GROUP 4 INSECTICIDE

CRUISER® POTATO

Seed Piece Treatment

Suspension

AGRICULTURAL

Soluble concentrate insecticide for control of listed insect pests of potatoes.

GUARANTEE:

Thiamethoxam240 g/L

Contains 1,2-benzisothiazolin-3-one at 0.029% as a preservative or 1,2-benzisothiazolin-3-one at 0.03% plus 2-bromo-2-nitropropane-1,3-diol at 0.03% as preservatives.

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





POISON

REGISTRATION NO.: 29748
PEST CONTROL PRODUCTS ACT

NET CONTENTS: 1 L - 1050 L

Syngenta Canada, Inc.

140 Research Lane, Research Park Guelph, ON N1G 4Z3

Telephone: 1-877-964-3682

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, call a physician or poison control centre **IMMEDIATELY.** Take container, label or product name and Pest Control Product Registration Number with you when seeking medical 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 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

There is no specific antidote for this product if ingested. If a large amount has been ingested and emesis is inadequate, lavage stomach. Treat symptomatically.

PRECAUTIONS

Safety Precautions:

- 1. Hazard to humans and domestic animals.
- 2. KEEP OUT OF THE REACH OF CHILDREN and domestic animals. PREVENT ACCESS BY UNAUTHORIZED PERSONNEL.
- 3. Causes moderate eye irritation. Harmful if swallowed, inhaled or absorbed through skin. DO NOT get in eyes. Avoid contact with skin. Avoid inhalation of vapours and spray mist. Wash hands and face after handling and before eating or smoking.
- 4. Wear coveralls over a long-sleeved shirt, long pants, goggles, chemical resistant gloves, socks and boots when mixing and loading and wear long-sleeved shirt, long pants, socks and boots during application. When handling treated potato seed pieces or when working with or around equipment used to transfer treated potato seed pieces workers must wear

- coveralls over a long-sleeved shirt, long pants, a dust mask, goggles, chemical resistant gloves, socks and boots.
- 5. DO NOT use open treating equipment when treating potato seed pieces. Use only closed system treatment equipment.
- 6. DO NOT use open cab planting equipment when planting potato seed pieces treated with CRUISER® POTATO Seed Piece Treatment. Use only closed cab planting equipment. Workers working outside the closed cab must wear coveralls over a long-sleeved shirt, long pants, a dust mask, goggles, chemical resistant gloves, socks and boots.
- 7. Avoid contamination of feed and foodstuffs.
- 8. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

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 web site at www.croplife.ca.

ENVIRONMENTAL HAZARDS

TOXIC to bees, beneficial arthropods and 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 animals.

Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil or other surfaces

STORE IN A COOL, DRY PLACE.

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 DISPOSAL OF PLASTIC JUGS:

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.

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

CRUISER® is a trademark of a Syngenta Group Company

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- 5. DO NOT use open treating equipment when treating potato seed pieces. Use only closed system treatment equipment.
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GENERAL INFORMATION

CRUISER POTATO Seed Piece Treatment controls listed sucking and chewing insects through contact and ingestion when used on potatoes.

USE DIRECTIONS - POTATO SEED PIECE TREATMENT

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.

Cut seed is particularly vulnerable to excess moisture. Too much moisture will induce seed decay. CRUISER POTATO Seed Piece Treatment has been designed to be delivered in very low volumes of liquid to ensure good coverage without increasing tuber decay. CRUISER POTATO Seed Piece Treatment delivered at a diluted volume of 263 mL/100 kg of seed gives good coverage over the seed. Do not add excess water to the cut seed.

Store cut seed at or below 7 °C. Temperatures above 10 °C promote soft rot in seed.

Apply only in areas with adequate ventilation or in areas that are equipped to remove mist or dust.

Seed loading on to the belt after cutting should be uniform. Do not overload. If there are several layers of seed under the hood, coverage will be erratic.

Calibrate the output to the actual flow rate. If calibrated properly, there will be no liquid material dripping off of the roller table.

If the treated seed needs to be stored or held for a few days, make sure that there is adequate cool air movement through the pile of cut seed potatoes at relative humidity of 85-90%. Cut and treated seed should not be piled above 1.8m in height. Best results are obtained if potatoes are planted immediately after CRUISER POTATO Seed Piece Treatment is applied to the seed. When transporting cut and CRUISER POTATO Seed Piece Treatment treated seed make sure the seed is covered.

When treating cut seed, CRUISER POTATO Seed Piece Treatment can be followed with a dust/talc treatment to improve suberization.

DO NOT apply any subsequent application of thiamethoxam in-furrow or foliar application or other group 4 insecticide following seed piece treatment with CRUISER POTATO Seed Piece Treatment.

