# ACCEPTED FOR REGISTRATION

Sep 18, 2023

DOC ID# 589057

New York State Department of Environmental Conservation Division of Materials Management Pesticide Product Registration





INSECTICIDE

FOR ORGANIC PRODUCTION

- For use on growing crops
- Can be used on day of harvest
- Kills more than 100 listed insects
- Provides rapid knockdown and kill of listed plant pests
- Contains pyrethrins—a botanical insecticide derived from chrysanthemums

#### **ACTIVE INGREDIENT:**

Pyrethrins a botanical insecticide 1.40%
OTHER INGREDIENTS: 98.60%
100.00%

This product contains 0.108 lbs. Pyrethrins per gallon.

# KEEP OUT OF REACH OF CHILDREN CAUTION / PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See inside booklet for First Aid, Precautionary Statements, Directions for Use and Storage and Disposal

EPA Reg. No. 1021-1771 F7443-100

Rev. 0722-0922

EPA Est. No. 1021-MN- $2^A$ , 10508-OH- $1^K$ , 33762-IA- $1^U$  Superscript is the first character of the lot number.

Distributed by:



**NET CONTENTS: 1 GALLON** 

Manufactured for:



Minneapolis, MN 55428

Job 208148

FIRST AID		
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 the 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 15-20 minutes. Call a poison control center or doctor for 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 center or doctor for treatment advice.	
IF INHALED:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>	

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information regarding medical emergencies or pesticide incidents, call 1-888-740-8712.

#### PRECAUTIONARY STATEMENTS

#### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

## **CAUTION**

Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are made of barrier laminate, nitrile or neoprene rubber or Viton.

Mixers, loaders, applicators, and other handlers must wear the following:

- Long-sleeved shirt
- · Long pants
- Shoes and socks
- Chemical-resistant gloves

In addition to the above PPE, applicators using handheld foggers in an enclosed area must wear:

- . A particulate respirator with any N, R, or P filter with NIOSH approval prefix TC-84A or
- . A NIOSH-approved gas mask with a canister filter with NIOSH approval prefix TC-14G, or
- A NIOSH-approved powered air purifying respirator with HE filter with NIOSH approval prefix TC-21C.

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.

When handlers use aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides 40 CFR 170.240 (d) (4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.



#### **USER SAFETY RECOMMENDATIONS**

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. 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.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is highly toxic to fish. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift from treated areas may be hazardous to organisms in adjacent aquatic sites. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are foraging in the treatment area.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR, Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not apply this product in a way that will contact workers or other persons either directly or through spray drift. Only protected handlers may be in the area during application.

For any requirement specific to your state or Tribe, consult the State or Tribal Agency responsible for pesticide regulation.

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

PPE required for early entry into treated areas that is permitted under Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Long-sleeved shirt and long pants:
- · Chemical-resistant gloves, such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton;
- · Shoes plus socks.

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR, Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow others to enter until vapors, mists, and aerosols have dispersed and the treated area has been thoroughly ventilated.

Keep unprotected persons out of treated areas until sprays have dried.

Wear protective clothing when using or handling this product to help avoid exposure to eyes and skin. Eye protection, gloves, a long-sleeved shirt and long pants are recommended.

Do not enter or allow others to enter until sprays have dried.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.





#### **USE RESTRICTIONS:**

- Do not make applications during the rain.
- Do not wet plants to the point of runoff.
- When used in dairy barns or facilities: Close milk bulk tank lids to prevent contamination from spray and dead or falling insects.
- Do not remain in the treated area. Exit area immediately and remain outside the treated area until aerosols, vapors and/or mists have dispersed.
- Do not use in outdoor residential misting systems.
- Do not use indoors except in greenhouses.
- Do not reapply within 3 days, except under extreme pest pressure.
- In case of extreme pest pressure, do not reapply within 24 hours.
- Do not harvest until spray has dried
- Do not wet plants to point of runoff or drip.
- Do not apply this product in a way that will contact workers or other persons either directly or through drift.
- Only protected handlers may be in the area during application.
- Do not use in outdoor metered release devices.
- Keep unprotected persons out of treated areas until sprays have dried.
- Allow spray to dry before allowing adults, children or pets on treated areas.
- Do not apply more than 10 times per season.

#### Spray Drift Management for Agricultural Crops

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interactions of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Do not apply at wind speeds greater than 10 mph at the application site.

Do not make any type of application into temperature inversions.

#### Apply as a medium or coarser spray (ASABE standard 572).

**Additional Requirements for Aerial Applications:**Do not release spray at a height greater than 10 feet above the ground or crop canopy.

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Aerial applicators must consider flight speed and nozzle orientation in determining droplet size.

When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

## Additional requirements for ground applications:

Do not release spray at a height greater than 4 feet above the ground or crop canopy.

#### Additional requirements for airblast applications:

Direct sprays into the canopy.

Turn off outward pointing nozzles at row ends and when spraying outer rows.

#### PESTICIDE RESISTANCE MANAGEMENT

Pyganic® Crop Protection EC 1.4<sub>II</sub> contains a Group 3A insecticide. Insect biotypes with acquired resistance to Group 3A may eventually dominate the insect population if Group 3A insecticides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Pyganic Crop Protection EC 1.4<sub>II</sub> or other Group 3A insecticides.

#### To delay insecticide resistance consider:

- Avoiding the consecutive use of Pyganic Crop Protection EC 1.4<sub>II</sub> or other Group 3A insecticides that have a similar target site of action, on the same insect species.
- Using tank mixtures or premixes with insecticides from a different target site of action Group as long as the involved products are all registered for the same use and have different sites of action.
- · Basing insecticide use on a comprehensive IPM program.
- · Monitoring treated insect population for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for insecticide resistance management and or IPM recommendations
  for the specific site and resistance pest problems.



#### INDOOR AREAS FOR USE IN AND AROUND:

Greenhouses

OUTDOOR AREAS FOR USE IN AND AROUND:

Nurseries

Outdoor Growing Crops

#### TO KILL THE FOLLOWING LISTED INSECTS:

12-spotted Cucumber Beetles, Angoumois Grain Moths, Ants (excluding fire and Pharaoh ants), Aphids, Apple Maggots, Armored Scales, Armyworms, Artichoke Plume Moths, Asian Citrus Psyllids, Asparagus Beetles, Bagworms, Bean Beetles, Beet Armyworms, Beetles, Bermudagrass Mirids, Billbugs, Blister Beetles, Blow Flies, Boll Weevils, Boxelder Bugs, Branch and Twig Borers, Cabbage Loopers, Cabbage Maggots, Cadelles, Cankerworms, Carrot Weevils, Caterpillars, Chalcids, Cheese Skippers, Cherry Fruit Flies, Cigarette Beetles, Clover Mites, Clover Weevils, Cockroaches, Codling Moths, Colorado Potato Beetles, Confused Flour Beetles, Corn Earworms, Crane Flies, Crickets, Cross-striped Cabbageworms, Cucumber Beetles, Dark Mealworms, Darkling Beetles (lesser mealworms), Deer Flies, Diamondback Larvae and Moths, Driedfruit Beetles, Drugstore Beetles, Earwigs, Eastern Tent Caterpillars, Elm Leaf Beetles, Eriophyid Mites, European Corn Borer, European Pine Tip Moths, Fireworms, Flea Beetles, Forest Tent Caterpillars, Fruit Flies, Fruittree Leafrollers, Fruitworms, Fungus Gnats, Garden Symphylan, Glassy-winged Sharpshooters, Gnats, Grain Mites, Grapeleaf Skeletonizers, Grape Leafhoppers, Grape Mealybugs, Grasshoppers, Greenbugs, Green Fruitworms, Green Peach Aphids, Greenhouse Thrips, Gypsy Moths (adults & larvae), Harlequin Bugs, Heliothis spp., Horn Flies, Hornworms, House Flies, Imported Cabbageworms, Indian Meal Moths, Japanese Beetles, Katydids, Lace Bugs, Leaffooted plant bugs, Leafhoppers, Leafminers, Leafrollers, Leaftiers, Lice, Loopers, Lygus, Maggots, Mealybugs, Mediterranean Flour Moths, Mexican Bean Beetles, Midges, Millipedes, Mites, Mole crickets, Mosquitoes, Moths, Mushroom Flies, Navel Orangeworms, Olive Fruit Flies, Onion Maggots, Orange Tortrix, Pacific flatheaded borers, Pear Psyllids, Pepper Weevils, Pink bollworms, Potato Leafhoppers, Potato Tuberworms, Proba bugs, Psyllids, Red Flour Beetles, Rice Weevils, Saltmarsh caterpillars, Sawtoothed Grain Beetles, Scales, Sharpshooters, Shore flies, Shothole borers, Silverfish, Skippers, Small Flying Moths, Soft Scales, Southern chinch bugs, Sow bugs, Spider Beetles, Springtails, Squash bugs, Stable Flies, Stink Bugs, Tarnished Plant Bugs, Thrips, Ticks, Tobacco Moths, Tomato budworms, Tomato bugs, Tomato Fruitworms, Tomato Hornworms, Tomato pinworms, Tomato Russet Mites, Tussock moths, Vine Mealybugs, Vinegar Flies, Webworms, Weevils, Western Yellowstriped armyworms, Whiteflies, Yellow Mealworms.

