

PYGANIC[®] Crop Protection EC 1.4 II

AGRICULTURAL
INSECTICIDE

EMULSIFIABLE CONCENTRATE

REGISTRATION NO. 30164

PEST CONTROL PRODUCTS ACT



READ THE LABEL BEFORE USING

- For use on organic growing crops and ornamentals as described below
- Provides rapid knockdown & kill of plant pests
- Contains pyrethrum – a botanical insecticide derived from chrysanthemums

ACTIVE INGREDIENT:

Pyrethrins..... 1.40%

MGK[®] and PYGANIC[®] - Registered trademarks of McLaughlin Gormley King Company

KEEP OUT OF REACH OF CHILDREN

POTENTIAL SKIN SENSITIZER

Net Contents: _____

Manufactured by:



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Minneapolis, MN 55428
U.S.A.
(763) 544-0341

EPA Est. No. 1021-MN-2

Valent Canada Inc., 201-230 Hanlon Creek Blvd., Guelph, Ontario N1C 0A1, (519) 767-9262

DIRECTIONS FOR USE:

USE RESTRICTIONS AND PRECAUTIONS

- Apply this product only as specified on this label.
- Do not contaminate food or feedstuffs.
- Do not apply this product in a way that will contact workers or other persons, either directly or through drift.
- Do not wet plants to the point of runoff or drip.
- Do not apply directly to or near water, storm drains or drainage ditches. Do not apply when windy. To prevent product runoff, do not over water the treated area(s) or apply when heavy rain is expected. Rinse applicator over lawn or garden area only.

Directions:

pH: It is recommended that the final mix be buffered to a pH of 5.5 – 7.0.

Honey Bees: To avoid possible harm to honey bees, it is advisable to apply in the early morning or late evening hours.

Phytotoxicity: Plant safety is an important consideration when using insecticides. It is not possible to evaluate the phytotoxicity of PYGANIC® Crop Protection EC 1.4 II towards numerous plant varieties that may react differently to insecticides in different growth stages or under varying environmental conditions. Before making widespread applications of PYGANIC Crop Protection EC 1.4 II, treat a limited number of plants and observe for phytotoxicity over a 10-day period. Slight to moderate foliar phytotoxicity (leaf discolouration) has been reported after repeated applications of PYGANIC Crop Protection EC 1.4 II on some cultivars of strawberry.

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.

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 S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

Chemigation: **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 S572.1) medium classification. Applications **MUST** be conducted **WITHOUT** the use of end guns.

DO NOT apply by aerial application equipment.

Buffer zones:

Use of the following spray methods or equipment **DO NOT** require a buffer zone: hand-held or backpack sprayer and spot treatment.

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Method of application	Crop	Buffer Zones (metres) Required for the Protection of:				
		Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Chemigation	Cranberry	10	1	2	1	
Ground boom sprayer	Low Growing Berry Group (bearberry, bilberry, blueberry lowbush, cloudberry, cranberry, lingonberry, Muntries, partridgeberry, strawberry)	35	5	10	4	
	Pinto bean, snap bean, wax bean, tomato and rose	20	3	5	3	
Airblast sprayer	Highbush blueberry, grape, raspberry	Early airblast	40	15	20	10
		Late airblast	30	5	10	5

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) 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.

The buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pest Management Regulatory Agency web site.

APPLY ON LISTED ORGANIC CROPS ACCORDING TO INDICATED APPLICATION RATES:

Apply in sufficient spray volume to ensure complete and thorough coverage of all plant surfaces. Monitor for pest presence and apply when pests are first observed; do not wait until plants are heavily infested. Repeat application if necessary, as indicated by monitoring, but do not reapply within the minimum indicated reapplication intervals.

Crop	Pest	Application Rate of PyGanic Crop Protection EC 1.4 II	Comments and Restrictions
Pinto bean Snap bean Wax bean	Aphids Beet armyworm Cabbage Looper Leafhoppers Mexican bean beetle Spotted cucumber beetle Striped cucumber beetle	2.32 – 4.65 L/ha (30-60 g a.i./ha)	Do not reapply more often than every 7 days. Do not apply more than 8 times per season. Do not apply more than 37.2 L/ha (480 g a.i./ha) per growing season.
Tomato	Aphids Beet armyworm Cabbage Looper Leafhoppers Spotted cucumber beetle Striped cucumber beetle		
Blueberry Grape Raspberry	Aphids Leafhoppers		
Rose	Aphids		

Crop	Pest	Application Rate of PyGanic Crop Protection EC 1.4 II	Comments and Restrictions
Low Growing Berry Subgroup (CG 13-07G) Bearberry; Bilberry; Blueberry, lowbush; Cloudberry; Cranberry; Lingonberry; Muntries; Partridgeberry; Strawberry; Cultivars, varieties and/or hybrids	Aphids Leafhoppers Leafrollers Leaf tiers Spanworms Blackheaded fireworm Sparganothis fruitworm (first generation only)"	2.32 – 4.65 L/ha (30-60 g a.i./ha)	For the low growing berry subgroup, do not reapply more often than every 3 days. Do not apply more than 10 times per growing season. Do not apply more than 46.5 L/ha (600 g a.i./ha) per growing season. For chemigation application (cranberry only) see: Direction For Chemigation on Cranberry.

