

2024-09-11  
2023-5578

<b>GROUP</b>	<b>28</b>	<b>INSECTICIDE</b>
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**BENEVIA™ Insecticide**

SUSPENSION

FOR SALE FOR USE ON OILSEEDS AND POTATOES

COMMERCIAL-AGRICULTURAL

READ THE LABEL AND ACCOMPANYING BOOKLET BEFORE USING

**ACTIVE INGREDIENT:** Cyantraniliprole 100 g/L

Warning, contains the allergen soy.

REGISTRATION NO 30893 PEST CONTROL PRODUCTS ACT

POTENTIAL SKIN SENSITIZER

**NET CONTENTS:** 0.5, - 3.79 - 100 LITRES

FMC Corporation  
6755 Mississauga Road, Suite 204  
Mississauga, ON L5N 7Y2  
1-833-362-7722

**PRECAUTIONS:**

- **KEEP OUT OF REACH OF CHILDREN.**
- Potential skin sensitizer.
- Wear a long-sleeved shirt, long pants and chemical resistant gloves while mixing /loading, applying and during clean up and repair.
- Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Users 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.
- Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.
- See the Aerial Application Label Instructions section of this label for additional precautions specific to aerial application.

**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 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.

For medical emergencies call 1-800-331-3148 (24 hours).

**ENVIRONMENTAL HAZARDS:**

- Toxic to non-target terrestrial plants. Observe spray buffer zones specified under DIRECTIONS FOR USE.
- Toxic to aquatic organisms. Observe spray buffer zones specified under DIRECTIONS FOR USE.
- Toxic to certain beneficial insects. Minimize spray drift to reduce harmful effects on beneficial insects in habitats next to the application site such as hedgerows and woodland.
- Toxic to bees. DO NOT apply this product to blooming crops or weeds while bees are actively visiting the treatment area. Apply early in the morning or late in the evening when bees are not active. Minimize spray drift to reduce harmful effects on bees in habitats close to the application site.
- To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.
- Avoid application when heavy rain is forecast.

- Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.
- DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, and wetlands), estuarine/marine habitats.
- DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

**STORAGE:**

Store product in original container only, away from other pesticides, fertilizer, food or feed. Not for use or storage in or around the home. Keep container closed.

**DISPOSAL:**

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/territorial requirements.

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.

**TOXICOLOGICAL INFORMATION:** Treat symptomatically.

**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.

GROUP	28	INSECTICIDE
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**BENEVIA™ insecticide**

SUSPENSION

FOR SALE FOR USE ON OILSEEDS AND POTATOES

COMMERCIAL-AGRICULTURAL

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**ACTIVE INGREDIENT:** Cyantraniliprole 100 g/L

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POTENTIAL SKIN SENSITIZER

**NET CONTENTS:** 0.5 - 3.79 - 100 LITRES

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## GENERAL INFORMATION

BENEVIA™ Insecticide is an Oil Dispersion that can be applied as a foliar spray, using ground or aerial application to control many important insect pests. BENEVIA™ Insecticide is specially formulated for foliar application. BENEVIA™ Insecticide is mixed with water for application.

BENEVIA™ Insecticide is a member of the anthranilic diamide class of insecticides which act on insect ryanodine receptors. Although BENEVIA™ Insecticide has contact activity, it is most effective through ingestion of treated plant material. After exposure to BENEVIA™ Insecticide, affected insects will rapidly stop feeding, become paralyzed, and typically die within 1 - 3 days. Time applications to the most susceptible insect pest stage, typically at egg hatch and/or newly hatched larvae or nymphs, before populations reach damaging levels. When pest populations are high, use the highest listed application rate for that pest.

Apply at the labelled rates when insect populations reach locally determined economic thresholds. Consult your local extension specialist or certified crop advisor to determine appropriate threshold levels for treatment in your area.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

Use sufficient water to obtain thorough, uniform coverage.