#### USE DIRECTIONS:

**IMPORTANT:** It is recommended that the final spray mix be adjusted to a pH of 5.5 to 7.0. Outside of this range, pyrethrins can degrade and the product will lose its effectiveness.

To avoid possible harm to honey bees, apply in the early morning or late evening hours.

**USED ALONE:** Apply 16 fl. oz. (1 pint) to 64 fl. oz. (2 quarts) per acre by ground in sufficient water for thorough coverage. This product may be applied by air at the rate of 16 to 64 fl. oz. per acre in a minimum of 5 gallons of water. Mix only enough for immediate use. Begin spraying when the insects first appear. Do not wait until the plants are heavily infested. Repeat as required to maintain effective kill.

**USED AS A TANK MIX:** This product may be tank mixed with other insecticides, acaricides, fungicides, adjuvants and wetting agents. This application should conform to accepted use precautions and directions for both products. Tank mix applications must be made in accordance with the more restrictive of label limitations and precautions. No label application rates may be exceeded. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. This product cannot be mixed with any product with label prohibitions against such mixing.

Prior to tank mixing, a compatibility test should be conducted using the proper proportions of products and water to ensure the physical compatibility of the mixture

For growing field crop and orchard applications, do not exceed the maximum application rate of 0.050 lb. active ingredient / Acre (equivalent to 59 fl. oz. of Pyganic Crop Protection EC 1.4 T / Acre) or 0.0012 lb. active ingredient / 1,000 sq. ft. (equivalent to 1.42 fl. oz. of Pyganic Crop Protection EC 1.4 T / 1,000 sq. ft.).

For surface applications to greenhouse grown crops, do not exceed the maximum application rate of 0.050 lb. active ingredient / Acre (equivalent to 59 fl. oz. of Pyganic Crop Protection EC 1.4 II / Acre) or 0.0012 lb. active ingredient / 1,000 sq. ft.).

For space spray applications to greenhouse grown crops, do not exceed the maximum application rate of 0.00014 lb. a.i. / 1,000 cu. ft. (equivalent to 0.166 fl. oz. or 4.92 mls of Pyganic Crop Protection EC  $1.4\Pi$  / 1,000 cu. ft.).

**IMPORTANT NOTE:** Plant safety is an important consideration when using insecticides in a greenhouse. However, it is not possible to evaluate the phytotoxicity of Pyganic Crop Protection EC 1.4<sub>II</sub> on 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<sub>II</sub>, or tank mix combinations, treat a limited number of plants and observe for phytotoxicity over a 10-day period.

**DIRECTIONS FOR APPLICATION THROUGH IRRIGATION SYSTEMS:** Apply this product only through sprinkler (including center pivot, lateral move, end tow, side (wheel) roll, traveler, big qun, solid set, or hand move) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for the operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock 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 pump when the pump motor stops. The irrigation line or water pump must include a functional pressure valve which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

System must be a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Constant agitation must be maintained in the chemical supply tank during the entire period of insecticide application. Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of more dilute suspension per unit of time.

**SOIL DRENCH DIRECTIONS FOR USE IN GREENHOUSES:** Add 1.43 fl. oz. of Pyganic Crop Protection EC 1.4<sub>II</sub> to 5 gallons of water and apply as a soil drench to 1,000 sq. ft. of soil or non-soil media to kill soil-borne insect larvae (e.g., Fungus Gnats). Apply for sufficient duration so as to distribute the application rate evenly to the entire treated area. Apply to moderately moist soils. Do not exceed the maximum application rate of 1.43 fl. oz. of Pyganic Crop Protection EC 1.4<sub>II</sub> per 1,000 sq. ft. To drench the soil, additional water may be applied to the area, being careful not to apply to runoff.

#### **GROWING CROPS (OUTDOORS, IN GREENHOUSES AND IN NURSERIES):**

ROOT AND TUBER VEGETABLES: Arracacha, Arrowroot, Purple Arrowroot, Japanese Artichoke, Jerusalem Artichoke, Garden Beets, Sugar Beets, Edible Burdock, Edible Canna, Carrots, Cassawa (bitter or sweet), Celeriac (celery root), Chayote (root), Chervil (turnip-rooted), Chicory, Chufa, Dasheen, Ginger, Ginseng, Horseradish, Leren, Parsley (turnip-rooted), Parsnip, Potato, Radish, Japanese Radish (Daikon), Rutabaga, Salsify, Black Salsify, Spanish Salsify, Sweet Potato, Tanier, Turmeric, Turnip, Yam (true), Yam Bean.

LEAVES OF ROOT AND TUBER VEGETABLES: Garden Beet, Sugar Beet, Edible Burdock, Carrot, Cassava (bitter or sweet), Celeriac (celery root), Chervil (turnip-rooted), Chicory, Dasheen (taro), Parsnip, Radish, Japanese Radish (Daikon), Rutabaga, Black Salsify, Sweet Potato, Tanier, Turnip, Yam (true).

BULB VEGETABLES: Garlic, Great-headed Garlic, Leek, Onion (bulb and green), Welsh, Shallot,

LEAFY VEGETABLES: Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula, Cardoon, Celery, Chinese Celery, Celtuce, Chervil, Cilantro, Corn Salad, Chrysanthemum (edible-leaved), Chrysanthemum (garland), Cress (garden, water), Upland Cress (yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Fennel (Florence), Lettuce (head and leafy), Orach, Parsley, Purslane (garden and winter), Radicchio, Rhubarb, Spinach, Fine Spinach (Malabar, Ceylon), Spinach (New Zealand), Swiss Chard.

**BRASSICA (COLE) LEAFY VEGETABLES:** Broccoli, Chinese Broccoli (Gai Lan), Broccoli Raab (Rapini), Brussels Sprouts, Cabbage, Chinese Cabbage (Bok Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Cavalo Broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens.



LEGUME VEGETABLES (SUCCULENT OR DRIED): Adzuki Beans, Field Beans, Kidney Beans, Lima Beans, Moth Beans, Mung Beans, Navy Beans, Pinto Beans, Rice Beans, Runner Beans, Snap Beans, Tepary Beans, Urd Beans, Wax Beans, Asparagus Beans, Blackeyed Peas, Catjang, Chinese Longbeans, Cowpeas, Crowder Peas, Southern Peas, Yardlong Beans, Broad Beans (fava beans), Chick Peas (garbanzo beans), Guar, Jack Beans (sword beans), Lablab Beans (hyacinth beans), Lentils, Peas (garden peas, field peas, sugar snap peas, English peas, snow peas), Pigeon Peas, Soybeans, Sweet Lupin Beans, White Lupin Beans, White Sweet Lupin, Sword Beans.

FOLIAGE OF LEGUME VEGETABLES: Plant part of any legume vegetable included in the legume vegetable group including any variety of Beans, Field Peas, Soybeans.

FRUITING VEGETABLES: Eggplant, Ground Cherry, Okra, Pepinos, Pepper (bell pepper, chili pepper, cooking peppers, pimentos, sweet peppers), Tomatillos, Tomatoes

CUCURBIT VEGETABLES: Balsam Apple, Balsam Pear (bitter melon), Chayote (fruit), Chinese Waxgourd (Chinese preserving melon), Chinese Cucumber, Citron Melon, Cucumber, Gherkin, Edible Gourds, Melons (including hybrids, Cantaloupe, Casaba, Crenshaw, Golden Pershaw Melon, Honeydew Melons, Honey Balls, Mango Melon, Muskmelon, Persian Melon, Pineapple Melon, Santa Claus Melon, Snake Melon), Pumpkin, Squash (summer and winter), Watermelon (including hybrids).

CITRUS FRUITS: Calamondin, Citrus Citron, Citrus Hybrids, Grapefruit, Kumquats, Lemons, Limes, Mandarin (tangerine), Orange (sweet and sour), Pummelo, Satsuma Mandarin, (Citrus spp. includes chironja, tangelos, tangors).

POME FRUITS: Apple, Crab Apple, Loquat, Pear, Mayhaw, Oriental Pear, Quince.