Avoid using liquid seed treatment on excessively sprouted seed.

USE DIRECTIONS

CROP	POTATOES - SEED PIECE TREATMENT APPLICATION	
PESTS	Colorado potato beetle, Aphids (including green peach, potato, buckthorn and foxglove aphid), Potato leafhopper	
PRODUCT RATE (mL/ha)	Choose the appropriate rate for CRUISER POTATO Seed Piece Treatment from the chart below, based upon the seeding rate. Use high rate for extended residual control. Do not apply more than 24.4 mL product /100 kg seed pieces or 488 mL product per hectare.	
APPLICATION	MIXING INSTRUCTIONS:	
METHOD	Shake or mix well before using.	
	Apply only in areas with adequate ventilation or in areas that are equipped to remove spray mist or dust.	
	Apply CRUISER POTATO Seed Piece Treatment as a water-based slurry utilizing standard slurry seed treatment equipment which provides uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of insect control. Thoroughly mix the recommended amount of CRUISER POTATO Seed Piece Treatment into the required amount of water for the slurry treater and dilution rate to be used. Follow the manufacturer's application instructions for the seed treatment equipment being used. Maintain constant agitation of the slurry during the treatment.	
NOTES	Cut seed is particularly vulnerable to excess moisture. Too much moisture will induce seed decay. CRUISER POTATO Seed Piece Treatment has been designed to be delivered in very low volumes of liquid to ensure good coverage without increasing tuber decay. CRUISER POTATO Seed Piece Treatment, delivered at a diluted volume of 263 mL/100 kg of seed gives good coverage over the seed. Do not add excess water to the cut seed.	
	Store cut seed at or below 7 °C. Temperatures above 10 °C promote soft rot in seed.	
	Apply only in areas with adequate ventilation or in areas that are equipped to remove mist or dust.	
	Seed loading on to the belt after cutting should be uniform. Do not overload. If there are several layers of seed under the hood, coverage will be erratic.	
	Calibrate the output to the actual flow rate. If calibrated properly, there will be no liquid material dripping off of the roller table.	
	If the treated seed needs to be stored or held for a few days, make sure that there is adequate cool air movement through the pile of cut seed potatoes at relative humidity of 85-90%. Cut and treated seed should not be piled above 1.8m in height. Best results are obtained if potatoes are planted immediately after CRUISER POTATO Seed Piece Treatment is applied to the seed. When transporting cut and CRUISER POTATO Seed Piece Treatment treated seed make sure the seed is covered.	
	When treating cut seed, CRUISER POTATO Seed Piece Treatment should be followed with a dust/talc treatment to improve suberization.	
	Do not apply any subsequent application of thiamethoxam in-furrow or foliar application or other group 4 insecticide following seed piece treatment with CRUISER POTATO Seed Piece Treatment.	
	Avoid using excessively sprouted seed for liquid seed treatment.	
CROP	POTATOES – SEED PIECE TREATMENT - TANK MIX WITH MAXIM® LIQUID PSP	

PESTS	Colorado potato beetle, Aphids (including green peach, potato, buckthorn and foxglove aphid), Potato leafhopper	
	Black Scurf and Stem and Stolon Canker (<i>Rhizoctonia solani</i>), Silver Scurf (<i>Helminthosporium solani</i>), Fusarium Dry Rot (<i>Fusarium</i> spp.)	
PRODUCT RATE (mL/ha)	Apply MAXIM Liquid PSP at a rate of 5.2 mL per 100 kg seed pieces in tank mix with CRUISER POTATO Seed Piece Treatment. Choose the appropriate rate for CRUISER POTATO Seed Piece Treatment from the chart below, based upon the seeding rate. Do not apply more than 24.4 mL product /100 kg seed pieces or 488 mL product per hectare.	
APPLICATION METHOD	MIXING INSTRUCTIONS:	
	Shake or mix well before using.	
	Apply only in areas with adequate ventilation or in areas that are equipped to remove spray mist or dust.	
	Apply CRUISER POTATO Seed Piece Treatment plus MAXIM Liquid PSP as a water-based slurry utilizing standard slurry seed treatment equipment which provides uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of disease or insect control. Thoroughly mix the recommended amount of CRUISER POTATO Seed Piece Treatment and MAXIM Liquid PSP into the required amount of water for the slurry treater and dilution rate to be used. Follow the manufacturer's application instructions for the seed treatment equipment being used. Maintain constant agitation of the slurry during the treatment.	