## DIRECTIONS FOR USE

### POTATOES

**Spray Volume for Potatoes:** Apply in a minimum finished spray volume of 100 L/ha by ground. Apply in a minimum finished spray volume of 50 L/ha by air.

SITE	PEST	RATE mL BENEVIA™ Insecticide/HA	RE- APPLICATION INTERVAL (DAYS)	SPECIFIC DIRECTIONS
POTATOES	Colorado potato beetle	750 to 1000	7-14	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control.  For optimum control of aphids, apply MSO Concentrate with Leci-Tech* at an application rate of 0.5% v/v.
	European corn borer Variegated cutworm	500 to 750	5	For Colorado potato beetle, use the higher application rate under heavy pest pressure and/or when larger larvae are present.
	Aphids	500 to 1500		Colorado potato beetle resistance management: DO NOT apply BENEVIA™ Insecticide for Colorado potato beetle control if

	Flea beetles	500 to 1000		any Group 28 insecticide was used at planting as an in-furrow, soil or seed-piece treatment.  For control of European corn borer, time the application to coincide with peak egg hatch. Scout for European corn borer by monitoring egg laying and egg hatch to determine application timing.
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**RESTRICTIONS AND PRECAUTIONS: Potatoes**

- For any of the pests listed above, use the high rate under heavy pest pressure.
- Do not make more than 4 applications per season.
- Do not apply less than 7 day before harvest. Observe a 7-day PHI.
- Do not exceed a total of 450 g of cyantraniliprole per ha per season.
- Do not make a foliar application of BENEVIA™ Insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed pieces treated with any Group 28 insecticide.

**CROP GROUP 20 – OILSEEDS**

**Spray Volume for Oilseeds Group:** Apply in a minimum finished spray volume of 100 L/ha by ground. Apply in a minimum finished spray volume of 50 L/ha by air.

SITE	PEST	RATE mL BENEVIA™ Insecticide/HA	RE-APPLICATION INTERVAL (DAYS)	SPECIFIC DIRECTIONS
OILSEEDS GROUP  Borage; Calendula; Canola; Crambe; Cuphea; Echium; Euphorbia; Evening Primrose; Flax seed; Gold of Pleasure; Hare's ear mustard; Lesquerella; Lunaria; Meadowfoam;	Diamondback moth	250 to 500	7	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control.  For early season cutworm control, apply to foliage when rain is not expected in the next 24 hours. For optimal control, apply to smaller plants or when
	Cabbage looper			
	Imported cabbageworm			
	Sunflower head moth			
	Bertha armyworm	500		
	Cutworms	500 to 750		
	Swede midge			
	Cabbage seedpod weevil (suppression)	500 to 1000		

Milkweed; Mustard seed; Niger seed; Oil radish; Poppy seed; Rapeseed; Rose hip; Safflower; Stokes Aster; Sunflower; Sweet rocket; Tea oil plant	Flea beetles	500 to 1000		lower portions of the plant can receive adequate coverage.  Monitor swede midge activity every 2-4 days using pheromone baited traps. Follow local threshold.
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**RESTRICTIONS AND PRECAUTIONS: Oilseeds**

- For pests with a range of application rates, use the high rate under heavy pest pressure.
- Do not make more than 4 applications per season.
- Do not apply within 7 days of harvest. Observe a 7-day PHI.
- Do not exceed a total of 450 g of cyantranilprole per ha per season.
- Do not make a foliar application of BENEVIA™ Insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed treated with any Group 28 insecticide.

**Field sprayer application:** **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) fine. Boom height must be 60 cm or less above the crop or ground.

**Aerial application:** **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply when wind speed is greater than 16 km/h at flying height at the site of application. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) fine. Reduce drift caused by turbulent wingtip vortices. Nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotorspan.