STONE FRUITS: Apricot, Cherry (sweet and sour), Nectarine, Peach, Plum, Prune, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot.

SMALL FRUITS AND BERRIES: Blackberry, Blueberry, Cranberry, Currant, Dewberry, Elderberry, Gooseberry, Grape, Huckleberry, Loganberry, Olallieberry, Raspberry (black and red), Strawberry, Youngberry.

TREE NUTS: Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia Nut (bush nut), Pecan, Pistachio, Walnut, Black and English (Persian).

ORIENTAL VEGETABLES: Acerola, Atemoya, Balsam Pear (bitter melon), Carambola, Japanese Artichoke, Chinese Broccoli (Gai Lan), Chinese Cabbage (Bok Choy, Napa), Chinese Mustard Cabbage (Gai Choy), Dasheen, Ginseng, Chinese Longbeans, Mung Beans, Citron Melon, Japanese Radish (Daikon), Chinese Spinach, Chinese Waxgourd, Cilantro, Citron Melon, Rambutan, Water Chestnut.

SUBTROPICAL FRUITS: Avocado, Banana, Carob, Barbados Cherry, Cherimoya, Dates, Durian (jackfruit), Feijoa, Figs, Guava, Kiwifruit, Lychee, Mango, Papaya, Passion Fruit, Persimmon, Pineapple, Pomegranate.

CEREAL GRAINS: Barley, Buckwheat, Corn (sweet and field), Millet, Proso, Oats, Pearl Millet, Popcorn, Rice, Rye, Sorghum (Milo), Teosinte, Triticale, Wheat, Wild Rice.

FORAGE, FODDER AND STRAW OF CEREAL GRAINS: Barley, Buckwheat, Corn (sweet and field), Millet, Proso, Oats, Pearl, Popcorn, Rice, Rye, Sorghum (milo), Teosinte, Triticale, Wheat, Wild Rice.

GRASSES FOR SEED, FORAGE, FODDER AND HAY: any grass, Gramineal family (green or cured) except sugarcane and those listed in the cereal grains group that will be fed to or grazed by livestock, all Pasture and Range Grasses and Grasses grown for hay and silage, Bermudagrass, Bluegrass, Bromegrass, Fescue.

NON-GRASS ANIMAL FEEDS: Alfalfa, Velvet Beans, Clover, Kudzu, Lespedeza, Lupine, Sainfoin, Trefoil, Crown Vetch, Milk Vetch.

HERBS AND SPICES: Allspice, Angelica, Anise (anise seed), Anise (star), Annatto (seed), Balm (lemon balm), Basil, Borage, Burnet, Caper buds, Caraway, Caraway (black), Cardamom, Cassia bark, Cassia buds, Catnip, Celery seed, Chamomile, Chervil (dried), Chicory, Chive, Chive (Chinese), Cinnamon, Clary, Clove buds, Coriander (cilantro or Chinese parsley) (leaf), Coriander (cilantro) (seed), Costmary, Culantro (leaf), Culantro (seed), Cumin, Curry (leaf), Dill (dill weed), Dill (seed), Fennel (common), Fennel (Florence) (seed), Fenugreek, Grains of Paradise, Horehound, Hyssop, Juniper Berry, Lavender, Lemongrass, Lovage (leaf), Lovage (seed), Mace, Marigold, Marjoram (includes sweet or annual marjoram, wild marjoram or oregano, and pot marjoram), Mustard (seed), Nasturtium, Nutmeg, Oregano, Mint, Paprika, Parsley (dried), Pennyroyal, Pepper (black), Pepper (white), Poppy (seed), Rosemary, Rue, Saffron, Sage, Savory (summer and winter), Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Vanilla, Wintergreen, Woodruff, Wormwood.

ADDITIONAL PLANTS: Artichoke, Asparagus, Avocado, Coffee, Cotton, Hops, Jojoba, Mushroom, Okra, Olives, Peanuts, Pineapple, Rice, Safflowers, Sesame, Sugarcane, Sunflower, Tea.

TO KILL ANTS (EXCLUDING FIRE AND PHARAOH ANTS) ON ORCHARD FLOORS AND VINEYARD FLOORS: Apply as a broadcast spray to the entire orchard floor using ground spray equipment at 5 to 18 fl. oz. per acre in 25 or more gallons of water. For best results use the high rate for heavy infestations and the lower rate for light infestations.





Do not apply where weed growth or other obstructions would impede uniform coverage of the orchard floor. Mow or chemically control weeds before the application. Foliar applications of Pyganic Crop Protection EC 1.411 may be made in addition to the orchard floor treatment.

#### USE ON GREENHOUSE FRUITS, VEGETABLES, FLOWERS AND FOLIAGE PLANTS:

**USED ALONE**: Combine 16 fl. oz. (1 pint) to 32 fl. oz. (1 quart) with 30 gallons of water for applications with conventional hydraulic sprayers or 1 to 2 fl. oz. per gallon of water for applications with compressed sprayers.

**FOR USE IN GARDENS AND TRUCK GARDENS:** For commercial production of listed crops to kill listed insects dilute 0.9 to 1.8 fl. oz. of Pyganic Crop Protection EC 1.4<sub>II</sub> per gallon of water. Apply diluted solution with all types of agricultural sprayers, including compressed air sprayers or pump driven sprayers.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Keep this product in a tightly closed container when not in use. Store in a cool, dry (preferably locked) area. Post as a pesticide storage area. Always store pesticides in the original container. Store away from food, feed, seed, fertilizers, and veterinary supplies. Place formulations on lower shelves and dry formulations above.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Non-refillable container. Do not reuse or refill this container. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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- Provides rapid knockdown and kill of listed plant pests
- Contains pyrethrins a botanical insecticide derived from chrysanthemums

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# CAUTION / PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See inside booklet for Precautionary Statements, Directions for Use and Storage and Disposal

EPA Reg. No. 1021-1771 F7443-100 Rev. 0722-0922

#### FIRST AID

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 the 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 15-20 minutes. Call a poison control center or doctor for 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 center 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 center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information regarding medical emergencies or pesticide incidents, call 1-888-740-8712.

EPA Est. No. 1021-MN- $2^A$ , 10508-OH- $1^K$ , 33762-IA- $1^U$  Superscript is the first character of the lot number.

Manufactured for:

**MGK** 

7325 Aspen Lane North • Minneapolis, MN 55428

**NET CONTENTS: 1 GALLON** 

PF-208148









GROUP 3A INSECTICIDE



# Pyganic® Crop Protection EC 1.4"



This product contains 0.108 lbs. Pyrethrins per gallon.

MGK® and Pyganic® are registered trademarks of McLaughlin Gormley King Company. All other marks are property of their respective holders.

# CAUTION / PRECAUCIÓN

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Manufactured by

7325 Aspen Lane North Minneapolis, MN 55428

EPA Reg. No. 1021-1771

medical emergencies or pesticide incidents, call 1-888-740-8712.

EPA Est. No. 1021-MN-2

Net Contents: \_\_\_\_\_(GA

\_\_(GAL) / \_\_\_\_\_(LBS)

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## CAUTION

Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are made of barrier laminate, nitrile or neoprene rubber or Viton.

Mixers, loaders, applicators, and other handlers must wear the following:

- Long-sleeved shirt
- Long pants
- Shoes and socks
- Chemical-resistant gloves

In addition to the above PPE, applicators using handheld foggers in an enclosed area must wear:

- A particulate respirator with any N, R, or P filter with NIOSH approval prefix TC-84A or
- A NIOSH-approved gas mask with a canister filter with NIOSH approval prefix TC-14G, or
- A NIOSH-approved powered air purifying respirator with HE filter with NIOSH approval prefix TC-21C.

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.

When handlers use aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides 40 CFR 170.240 (d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

#### USER SAFETY RECOMMENDATIONS

#### 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. 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.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is highly toxic to fish. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift from treated areas may be hazardous to organisms in adjacent aquatic sites. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are foraging in the treatment area.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR, Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not apply this product in a way that will contact workers or other persons either directly or through spray drift. Only protected handlers may be in the area during application.

For any requirement specific to your state or Tribe, consult the State or Tribal Agency responsible for pesticide regulation.

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

PPE required for early entry into treated areas that is permitted under Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Long-sleeved shirt and long pants, Chemical-resistant gloves, such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton; Shoes plus socks

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR, Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow others to enter until vapors, mists, and aerosols have dispersed and the treated area has been thoroughly ventilated. Keep unprotected persons out of treated areas until sorays have dried.

Wear protective clothing when using or handling this product to help avoid exposure to eyes and skin. Eye protection, gloves, a long-sleeved shirt and long pants are recommended.

