prefilter.

\* For exposures outdoors, usa a NIOSH approved respirator with any N, R, P or HE filter. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash the outside of the gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Follow 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. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. No food, drink or tobacco should be allowed in areas of chemical storage or use.

Apply only in areas with adequate ventilation or dust collection and control equipment installed. Do not substitute fans for ventilation in areas where application is made to cut potatoes. 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.

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 the acceptable residue levels in the U.S., visit CropLife Canada's web site at: www.croplife.ca.

#### TOXICOLOGICAL INFORMATION:

No specific antidote. Treat symptomatically.

# FIRST AID:

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 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 the eye. Call a poison control centre or doctor for treatment advice.

IF ON SKIN: 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 mouth-to-mouth if possible. Call a poison control centre or doctor for further treatment advice.

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

STORAGE: Store product in original container only, away from other pesticides, fertilizer, food or feed. Do not store in direct, hot sunlight.

DISPOSAL: Do not reuse the container for any purpose.

- 1. Empty the bag thoroughly into the application equipment.
- 2. Follow provincial instructions for any required additional cleaning of the bag prior to its disposal.
- 3. Make the empty bag unsuitable for further use.
- 4. Dispose of the bag in accordance with provincial requirements.

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

# NOTICE: READ CAREFULLY

Treatment of highly mechanically damaged seed-pieces or seed-pieces of known low vigor may result in reduced germination and/or reduction of seed and seedling vigor.

Due to seed quality and storage conditions which are beyond the control of Bayer CropScience, no claims are made to guarantee germination of seed which has been treated and kept longer than the period, if any that is stated in the DIRECTIONS FOR USE section of this label.

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.

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