Apply only by fixed-wing or rotary aircraft equipment, which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label. Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Use Precautions for Aerial Application

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the **National Aerial Pesticide Application Manual, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.**

Operator Precautions for Aerial Application

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

**Product Specific Precautions for Aerial Application**

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-833-362-7722 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following: Apply the recommended rate in a minimum spray volume of 50 litres per hectare.

**Spray Buffer zones:**

A spray buffer zone is NOT required for:

- uses with hand-held application equipment permitted on this label.

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands) and sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands).

Method of application	Crop		Spray Buffer Zones (metres) Required for the Protection of:		
			Freshwater Habitat of Depths:		Terrestrial habitat
			Less than 1 m	Greater than 1 m	
Field sprayer	Potato and oilseed group		2	1	1
Aerial	Potato and oilseed group	Fixed wing	5	1	15
		Rotary wing	3	1	15

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

**MIXING INSTRUCTIONS:**

Spray equipment must be clean and free of previous pesticide deposits before applying BENEVIA™ Insecticide. Fill spray tank 1/4 to 1/2 full of water. Add BENEVIA™ Insecticide directly to spray tank. Mix thoroughly to fully disperse the insecticide; once dispersed continued agitation is required. Use mechanical or hydraulic means; do not use air agitation. Spray mix should not be stored overnight in spray tank.

**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 FMC of Canada Limited at 1-833-362-7722 for information before applying any tank mix that is not specifically recommended on this label.



Tank mix and crop tolerance –BENEVIA™ Insecticide is an oil-dispersion. Tank mixing BENEVIA™ insecticide with some products formulated as emulsifiable concentrates (EC) and certain fungicides can result in crop injury. Strobilurin (Group 11) fungicides, and copper- and captan-containing fungicides applied in tank mixes with BENEVIA™ Insecticide, or applied close in time to application of BENEVIA™ Insecticide, have been shown to cause crop injury under laboratory settings. Tank mixes of BENEVIA™ with some products formulated as emulsifiable concentrates (EC), strobilurin (Group 11) fungicides (for example Cabrio and Quadris), copper and sulfur based fungicides, chlorothalonil based fungicides (for example, Bravo Weather Stik), and the fungicides Captan, Tanos®, Rally and Manzate may result in adverse crop response. Some materials including oils, surfactants, adjuvants, nutritionals and pesticide formulations when applied individually, sequentially, or in tank mixtures may solubilize the plant cuticle, facilitate penetration into plant tissue, and increase the potential for crop injury. The application of strobilurin (Group 11) fungicides in a short time sequence (i.e., seven days apart or less between applications) before or after BENEVIA™ Insecticide may also result in adverse crop response. Applying BENEVIA™ with any product that produces adverse crop response in a tank mixture, specifically including, but not limited to, those listed above, may also cause adverse crop response when applied in a short time sequence. Such uses should be tested as described below before broad application is made.

Crop varieties can differ in their responsiveness, and environmental conditions can have an influence. It is not possible to test BENEVIA™ Insecticide alone or with all possible tank mix combinations on all crop varieties under all environmental conditions. To prevent potential crop injury, test the mixture in a limited area in accordance with label directions prior to using BENEVIA™ Insecticide with any tank mix partner on a wide area. When considering the use of a tank mixture on a labeled crop without prior experience, or which is not specifically described on BENEVIA™ product labeling or in other product use instruction, or when applying any of the aforementioned products in close sequence with BENEVIA™, it is important to check crop safety first. Follow the most restrictive label. Consult a representative for more information regarding use of BENEVIA™ Insecticide in tank mixtures.

#### Acidification of Spray Tank

If the pH of the final spray solution is high (pH >8) and the spray solution is not going to be sprayed within 4 hours, then a spray tank acidifier should be added to the tank to adjust the pH to 7.5 or less. Spray tanks of approximately pH 8 or less can be held for up to 8 hours before spraying. Do not store the spray mixture overnight in the spray tank.

#### **SPRAYER CLEANUP:**

Prior to application, start with clean, well maintained application equipment. Immediately following application, thoroughly clean all spray equipment to reduce the risk of forming hardened deposits which might become difficult to remove.