Do not enter or allow others to enter until sprays have dried.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation

#### **USE RESTRICTIONS:**

- Do not make applications during the rain.
- Do not wet plants to the point of runoff.
- When used in dairy barns or facilities: Close milk bulk tank lids to prevent contamination from spray and dead or falling insects.
- Do not remain in the treated area. Exit area immediately and remain outside the treated area until aerosols, vapors and/or mists have dispersed.
- Do not use in outdoor residential misting systems.
- Do not use indoors except in greenhouses.
- Do not reapply within 3 days, except under extreme pest pressure.
- In case of extreme pest pressure, do not reapply within 24 hours.
- Do not harvest until spray has dried.
- Do not wet plants to point of runoff or drip.
- Do not apply this product in a way that will contact workers or other persons either directly or through drift
- Only protected handlers may be in the area during application.
- Do not use in outdoor metered release devices.
- Keep unprotected persons out of treated areas until sprays have dried.
- Allow spray to dry before allowing adults, children or pets on treated areas.
- Do not apply more than 10 times per season.

#### **Spray Drift Management for Agricultural Crops:**

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interactions of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Do not apply at wind speeds greater than 10 mph at the application site.

Do not make any type of application into temperature inversions.

Apply as a medium or coarser spray (ASABE standard 572).

#### Additional Requirements for Aerial Applications:

Do not release spray at a height greater than 10 feet above the ground or crop canopy.

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Aerial applicators must consider flight speed and nozzle orientation in determining droplet size.

When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

#### Additional requirements for ground applications:

Do not release spray at a height greater than 4 feet above the ground or crop canopy.

#### Additional requirements for airblast applications:

Direct sprays into the canopy.

Turn off outward pointing nozzles at row ends and when spraying outer rows.

#### PESTICIDE RESISTANCE MANAGEMENT

Pyganic® Crop Protection EC 1.4<sub>II</sub> contains a Group 3A insecticide. Insect biotypes with acquired resistance to Group 3A may eventually dominate the insect population if Group 3A insecticides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Pyganic Crop Protection EC 1.4<sub>II</sub> or other Group 3A insecticides.

To delay insecticide resistance consider:

- Avoiding the consecutive use of Pyganic Crop Protection EC 1.4<sub>II</sub> or other Group 3A insecticides that have a similar target site of action, on the same insect species.
- Using tank mixtures or premixes with insecticides from a different target site of action Group as long as the involved products
  are all registered for the same use and have different sites of action.
- Basing insecticide use on a comprehensive IPM program.
- Monitoring treated insect population for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for insecticide resistance management and or IPM recommendations for the specific site and resistance pest problems.

#### INDOOR AREAS FOR USE IN AND AROUND:

Greenhouses

#### OUTDOOR AREAS FOR USE IN AND AROUND:

Nurseries

**Outdoor Growing Crops** 

#### TO KILL THE FOLLOWING LISTED INSECTS:

12-spotted Cucumber Beetles, Angoumois Grain Moths, Ants (excluding fire and Pharaoh ants), Aphids, Apple Maggots, Armored Scales, Armyworms, Artichoke Plume Moths, Asian Citrus Psyllids, Asparagus Beetles, Bagworms, Bean Beetles, Beet Armyworms, Beetles, Bermudagrass Mirids, Billbugs, Blister Beetles, Blow Flies, Boll Weevils, Boxelder Bugs, Branch and Twig Borers, Cabbage Loopers, Cabbage Maggots, Cadelles, Cankerworms, Carrot Weevils, Caterpillars, Chalcids, Cheese Skippers, Cherry Fruit Flies, Cigarette Beetles, Clover Mites, Clover Weevils, Cockroaches, Codling Moths, Colorado Potato Beetles, Confused Flour Beetles, Corn Earworms, Crane Flies, Crickets, Cross-striped Cabbageworms, Cucumber Beetles, Dark Mealworms, Darkling Beetles (lesser mealworms), Deer Flies, Diamondback Larvae and Moths, Driedfruit Beetles, Drugstore Beetles, Earwigs, Eastern Tent Caterpillars, Elm Leaf Beetles, Eriophyid Mites, European Corn Borer, European Pine Tip Moths, Fireworms, Flea Beetles, Forest Tent Cateroillars, Fruit Flies, Fruittree Leafrollers, Fruitworms, Fungus Gnats, Garden Symphylan, Glassy-winged Sharpshooters, Gnats, Grain Mites, Grapeleaf Skeletonizers, Grape Leafhoppers, Grape Mealybugs, Grasshoppers, Greenbugs, Green Fruitworms, Green Peach Aphids, Greenhouse Thrips, Gypsy Moths (adults & larvae), Harlequin Bugs, Heliothis spp., Horn Flies, Hornworms, House Flies, Imported Cabbageworms, Indian Meal Moths, Japanese Beetles, Katydids, Lace Bugs, Leaffooted plant bugs, Leafhoppers, Leafminers, Leafrollers, Leaftiers, Lice, Loopers, Lygus, Maggots, Mealybugs, Mediterranean Flour Moths, Mexican Bean Beetles, Midges, Millipedes, Mites, Mole crickets, Mosquitoes, Moths, Mushroom Flies, Navel Orangeworms, Olive Fruit Flies, Onion Maggots, Orange Tortrix, Pacific flatheaded borers, Pear Psyllids, Pepper Weevils, Pink bollworms, Potato Leafhoppers, Potato Tuberworms, Proba bugs, Psyllids, Red Flour Beetles, Rice Weevils, Saltmarsh caterpillars, Sawtoothed Grain Beetles, Scales, Sharpshooters, Shore flies, Shothole borers, Silverfish, Skippers, Small Flying Moths, Soft Scales, Southern chinch bugs, Sow bugs, Spider Beetles, Springtails, Squash bugs, Stable Flies, Stink Bugs, Tarnished Plant Bugs, Thrips, Ticks, Tobacco Moths, Tomato budworms, Tomato bugs, Tomato Fruitworms, Tomato Hornworms, Tomato pinworms, Tomato Russet Mites, Tussock moths, Vine Mealybugs, Vinegar Flies, Webworms, Weevils, Western Yellowstriped armyworms, Whiteflies, Yellow Mealworms.

#### USE DIRECTIONS:

IMPORTANT: It is recommended that the final spray mix be adjusted to a pH of 5.5 to 7.0. Outside of this range, pyrethrins can degrade and the product will lose its effectiveness.

To avoid possible harm to honey bees, apply in the early morning or late evening hours.

USED ALONE: Apply 16 fl. oz. (1 pint) to 64 fl. oz. (2 quarts) per acre by ground in sufficient water for thorough coverage. This product may be applied by air at the rate of 16 to 64 fl. oz. per acre in a minimum of 5 gallons of water. Mix only enough for immediate use. Begin spraying when the insects first appear. Do not wait until the plants are heavily infested. Repeat as required to maintain effective kill.

USED AS A TANK MIX: This product may be tank mixed with other insecticides, acaricides, fungicides, adjuvants and wetting agents. This application should conform to accepted use precautions and directions for both products. Tank mix applications must be made in accordance with the more restrictive of label limitations and precautions. No label application rates may be exceeded. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. This product cannot be mixed with any product with label prohibitions against such mixing.

Prior to tank mixing, a compatibility test should be conducted using the proper proportions of products and water to ensure the physical compatibility of the mixture.

For growing field crop and orchard applications, do not exceed the maximum application rate of 0.050 lb. active ingredient / acre (equivalent to 59 fl. oz. of Pyganic Crop Protection EC 1.4<sub>II</sub> / acre) or 0.0012 lb. active ingredient / 1,000 sq. ft. (equivalent to 1.42 fl. oz. of Pyganic Crop Protection EC 1.4<sub>II</sub> / 1,000 sq. ft.).

For surface applications to greenhouse grown crops, do not exceed the maximum application rate of 0.050 lb. active ingredient / acre (equivalent to 59 fl. oz. of Pyganic Crop Protection EC  $1.4_{\rm ll}$  / acre) or 0.0012 lb. active ingredient / 1,000 sq. ft. (equivalent to 1.42 fl. oz. of Pyganic Crop Protection EC  $1.4_{\rm ll}$  / 1,000 sq. ft.).

For space spray applications to greenhouse grown crops, do not exceed the maximum application rate of 0.00014 lb. a.i. / 1,000 cu. ft. (equivalent to 0.166 fl. oz. or 4.92 mls of Pyganic Crop Protection EC  $1.4_{\rm H}$  / 1,000 cu. ft.).

