

2011-2264
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GROUP	4	INSECTICIDE
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TITAN™ INSECTICIDE

SUSPENSION

Titan Insecticide is a systemic insecticide for control of insect pests
and for suppression of wireworms in potatoes.

COMMERCIAL

GUARANTEE: Clothianidin600 g/L

Contains 1,2-benzisothiazolin-3-one at 0.04% and 5-chloro-2-methyl-4-isothiazolin-3-one
at 0.001% and 2-methyl-4-isothiazolin-3-one at 0.0004% as preservatives.

REGISTRATION NUMBER 27449 PEST CONTROL PRODUCTS ACT

READ THE LABEL BEFORE USING

KEEP OUT OF REACH OF CHILDREN

WARNING POISON

NET CONTENTS : 1 L, 3.8 L, 10 L, 200 L, 1000 L

This product contains no colourant. An appropriate colourant must be added when this product is
applied. Regulations pertaining to the Seeds Act must be strictly adhered to when using this
product.

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

1-(888) 283-6847

IN CASE OF SPILLS, POISONING OR FIRE, TELEPHONE EMERGENCY RESPONSE
NUMBER, 1-800-334-7577 (24 HOURS A DAY)

Titan™ is a trademark of Bayer CropScience.

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

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

If swallowed: Call a poison control center 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 center 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 to 20 minutes. Call a poison control center or doctor immediately 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 center 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 five minutes, then continue rinsing. Call a poison control center or doctor for further treatment advice.

TOXICOLOGICAL INFORMATION :

No specific antidote is available. Treat the patient symptomatically.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN. Harmful or fatal if swallowed. Harmful if absorbed through skin. Wash hands thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

IN-FURROW APPLICATION: Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes for mixing, loading, clean-up and repair. Applicators must wear long-sleeved shirt, long pants, socks, shoes and have chemical-resistant gloves available.

POTATO SEED PIECE TREATMENT: Workers mixing, loading, sorting/cutting, treating, cleaning-up, maintaining and repairing seed piece treatment equipment, handling and planting treated potato seed pieces must wear coveralls over long-sleeved shirt, long pants, chemical resistant gloves, headgear, socks and shoes, and respiratory protection (i.e. NIOSH/MSHA/BHSE-approved dust-filtering respirator or fresh air hood). Planters, while driving closed-cab equipment, are not required to wear a respirator.

USER SHOULD:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing 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.

Follow manufacturer's instructions for cleaning/maintaining. If no such instructions for washables, 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., visit CropLife Canada's Website at www.croplife.ca.

ENVIRONMENTAL HAZARDS

Toxic to aquatic organisms.

Treated seed is toxic to birds and small wild mammals. Any spilled or exposed seeds pieces must be incorporated into the soil or otherwise cleaned-up from the soil surface.

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

The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g. sandy soil) and/or the depth to the water table is shallow.

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.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage, disposal, or by cleaning of equipment.

PESTICIDE STORAGE: Store in a cool place away from feeds and other foodstuffs. Do not store in direct sunlight. Protect from freezing temperatures.

PESTICIDE 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

RECYCLABLE CONTAINER

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.

RETURNABLE CONTAINER

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

REFILLABLE CONTAINER

1. After use, return the container to the point of purchase or designated locations.
2. This container must only be refilled with Titan Insecticide at designated locations.
3. Do not reuse container for other purposes.
4. Prior to refilling inspect thoroughly for damage.
5. Check for leaks after refilling and before transportation.
6. Do not refill or transport damaged or leaking containers.
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NON-RECYCLABLE/RETURNABLE/REFILLABLE CONTAINER

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DIRECTIONS FOR USE

ROTATIONAL CROP RESTRICTIONS

Corn, canola and potatoes may be replanted at any time. A one year plant-back interval is required for leafy, root and tuber vegetables (except potatoes). A 30-day plantback interval for cereal grains, grasses, nongrass animal feeds and soybeans and dried beans is required.

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, please note that Titan Insecticide contains a Group 4 insecticide. Any insect population may contain individuals naturally resistant to this product and other Group 4 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 Titan Insecticide with different groups that control the same pests in a field;
- Use tank mixtures with insecticides from a different group when such use is permitted; Insecticide use should be based on an integrated pest management (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 the local extension specialist or certified crop advisors for any additional pesticide resistance-management and IPM recommendations for the specific site and pest problems in the area;

For further information or to report suspected resistance, contact Bayer CropScience Inc. at 1-888-283-6847.

DIRECTIONS FOR USE

Potato seed-piece treatment for control of insect pests and for suppression of wireworms.

Pests	Rate of Titan Insecticide per 100 kg potato seed pieces	Remarks
Wireworm (<i>Agriotes obscurus</i> , <i>A. lineatus</i> , <i>Limonijs agonus</i> , <i>Melanotus spp.</i> , <i>M. communis</i> (damage suppression only.)) May reduce the	20.8 mL	Apply only in areas with adequate ventilation or in areas that are equipped to remove spray mist or dust. Apply specified dosage as a diluted spray onto seed pieces using a shielded spray system that is well contained and will prevent the loss of any liquid. Agitate or stir spray solution as needed. For optimal insect control, good coverage of the seed pieces is required. Do not dilute with any more than 6 parts water to 1

damage caused by other wireworm species.		part Titan Insecticide. As part of the seed cutting and treating process, application of a fungicide registered for potato seed treatment and/or an inert absorbent ingredient is recommended to improve suberization. Plant seed pieces as soon as possible after cutting and treating. Consult local specialists, Bayer CropScience representative or dealer for information relevant to your area.
Aphid (including potato, green peach, foxglove and buckthorn aphids), Colorado potato beetle, Potato leafhopper, Potato flea beetle (overwintered adults and suppression of second generation)	10.4 – 20.8 mL	Do not apply any subsequent application of a Group 4 Insecticide (i.e., in-furrow or foliar application) following treatment with Titan Insecticide. For extended residual control of pests other than wireworm, apply the higher rate. Do not enter or allow worker re-entry into treated areas during the restricted entry interval of 12 hours.

In-furrow application for control of Colorado potato beetle and leafhoppers.

Pest	Rate of Titan Insecticide mL/100 m row	Remarks
Colorado potato beetle, Leafhoppers	2.0 – 3.33 mL (221-373 mL/ha based on 90 cm row spacing)	Apply as a narrow band in-furrow. For best results, direct spray on the seed pieces or seed potatoes in the furrow. The length of control may vary due to climate and soil conditions. The higher rate is recommended when extended length of control is needed. Do not apply more than once per season as a soil application. Do not apply any subsequent application of a Group 4 Insecticide (e.g. foliar) following an in-furrow application with Titan Insecticide. Do not apply Titan Insecticide in conjunction with a Group 4 Insecticide seed piece treatment. Do not enter or allow worker re-entry into treated areas during the restricted entry interval of 12 hours.

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