Drain spray equipment. Thoroughly rinse sprayer and flush hoses, boom and nozzles with clean water. Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. Do not clean near wells, water sources or desirable vegetation.

Dispose of waste rinse water in accordance with local regulations.

#### **PRECAUTIONS:**

- **KEEP OUT OF REACH OF CHILDREN.**
- Potential skin sensitizer.
- Wear a long-sleeved shirt, long pants and chemical resistant gloves while mixing /loading, applying and during clean up and repair.
- Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Users 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.
- Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

- See the Aerial Application Label Instructions section of this label for additional precautions specific to aerial application.

**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 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.

For medical emergencies call 1-800-331-3148 (24 hours).

**TOXICOLOGICAL INFORMATION:** Treat symptomatically.

**ENVIRONMENTAL HAZARDS:**

- Toxic to non-target terrestrial plants. Observe spray buffer zones specified under DIRECTIONS FOR USE.
- Toxic to aquatic organisms. Observe spray buffer zones specified under DIRECTIONS FOR USE.
- Toxic to certain beneficial insects. Minimize spray drift to reduce harmful effects on beneficial insects in habitats next to the application site such as hedgerows and woodland.
- Toxic to bees. DO NOT apply this product to blooming crops or weeds while bees are actively visiting the treatment area. Apply early in the morning or late in the evening when bees are not active. Minimize spray drift to reduce harmful effects on bees in habitats close to the application site. To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.
- Avoid application when heavy rain is forecast.
- Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.
- DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, and wetlands), estuarine/marine habitats.
- DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

**ROTATIONAL CROP RESTRICTIONS:**

**Recommended Plant-Back Intervals (PBI) for Rotational Crops.**

PBI	CROPS
0 days	Crop Group 1C (Tuberous and corm vegetables); Crop Group 3-07 (Bulb vegetables); Crop Group 4 (Leafy vegetables; except <i>Brassica</i> vegetables); Crop Group 5 ( <i>Brassica</i> (Cole) leafy vegetables); Crop Group 8-09 (Fruiting vegetables); Crop Group 9 (Cucurbit vegetables); Crop Group 13-07B (Bushberry subgroup); Crop Group 20 (Oilseed)

30 days	Crop Group 1A (Root and tuber vegetables); Crop Group 2 (Leaves of root and tuber vegetables); Crop Group 6 (Legume vegetables (succulent or dried)); Crop Group 7 (Foliage of legume vegetables); Crop Group 13-07G (Lowgrowing berry subgroup); Crop Group 15 (Cereal grains); Crop Group 16 (Forage, fodder, and straw of cereal grains); Crop Group 17 (Grass forage, fodder, and hay); Crop Group 18 (Nongrass animal feeds: Forage, fodder, straw and hay)
365 days	Other crops

**RESISTANCE-MANAGEMENT RECOMMENDATIONS:**

For resistance management, please note that BENEVIA™ Insecticide contains a Group 28 insecticide. Any insect population may contain individuals naturally resistant to BENEVIA™ Insecticide and other Group 28 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 are 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 BENEVIA™ Insecticide or other Group 28 insecticides with different groups that control the same pests.
- Make no more than 2 successive applications per generation to the same insect species on a crop. The following application to the target pest(s) must be with a registered product with a different mode of action.
- Avoid using the same mode of action (same IRAC group number) on consecutive generations of insect pests.
- Use tank mixtures with insecticides from a different group that is effective on the target pest when such use is permitted.
- Insecticide use should be based on an 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 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 FMC Corporation at 1-833-362-7722.

**STORAGE:**

Store product in original container only, away from other pesticides, fertilizer, food or feed. Not for use or storage in or around the home. Keep container closed.

**DISPOSAL:**

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/territorial requirements.

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.

**NOTICE TO USER:**

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\*All other products mentioned are trademarks of their respective companies.