IMPORTANT NOTE: Plant safety is an important consideration when using insecticides in a greenhouse. However, it is not possible to evaluate the phytotoxicity of Pyganic Crop Protection EC 1.4<sub>II</sub> on 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<sub>II</sub>, or tank mix combinations, treat a limited number of plants and observe for phytotoxicity over a 10-day period.

#### **DIRECTIONS FOR APPLICATION THROUGH IRRIGATION SYSTEMS:**

Apply this product only through sprinkler (including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for the operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock 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 pump when the pump motor stops. The irrigation line or water pump must include a functional pressure valve which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

System must be a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Constant agitation must be maintained in the chemical supply tank during the entire period of insecticide application. Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of more dilute suspension per unit of time.

**SOIL DRENCH DIRECTIONS FOR USE IN GREENHOUSES:** Add 1.43 fl. oz. of Pyganic Crop Protection EC 1.4<sub>II</sub> to 5 gallons of water and apply as a soil drench to 1,000 sq. ft. of soil or non-soil media to kill soil-borne insect larvae (e.g., Fungus Gnats). Apply for sufficient duration so as to distribute the application rate evenly to the entire treated area. Apply to moderately moist soils. Do not exceed the maximum application rate of 1.43 fl. oz. of Pyganic Crop Protection EC 1.4<sub>II</sub> per 1,000 sq. ft. To drench the soil, additional water may be applied to the area, being careful not to apply to runoff.

#### **GROWING CROPS (OUTDOORS, IN GREENHOUSES AND IN NURSERIES):**

ROOT AND TUBER VEGETABLES: Arracacha, Arrowroot, Purple Arrowroot, Japanese Artichoke, Jerusalem Artichoke, Garden Beets, Sugar Beets, Edible Burdock, Edible Canna, Carrots, Cassava (bitter or sweet), Celeriac (Celery root), Chayote (root), Chervil (turnip-rooted), Chicory, Chufa, Dasheen, Ginger, Ginseng, Horseradish, Leren, Parsley (turnip-rooted), Parsnip, Potato, Radish, Japanese Radish (Daikon), Rutabaga, Salsify, Black Salsify, Spanish Salsify, Sweet Potato, Tanier, Turmeric, Turnip, Yam (true), Yam Bean.

LEAVES OF ROOT AND TUBER VEGETABLES: Garden Beet, Sugar Beet, Edible Burdock, Carrot, Cassava (bitter or sweet), Celeriac (Celery root), Chervil (turnip-rooted), Chicory, Dasheen (Taro), Parsnip, Radish, Japanese Radish (Daikon), Rutabaga, Black Salsify, Sweet Potato, Tanier, Turnip, Yam (true).

BULB VEGETABLES: Garlic, Great-headed Garlic, Leek, Onion (bulb and green), Welsh, Shallot,

<u>LEAFY VEGETABLES</u>: Amaranth (Leafy Amaranth, Chinese Spinach, Tampala), Arugula, Cardoon, Celery, Chinese Celery, Celtuce, Chervil, Cilantro, Corn Salad, Chrysanthemum (edible-leaved), Chrysanthemum (garland), Cress (garden, water), Upland Cress (Yellow Rocket, Winter Cress), Dandelion, Dock (Sorrel), Endive (Escarole), Fennel (Florence), Lettuce (head and leafy), Orach, Parsley, Purslane (garden & winter), Radicchio, Rhubarb, Spinach, Fine Spinach (Malabar, Ceylon), Spinach (New Zealand), Swiss Chard.

BRASSICA (COLE) LEAFY VEGETABLES: Broccoli, Chinese Broccoli (Gai Lan), Broccoli Raab (Rapini), Brussels Sprouts, Cabbage, Chinese Cabbage (Bok Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Cavalo Broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens.

LEGUME VEGETABLES (SUCCULENT OR DRIED): Adzuki Beans, Field Beans, Kidney Beans, Lima Beans, Moth Beans, Mung Beans, Navy Beans, Pinto Beans, Rice Beans, Runner Beans, Snap Beans, Tepary Beans, Urd Beans, Wax Beans, Asparagus Beans, Blackeyed Peas, Catjang, Chinese Longbeans, Cowpeas, Crowder Peas, Southern Peas, Yardlong Beans, Broad Beans (Fava Beans), Chick Peas (Garbanzo Beans), Guar, Jack Beans (Sword Beans), Lablab Beans (Hyacinth Beans), Lentils, Peas (Garden Peas, Field Peas, Sugar Snap Peas, English Peas, Snow Peas), Pigeon Peas, Soybeans, Sweet Lupin Beans, White Sweet Lupin, Sword Beans.

FOLIAGE OF LEGUME VEGETABLES: Plant part of any legume vegetable included in the legume vegetable group including any variety of Beans, Field Peas. Sovbeans.

<u>FRUITING VEGETABLES</u>: Eggplant, Ground Cherry, Okra, Pepinos, Pepper (Bell Pepper, Chili Pepper, Cooking Peppers, Pimentos, Sweet Peppers), Tomatillos, Tomatoes.

CUCURBIT VEGETABLES: Balsam Apple, Balsam Pear (Bitter Melon), Chayote (fruit), Chinese Waxgourd (Chinese preserving melon), Chinese Cucumber, Citron Melon, Cucumber, Gherkin, Edible Gourds, Melons (including hybrids, Cantaloupe, Casaba, Crenshaw, Golden Pershaw Melon, Honeydew Melons, Honey Balls, Mango Melon, Muskmelon, Persian Melon, Pineapple Melon, Santa Claus Melon, Snake Melon), Pumpkin, Squash (summer & winter), Watermelon (including hybrids).

<u>CITRUS FRUITS</u>: Calamondin, Citrus Citron, Citrus Hybrids, Grapefruit, Kumquats, Lemons, Limes, Mandarin (Tangerine), Orange (sweet & sour), Pummelo, Satsuma Mandarin, (Citrus spp. includes Chironja, Tangelos, Tangors).

POME FRUITS: Apple, Crab Apple, Loquat, Pear, Mayhaw, Oriental Pear, Quince.

STONE FRUITS: Apricot, Cherry (sweet & sour), Nectarine, Peach, Plum, Prune, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot.

SMALL FRUITS AND BERRIES: Blackberry, Blueberry, Cranberry, Currant, Dewberry, Elderberry, Gooseberry, Grape, Huckleberry, Loganberry, Olallieberry, Raspberry (black & red), Strawberry, Youngberry.

TREE NUTS: Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Walnut, Black and English (Persian).

ORIENTAL VEGETABLES: Acerola, Atemoya, Balsam Pear (bitter melon), Carambola, Japanese Artichoke, Chinese Broccoli (Gai Lan), Chinese Cabbage (Bok Choy, Napa), Chinese Mustard Cabbage (Gai Choy), Dasheen, Ginger, Ginseng, Chinese Longbeans, Mung Beans, Citron Melon, Japanese Radish (Daikon), Chinese Spinach, Chinese Waxgourd, Cilantro, Citron Melon, Rambutan, Water Chestnut.

SUBTROPICAL FRUITS: Avocado, Banana, Carob, Barbados Cherry, Cherimoya, Dates, Durian (Jackfruit), Feijoa, Figs, Guava, Kiwifruit, Lychee, Mango, Papaya, Passion Fruit, Persimmon, Pineapple, Pomegranate.

CEREAL GRAINS: Barley, Buckwheat, Corn (sweet and field), Millet, Proso, Oats, Pearl Millet, Popcorn, Rice, Rye, Sorghum (Milo), Teosinte, Triticale. Wheat. Wild Rice.

FORAGE, FODDER AND STRAW OF CEREAL GRAINS: Barley, buckwheat, corn (sweet and field), millet, proso, oats, pearl, popcorn, rice, rye, sorghum (milo), teosinte, triticale, wheat, wild rice.

GRASSES FOR SEED, FORAGE, FODDER AND HAY: Any grass, Gramineal family (green or cured) except sugarcane and those listed in the cereal grains group that will be fed to or grazed by livestock, all Pasture and Range Grasses and Grasses grown for hay and silage, Bermudagrass, Bluegrass, Bromegrass, Fescue.

NON-GRASS ANIMAL FEEDS: Alfalfa, Velvet Beans, Clover, Kudzu, Lespedeza, Lupine, Sainfoin, Trefoil, Crown Vetch, Milk Vetch.