NOTES

Cut seed is particularly vulnerable to excess moisture. Too much moisture will induce seed decay. CRUISER POTATO Seed Piece Treatment and MAXIM Liquid PSP have been designed to be delivered in very low volumes of liquid to ensure good coverage without increasing tuber decay. CRUISER POTATO Seed Piece Treatment tank mixed with MAXIM Liquid PSP, delivered at a diluted volume of 263 mL/100 kg of seed gives good coverage over the seed. Do not add excess water to the cut seed.

Store cut seed at or below 7 °C. Temperatures above 10 °C promote soft rot in seed.

Apply only in areas with adequate ventilation or in areas that are equipped to remove mist or dust.

Seed loading on to the belt after cutting should be uniform. Do not overload. If there are several layers of seed under the hood, coverage will be erratic.

Calibrate the output to the actual flow rate. If calibrated properly, there will be no liquid material dripping off of the roller table.

If the treated seed needs to be stored or held for a few days, make sure that there is adequate cool air movement through the pile of cut seed potatoes at relative humidity of 85-90%. Cut and treated seed should not be piled above 1.8m in height. Best results are obtained if potatoes are planted immediately after CRUISER POTATO Seed Piece Treatment tank mixed with MAXIM Liquid PSP is applied to the seed. When transporting cut seed treated with CRUISER POTATO Seed Piece Treatment tank mixed with MAXIM Liquid PSP make sure the seed is covered.

When treating cut seed, CRUISER POTATO Seed Piece Treatment tank mixed with MAXIM Liquid PSP should be followed with a dust/talc treatment to improve suberization.

Do not apply any subsequent application of thiamethoxam in-furrow or foliar application or other group 4 insecticide following seed piece treatment with CRUISER POTATO Seed Piece Treatment.

Avoid using excessively sprouted seed for liquid seed treatment.

CRUISER POTATO SEED PIECE TREATMENT- RATE CONVERSION CHART

To use this Rate Conversion Chart, first determine whether the low or high rate is required*, then choose the appropriate rate (mL product/100kg seed piece) based on the planned seeding rate (number of 100 kg seed piece units per hectare).

SEEDING RATE	APPLICATION RATE (mL product/100 kg potato seed piece)		
(# 100 kg units/ha)	Low Rate (equivalent to	High Rate* (equivalent to	
	380 mL product per ha)	488 mL product per ha)	
16	23.7		
17	22.3		
18	21.1		
20	19.0	24.4	
21	18.0	23.2	
22	17.2	22.2	
23	16.5	21.2	
24	15.8	20.3	
25	15.2	19.5	
26	14.6	18.8	
27	14.0	18.1	
28	13.5	17.4	
29	13.1	16.8	
30	12.6	16.3	
31	12.2	15.7	
32	11.8	15.2	
33	11.5	14.8	
34	11.2	14.3	
35	10.8	13.9	
36	10.5	13.5	
37	10.3	13.2	
38	10.0	12.8	
39	9.7	12.5	
40	9.5	12.2	
41	9.3	11.9	
42	9.0	11.6	
43	8.8	11.3	
44	8.6	11.1	
45	8.4	10.8	
46	8.2	10.6	
47	8.1	10.4	
48	7.9	10.2	

^{*}Use the high rate for extended residual control.

Example calculation:

Seeding rate of 20 100 kg units of seed / ha X 19 mL product/100 kg unit of seed = 380 mL product/ha

Seeding rate of 20 100 kg units of seed / ha X 24.4 mL product/100 kg unit of seed = 488 mL product/ha

The ranges in the table above take into account various row widths, plant spacings within the row and seed sizes. The rates for CRUISER POTATO Seed Piece Treatment used as a seed treatment are based upon the seeding rate.

Rotational Restrictions

Treated areas may be replanted immediately following harvest or as soon as practical following the last application with any crop listed on this label or to sorghum, wheat, barley, canola and pome fruit. Any cover crop planted for erosion control or soil improvement may be planted as soon as practical following the last application. However, the cover crop may not be grazed or harvested for food or feed. For all other crops, a 120 day plant-back interval must be observed.

Resistance-Management Recommendations

For resistance management, please note that CRUISER POTATO Seed Piece Treatment contains a Group 4 insecticide (neonicotinoid class of chemistry). Any insect population may contain individuals naturally resistant to CRUISER POTATO Seed Piece Treatment and other Group 4 insecticides. The resistant individuals may dominate the insect population if this group of insecticides is used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also exist. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies established for the crop and use area.

To delay insecticide resistance:

Where possible, rotate the use of CRUISER POTATO Seed Piece Treatment or other Group 4 insecticides 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 IPM program that includes scouting, 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 company representatives at 1-87-SYNGENTA (1-877-964-3682) or at www.syngenta.ca.

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