APPLICATION DIRECTIONS

- Mix only enough for immediate use.
- Dilute PyGanic Crop Protection EC 1.4 II in sufficient water for thorough coverage.
- Adjust spray solution to pH of 5.5 – 7.0, if outside that range.
- Apply product promptly after mixing.
- Complete coverage of all leaf surfaces is essential for optimum results, but do not wet plants to the point of runoff or drip.
- If the mixture is not applied immediately after mixing, agitate before application.
- Do not apply when wind speed favours drift beyond the area intended for treatment.
- If possible, apply in the early morning or evening hours; the reduced UV exposure and lower temperatures will increase performance and reduce the impact on pollinators.

Directions for Chemigation on Cranberry

DO NOT apply PYGANIC Crop Protection EC 1.4 II by chemigation to other crops listed on this label. PYGANIC Crop Protection EC 1.4 II may be applied through a solid set overhead sprinkler irrigation system that will apply water uniformly and within the confines of a closed perimeter of dykes. Do not apply this product through any other type of irrigation system. Sprinkler systems that deliver a low coefficient of uniformity such as certain water drive units are not recommended. Non-uniform distribution of treated water may reduce effectiveness or result in illegal pesticide residues on the crop.

Proper calibration of the chemigation system is essential to deliver the desired rate per hectare in a uniform manner and to minimize wash-off time. If you have questions about calibration, contact the equipment manufacturer or other expert.

Equipment Requirements

- The system must contain an air gap, or approved backflow prevention device, or approved functional check valve, vacuum relief valve (including inspection port), and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow unless the water is from a man-made self-contained source on private land.
- The pesticide injection pipeline must contain a functional, automatic quick-closing check valve or one-way valve to prevent the flow of fluid back toward the injection pump. A secondary containment system around the injection port area must be in place.
- The pesticide injection pipeline must also contain a functional, normally closed, valve located on the intake side of the injection system to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection when the water pressure drops or water flow stops. Alternatively, in the absence of such an automatic system, the injection procedure must be continuously monitored by an operator who is able to manually shut off pesticide injection under the same circumstances.
- Systems must use a metering device, such as a positive displacement injection pump (or flow meter on eductor) effectively designed and compatible with pesticides and capable of being fitted with a system interlock.
- The tank holding the insecticide mixture should be free of rust, fertilizer, sediment, and foreign material, and equipped with an in-line strainer situated between the tank and the injection point.
- To insure uniform mixing of the insecticide in the water line, inject the mixture in the center of the pipe diameter or just ahead of an elbow or tee in the irrigation line so the turbulence created at those points will assist in mixing. The injection point must be located after all back-flow prevention devices on the water line unless the water is from a man-made self-contained source on private land.

Precautions

- **DO NOT** connect an irrigation system used for pesticide application to a public water system unless the required safety devices for public water systems are in place. Specific local regulations may apply and must be followed.
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall operate the system and shall shut the system down to make necessary adjustments should the need arise.
- **DO NOT** apply when wind speed causes non-uniform distribution.
- **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 prescribed American Society of Agricultural Engineers (ASAE S572.1) fine classification. Applications must be conducted **WITHOUT** the use of end guns.
- **DO NOT** allow spray pattern to exceed the enclosed bed area.

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 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.

PRECAUTIONS:

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during application within a closed cab.

KEEP OUT OF REACH OF CHILDREN. Avoid breathing vapors or spray mist. Avoid contact with skin or eyes. In case of contact, flush with plenty of water. Wash with soap and warm water after use. Obtain medical attention if irritation persists. This pesticide may cause skin sensitization reactions in certain individuals. Avoid contamination of food or feedstuffs.

TOXICOLOGICAL INFORMATION: Treat symptomatically.

ENVIRONMENTAL PRECAUTIONS:

TOXIC to aquatic organisms. Observe buffer zones specified under DIRECTIONS FOR USE.

Toxic to bees. Bees can be exposed to direct treatment, drift, or residues on flowering crops or weeds.

DO NOT apply this product to flowering crops if bees are visiting the treatment area. 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.

STORAGE:

Do not contaminate water, food, or feed by storage or disposal. Store in a cool dry place. Keep container closed.

DISPOSAL:

Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank. Follow provincial instructions for any required additional cleaning of the container prior to its disposal. Make the empty container unsuitable for further use. Dispose of the container in accordance with provincial requirements. 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 cleanup of spills.

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.

EMERGENCY TELEPHONE NUMBER:

In case of Medical emergencies or health and safety inquiries, or in case of fire, leaking or damaged containers, information may be obtained by calling **1-888-740-8712**.