HERBS AND SPICES: Allspice, Angelica, Anise (anise seed), Anise [star], Annatto (seed), Balm (lemon balm), Basil, Borage, Burnet, Caper buds, Caraway, Caraway [black], Cardamom, Cassia bark, Cassia buds, Catnip, Celery seed, Chamomile, Chervil (dried), Chicory, Chive, Chive [Chinese], Cinnamon, Clary, Clove buds, Coriander (cilantro or Chinese parsley) (leaf), Coriander (cilantro) (seed), Costmary, Culantro (leaf), Culantro (seed), Cumin, Curry (leaf), Dill (dill weed), Dill (seed), Fennel (common), Fennel [Florence] (seed), Fenugreek, Grains of Paradise, Horehound, Hyssop, Juniper berry, Lavender, Lemongrass, Lovage (leaf), Lovage (seed), Mace, Marigold, Marjoram (includes sweet or annual marjoram, wild marjoram or oregano, and pot marjoram), Mustard (seed), Nasturtium, Nutmeg, Oregano, Mint, Paprika, Parsley (dried), Pennyroyal, Pepper [black], Pepper [white], Poppy (seed), Rosemary, Rue, Saffron, Sage, Savory [summer and winter], Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Vanilla, Wintergreen, Woodruff, Wormwood.

ADDITIONAL PLANTS: Artichoke, Asparagus, Avocado, Coffee, Cotton, Hops, Jojoba, Mushroom, Okra, Olives, Peanuts, Pineapple, Rice, Safflowers. Sesame. Sugarcane. Sunflower. Tea.

TO KILL ANTS (EXCLUDING FIRE AND PHARAOH ANTS) ON ORCHARD FLOORS AND VINEYARD FLOORS: Apply as a broadcast spray to the entire orchard floor using ground spray equipment at 5 to 18 fl. oz. per acre in 25 or more gallons of water. For best results use the high rate for heavy infestations and the lower rate for light infestations.

Do not apply where weed growth or other obstructions would impede uniform coverage of the orchard floor. Mow or chemically control weeds before the application. Foliar applications of Pyganic Crop Protection EC 1.4<sub>II</sub> may be made in addition to the orchard floor treatment.

USE ON GREENHOUSE FRUITS, VEGETABLES, FLOWERS AND FOLIAGE PLANTS: Used alone: Combine 16 fl. oz. (1 pint) to 32 fl. oz. (1 quart) with 30 gallons of water for applications with conventional hydraulic sprayers or 1 to 2 fl. oz. per gallon of water for applications with compressed sprayers.

FOR USE IN GARDENS AND TRUCK GARDENS: For commercial production of listed crops to kill listed insects dilute 0.9 to 1.8 fl. oz. of Pyganic Crop Protection EC 1.4<sub>II</sub> per gallon of water. Apply diluted solution with all types of agricultural sprayers, including compressed air sprayers or pump driven sprayers.

### STORAGE AND DISPOSAL

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

#### PESTICIDE STORAGE:

Keep this product in a tightly closed container when not in use. Store in a cool, dry (preferably locked) area. Post as a pesticide storage area. Always store pesticides in the original container. Store away from food, feed, seed, fertilizers, and veterinary supplies. Place formulations on lower shelves and dry formulations above.

#### PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

#### **CONTAINER DISPOSAL:**

Non-refillable container. Do not reuse or refill this container.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

GROUP 3A INSECTICIDE



# Pyganic® Crop Protection EC 1.4"

For Organic Production

OMRI

ACTIVE INGREDIENT:	
Pyrethrins a botanical insecticide	1.40%
OTHER INGREDIENTS:	
	100 00%

This product contains 0.108 lbs. Pyrethrins per gallon.

MGK® and Pyganic® are registered trademarks of McLaughlin Gormley King Company. All other marks are property of their respective holders.

# KEEP OUT OF REACH OF CHILDREN CAUTION / PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

/י	i you do not understand the label, find someone to explain it to you in detail.
	FIRST AID
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>
	<ul> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> </ul>
	Do not give anything by mouth to an unconscious person.
IF ON SKIN OR	Take off contaminated clothing.
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>
	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
	Call a poison control center 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.
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
Have the product cont	rainer or label with you when colling a poison central center or dector, or going for treatment. For information regarding

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information regarding medical emergencies or pesticide incidents, call 1-888-740-8712.

Manufactured by

NGK

7325 Aspen Lane North
Minneapolis, MN 55428

EPA Reg. No. 1021-1771 EPA Est. No. 1021-MN-2

Net Contents: \_\_\_\_\_(GAL) / \_\_\_\_\_(LBS

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## CAUTION

Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are made of barrier laminate, nitrile or neoprene rubber or Viton.

Mixers, loaders, applicators, and other handlers must wear the following:

- Long-sleeved shirt
- Long pants
- Shoes and socks
- Chemical-resistant gloves

In addition to the above PPE, applicators using handheld foggers in an enclosed area must wear:

- A particulate respirator with any N, R, or P filter with NIOSH approval prefix TC-84A or
- A NIOSH-approved gas mask with a canister filter with NIOSH approval prefix TC-14G, or
- A NIOSH-approved powered air purifying respirator with HE filter with NIOSH approval prefix TC-21C.

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.

When handlers use aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides 40 CFR 170.240 (d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

#### USER SAFETY RECOMMENDATIONS

#### 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. 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.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is highly toxic to fish. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift from treated areas may be hazardous to organisms in adjacent aquatic sites. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are foraging in the treatment area.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR, Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not apply this product in a way that will contact workers or other persons either directly or through spray drift. Only protected handlers may be in the area during application.

For any requirement specific to your state or Tribe, consult the State or Tribal Agency responsible for pesticide regulation.

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

PPE required for early entry into treated areas that is permitted under Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Long-sleeved shirt and long pants, Chemical-resistant gloves, such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton; Shoes plus socks

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR, Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow others to enter until vapors, mists, and aerosols have dispersed and the treated area has been thoroughly ventilated. Keep unprotected persons out of treated areas until sorays have dried.

Wear protective clothing when using or handling this product to help avoid exposure to eyes and skin. Eye protection, gloves, a long-sleeved shirt and long pants are recommended.

Do not enter or allow others to enter until sprays have dried.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation

#### **USE RESTRICTIONS:**

- Do not make applications during the rain.
- Do not wet plants to the point of runoff.
- When used in dairy barns or facilities: Close milk bulk tank lids to prevent contamination from spray and dead or falling insects.
- Do not remain in the treated area. Exit area immediately and remain outside the treated area until aerosols, vapors and/or mists have dispersed.
- Do not use in outdoor residential misting systems.
- Do not use indoors except in greenhouses.
- Do not reapply within 3 days, except under extreme pest pressure.
- In case of extreme pest pressure, do not reapply within 24 hours.
- Do not harvest until spray has dried.
- Do not wet plants to point of runoff or drip.
- Do not apply this product in a way that will contact workers or other persons either directly or through drift
- Only protected handlers may be in the area during application.
- Do not use in outdoor metered release devices.
- Keep unprotected persons out of treated areas until sprays have dried.
- Allow spray to dry before allowing adults, children or pets on treated areas.
- Do not apply more than 10 times per season.

#### **Spray Drift Management for Agricultural Crops:**

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interactions of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Do not apply at wind speeds greater than 10 mph at the application site.

Do not make any type of application into temperature inversions.

Apply as a medium or coarser spray (ASABE standard 572).

#### Additional Requirements for Aerial Applications:

Do not release spray at a height greater than 10 feet above the ground or crop canopy.

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Aerial applicators must consider flight speed and nozzle orientation in determining droplet size.

When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

#### Additional requirements for ground applications:

Do not release spray at a height greater than 4 feet above the ground or crop canopy.

#### Additional requirements for airblast applications:

Direct sprays into the canopy.

Turn off outward pointing nozzles at row ends and when spraying outer rows.

#### PESTICIDE RESISTANCE MANAGEMENT

Pyganic<sup>®</sup> Crop Protection EC 1.4<sub>II</sub> contains a Group 3A insecticide. Insect biotypes with acquired resistance to Group 3A may eventually dominate the insect population if Group 3A insecticides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Pyganic Crop Protection EC 1.4<sub>II</sub> or other Group 3A insecticides.

To delay insecticide resistance consider:

- Avoiding the consecutive use of Pyganic Crop Protection EC 1.4<sub>II</sub> or other Group 3A insecticides that have a similar target site of action, on the same insect species.
- Using tank mixtures or premixes with insecticides from a different target site of action Group as long as the involved products
  are all registered for the same use and have different sites of action.
- Basing insecticide use on a comprehensive IPM program.
- Monitoring treated insect population for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for insecticide resistance management
  and or IPM recommendations for the specific site and resistance pest problems.

#### INDOOR AREAS FOR USE IN AND AROUND:

Greenhouses

#### OUTDOOR AREAS FOR USE IN AND AROUND:

Nurseries

Outdoor Growing Crops

#### TO KILL THE FOLLOWING LISTED INSECTS:

12-spotted Cucumber Beetles, Angoumois Grain Moths, Ants (excluding fire and Pharaoh ants), Aphids, Apple Maggots, Armored Scales, Armyworms, Artichoke Plume Moths, Asian Citrus Psyllids, Asparagus Beetles, Bagworms, Bean Beetles, Beet Armyworms, Beetles, Bermudagrass Mirids, Billbugs, Blister Beetles, Blow Flies, Boll Weevils, Boxelder Bugs, Branch and Twig Borers, Cabbage Loopers, Cabbage Maggots, Cadelles, Cankerworms, Carrot Weevils, Caterpillars, Chalcids, Cheese Skippers, Cherry Fruit Flies, Cigarette Beetles, Clover Mites, Clover Weevils, Cockroaches, Codling Moths, Colorado Potato Beetles, Confused Flour Beetles, Corn Earworms, Crane Flies, Crickets, Cross-striped Cabbageworms, Cucumber Beetles, Dark Mealworms, Darkling Beetles (lesser mealworms), Deer Flies, Diamondback Larvae and Moths, Driedfruit Beetles, Drugstore Beetles, Earwigs, Eastern Tent Caterpillars, Elm Leaf Beetles, Eriophyid Mites, European Corn Borer, European Pine Tip Moths, Fireworms, Flea Beetles, Forest Tent Cateroillars, Fruit Flies, Fruittree Leafrollers, Fruitworms, Fungus Gnats, Garden Symphylan, Glassy-winged Sharpshooters, Gnats, Grain Mites, Grapeleaf Skeletonizers, Grape Leafhoppers, Grape Mealybugs, Grasshoppers, Greenbugs, Green Fruitworms, Green Peach Aphids, Greenhouse Thrips, Gypsy Moths (adults & larvae), Harlequin Bugs, Heliothis spp., Horn Flies, Hornworms, House Flies, Imported Cabbageworms, Indian Meal Moths, Japanese Beetles, Katydids, Lace Bugs, Leaffooted plant bugs, Leafhoppers, Leafminers, Leafminer Leaftiers, Lice, Loopers, Lygus, Maggots, Mealybugs, Mediterranean Flour Moths, Mexican Bean Beetles, Midges, Millipedes, Mites, Mole crickets, Mosquitoes, Moths, Mushroom Flies, Navel Orangeworms, Olive Fruit Flies, Onion Maggots, Orange Tortrix, Pacific flatheaded borers, Pear Psyllids, Pepper Weevils, Pink bollworms, Potato Leafhoppers, Potato Tuberworms, Proba bugs, Psyllids, Red Flour Beetles, Rice Weevils, Saltmarsh caterpillars, Sawtoothed Grain Beetles, Scales, Sharpshooters, Shore flies, Shothole borers, Silverfish, Skippers, Small Flying Moths, Soft Scales, Southern chinch bugs, Sow bugs, Spider Beetles, Springtails, Squash bugs, Stable Flies, Stink Bugs, Tarnished Plant Bugs, Thrips, Ticks, Tobacco Moths, Tomato budworms, Tomato bugs, Tomato Fruitworms, Tomato Hornworms, Tomato pinworms, Tomato Russet Mites, Tussock moths, Vine Mealybugs, Vinegar Flies, Webworms, Weevils, Western Yellowstriped armyworms, Whiteflies, Yellow Mealworms.

#### USE DIRECTIONS:

IMPORTANT: It is recommended that the final spray mix be adjusted to a pH of 5.5 to 7.0. Outside of this range, pyrethrins can degrade and the product will lose its effectiveness.

To avoid possible harm to honey bees, apply in the early morning or late evening hours.

USED ALONE: Apply 16 fl. oz. (1 pint) to 64 fl. oz. (2 quarts) per acre by ground in sufficient water for thorough coverage. This product may be applied by air at the rate of 16 to 64 fl. oz. per acre in a minimum of 5 gallons of water. Mix only enough for immediate use. Begin spraying when the insects first appear. Do not wait until the plants are heavily infested. Repeat as required to maintain effective kill.

USED AS A TANK MIX: This product may be tank mixed with other insecticides, acaricides, fungicides, adjuvants and wetting agents. This application should conform to accepted use precautions and directions for both products. Tank mix applications must be made in accordance with the more restrictive of label limitations and precautions. No label application rates may be exceeded. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. This product cannot be mixed with any product with label prohibitions against such mixing.

Prior to tank mixing, a compatibility test should be conducted using the proper proportions of products and water to ensure the physical compatibility of the mixture.

For growing field crop and orchard applications, do not exceed the maximum application rate of 0.050 lb. active ingredient / acre (equivalent to 59 fl. oz. of Pyganic Crop Protection EC 1.4<sub>II</sub> / acre) or 0.0012 lb. active ingredient / 1,000 sq. ft. (equivalent to 1.42 fl. oz. of Pyganic Crop Protection EC 1.4<sub>II</sub> / 1,000 sq. ft.).

For surface applications to greenhouse grown crops, do not exceed the maximum application rate of 0.050 lb. active ingredient / acre (equivalent to 59 fl. oz. of Pyganic Crop Protection EC  $1.4_{\rm ll}$  / acre) or 0.0012 lb. active ingredient / 1,000 sq. ft. (equivalent to 1.42 fl. oz. of Pyganic Crop Protection EC  $1.4_{\rm ll}$  / 1,000 sq. ft.).

For space spray applications to greenhouse grown crops, do not exceed the maximum application rate of 0.00014 lb. a.i. / 1,000 cu. ft. (equivalent to 0.166 fl. oz. or 4.92 mls of Pyganic Crop Protection EC  $1.4_{\rm H}$  / 1,000 cu. ft.).

IMPORTANT NOTE: Plant safety is an important consideration when using insecticides in a greenhouse. However, it is not possible to evaluate the phytotoxicity of Pyganic Crop Protection EC 1.4<sub>II</sub> on 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<sub>II</sub>, or tank mix combinations, treat a limited number of plants and observe for phytotoxicity over a 10-day period.

#### **DIRECTIONS FOR APPLICATION THROUGH IRRIGATION SYSTEMS:**

Apply this product only through sprinkler (including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for the operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock 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 pump when the pump motor stops. The irrigation line or water pump must include a functional pressure valve which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

System must be a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Constant agitation must be maintained in the chemical supply tank during the entire period of insecticide application. Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of more dilute suspension per unit of time.

SOIL DRENCH DIRECTIONS FOR USE IN GREENHOUSES: Add 1.43 fl. oz. of Pyganic Crop Protection EC 1.4<sub>II</sub> to 5 gallons of water and apply as a soil drench to 1,000 sq. ft. of soil or non-soil media to kill soil-borne insect larvae (e.g., Fungus Gnats). Apply for sufficient duration so as to distribute the application rate evenly to the entire treated area. Apply to moderately moist soils. Do not exceed the maximum application rate of 1.43 fl. oz. of Pyganic Crop Protection EC 1.4<sub>II</sub> per 1,000 sq. ft. To drench the soil, additional water may be applied to the area, being careful not to apply to runoff.

#### **GROWING CROPS (OUTDOORS, IN GREENHOUSES AND IN NURSERIES):**

ROOT AND TUBER VEGETABLES: Arracacha, Arrowroot, Purple Arrowroot, Japanese Artichoke, Jerusalem Artichoke, Garden Beets, Sugar Beets, Edible Burdock, Edible Canna, Carrots, Cassava (bitter or sweet), Celeriac (Celery root), Chayote (root), Chervil (turnip-rooted), Chicory, Chufa, Dasheen, Ginger, Ginseng, Horseradish, Leren, Parsley (turnip-rooted), Parsnip, Potato, Radish, Japanese Radish (Daikon), Rutabaga, Salsify, Black Salsify, Spanish Salsify, Sweet Potato, Tanier, Turmeric, Turnip, Yam (true), Yam Bean.

LEAVES OF ROOT AND TUBER VEGETABLES: Garden Beet, Sugar Beet, Edible Burdock, Carrot, Cassava (bitter or sweet), Celeriac (Celery root), Chervil (turnip-rooted), Chicory, Dasheen (Taro), Parsnip, Radish, Japanese Radish (Daikon), Rutabaga, Black Salsify, Sweet Potato, Tanier, Turnip, Yam (true).

BULB VEGETABLES: Garlic, Great-headed Garlic, Leek, Onion (bulb and green), Welsh, Shallot,

<u>LEAFY VEGETABLES</u>: Amaranth (Leafy Amaranth, Chinese Spinach, Tampala), Arugula, Cardoon, Celery, Chinese Celery, Celtuce, Chervil, Cilantro, Corn Salad, Chrysanthemum (edible-leaved), Chrysanthemum (garland), Cress (garden, water), Upland Cress (Yellow Rocket, Winter Cress), Dandelion, Dock (Sorrel), Endive (Escarole), Fennel (Florence), Lettuce (head and leafy), Orach, Parsley, Purslane (garden & winter), Radicchio, Rhubarb, Spinach, Fine Spinach (Malabar, Ceylon), Spinach (New Zealand), Swiss Chard.

BRASSICA (COLE) LEAFY VEGETABLES: Broccoli, Chinese Broccoli (Gai Lan), Broccoli Raab (Rapini), Brussels Sprouts, Cabbage, Chinese Cabbage (Bok Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Cavalo Broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens.

LEGUME VEGETABLES (SUCCULENT OR DRIED): Adzuki Beans, Field Beans, Kidney Beans, Lima Beans, Moth Beans, Mung Beans, Navy Beans, Pinto Beans, Rice Beans, Runner Beans, Snap Beans, Tepary Beans, Urd Beans, Wax Beans, Asparagus Beans, Blackeyed Peas, Catjang, Chinese Longbeans, Cowpeas, Crowder Peas, Southern Peas, Yardlong Beans, Broad Beans (Fava Beans), Chick Peas (Garbanzo Beans), Guar, Jack Beans (Sword Beans), Lablab Beans (Hyacinth Beans), Lentils, Peas (Garden Peas, Field Peas, Sugar Snap Peas, English Peas, Snow Peas), Pigeon Peas, Soybeans, Sweet Lupin Beans, White Lupin Beans, White Sweet Lupin, Sword Beans.

FOLIAGE OF LEGUME VEGETABLES: Plant part of any legume vegetable included in the legume vegetable group including any variety of Beans, Field Peas. Soybeans.

<u>FRUITING VEGETABLES</u>: Eggplant, Ground Cherry, Okra, Pepinos, Pepper (Bell Pepper, Chili Pepper, Cooking Peppers, Pimentos, Sweet Peppers), Tomatillos, Tomatoes.

<u>CUCURBIT VEGETABLES</u>: Balsam Apple, Balsam Pear (Bitter Melon), Chayote (fruit), Chinese Waxgourd (Chinese preserving melon), Chinese Cucumber, Citron Melon, Cucumber, Gherkin, Edible Gourds, Melons (including hybrids, Cantaloupe, Casaba, Crenshaw, Golden Pershaw Melon, Honeydew Melons, Honey Balls, Mango Melon, Muskmelon, Persian Melon, Pineapple Melon, Santa Claus Melon, Snake Melon), Pumpkin, Squash (summer & winter), Watermelon (including hybrids).

<u>CITRUS FRUITS</u>: Calamondin, Citrus Citron, Citrus Hybrids, Grapefruit, Kumquats, Lemons, Limes, Mandarin (Tangerine), Orange (sweet & sour), Pummelo, Satsuma Mandarin, (Citrus spp. includes Chironia, Tangelos, Tangers).

POME FRUITS: Apple, Crab Apple, Loquat, Pear, Mayhaw, Oriental Pear, Quince.

STONE FRUITS: Apricot, Cherry (sweet & sour), Nectarine, Peach, Plum, Prune, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot.

SMALL FRUITS AND BERRIES: Blackberry, Blueberry, Cranberry, Currant, Dewberry, Elderberry, Gooseberry, Grape, Huckleberry, Loganberry, Olallieberry, Raspberry (black & red), Strawberry, Youngberry.

TREE NUTS: Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Walnut, Black and English (Persian).

ORIENTAL VEGETABLES: Acerola, Atemoya, Balsam Pear (bitter melon), Carambola, Japanese Artichoke, Chinese Broccoli (Gai Lan), Chinese Cabbage (Bok Choy, Napa), Chinese Mustard Cabbage (Gai Choy), Dasheen, Ginger, Ginseng, Chinese Longbeans, Mung Beans, Citron Melon, Japanese Radish (Daikon), Chinese Spinach, Chinese Waxqourd, Cilantro, Citron Melon, Rambutan, Water Chestnut.

SUBTROPICAL FRUITS: Avocado, Banana, Carob, Barbados Cherry, Cherimoya, Dates, Durian (Jackfruit), Feijoa, Figs, Guava, Kiwifruit, Lychee, Mango, Papaya, Passion Fruit, Persimmon, Pineapple, Pomegranate.

CEREAL GRAINS: Barley, Buckwheat, Corn (sweet and field), Millet, Proso, Oats, Pearl Millet, Popcorn, Rice, Rye, Sorghum (Milo), Teosinte, Triticale. Wheat. Wild Rice.

FORAGE, FODDER AND STRAW OF CEREAL GRAINS: Barley, buckwheat, corn (sweet and field), millet, proso, oats, pearl, popcorn, rice, rye, sorghum (milo), teosinte, triticale, wheat, wild rice.

GRASSES FOR SEED, FORAGE, FODDER AND HAY: Any grass, Gramineal family (green or cured) except sugarcane and those listed in the cereal grains group that will be fed to or grazed by livestock, all Pasture and Range Grasses and Grasses grown for hay and silage, Bermudagrass, Bluegrass, Bromegrass, Fescue.

NON-GRASS ANIMAL FEEDS: Alfalfa, Velvet Beans, Clover, Kudzu, Lespedeza, Lupine, Sainfoin, Trefoil, Crown Vetch, Milk Vetch.

HERBS AND SPICES: Allspice, Angelica, Anise (anise seed), Anise [star], Annatto (seed), Balm (lemon balm), Basil, Borage, Burnet, Caper buds, Caraway, Caraway [black], Cardamom, Cassia bark, Cassia buds, Catnip, Celery seed, Chamomile, Chervil (dried), Chicory, Chive, Chive [Chinese], Cinnamon, Clary, Clove buds, Coriander (cilantro or Chinese parsley) (leaf), Coriander (cilantro) (seed), Costmary, Culantro (leaf), Culantro (seed), Cumin, Curry (leaf), Dill (dill weed), Dill (seed), Fennel (common), Fennel [Florence] (seed), Fenugreek, Grains of Paradise, Horehound, Hyssop, Juniper berry, Lavender, Lemongrass, Lovage (leaf), Lovage (seed), Mace, Marigold, Marjoram (includes sweet or annual marjoram, wild marjoram or oregano, and pot marjoram), Mustard (seed), Nasturtium, Nutmeg, Oregano, Mint, Paprika, Parsley (dried), Pennyroyal, Pepper [black], Pepper [white], Poppy (seed), Rosemary, Rue, Saffron, Sage, Savory [summer and winter], Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Vanilla, Wintergreen, Woodruff, Wormwood.

ADDITIONAL PLANTS: Artichoke, Asparagus, Avocado, Coffee, Cotton, Hops, Jojoba, Mushroom, Okra, Olives, Peanuts, Pineapple, Rice, Safflowers. Sesame. Sugarcane. Sunflower. Tea.

TO KILL ANTS (EXCLUDING FIRE AND PHARAOH ANTS) ON ORCHARD FLOORS AND VINEYARD FLOORS: Apply as a broadcast spray to the entire orchard floor using ground spray equipment at 5 to 18 fl. oz. per acre in 25 or more gallons of water. For best results use the high rate for heavy infestations and the lower rate for light infestations.

Do not apply where weed growth or other obstructions would impede uniform coverage of the orchard floor. Mow or chemically control weeds before the application. Foliar applications of Pyganic Crop Protection EC 1.4<sub>II</sub> may be made in addition to the orchard floor treatment.

<u>USE ON GREENHOUSE FRUITS, VEGETABLES, FLOWERS AND FOLIAGE PLANTS</u>: Used alone: Combine 16 fl. oz. (1 pint) to 32 fl. oz. (1 quart) with 30 gallons of water for applications with conventional hydraulic sprayers or 1 to 2 fl. oz. per gallon of water for applications with compressed sprayers.

FOR USE IN GARDENS AND TRUCK GARDENS: For commercial production of listed crops to kill listed insects dilute 0.9 to 1.8 fl. oz. of Pyganic Crop Protection EC 1.4<sub>II</sub> per gallon of water. Apply diluted solution with all types of agricultural sprayers, including compressed air sprayers or pump driven sprayers.

### STORAGE AND DISPOSAL

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

#### PESTICIDE STORAGE:

Keep this product in a tightly closed container when not in use. Store in a cool, dry (preferably locked) area. Post as a pesticide storage area. Always store pesticides in the original container. Store away from food, feed, seed, fertilizers, and veterinary supplies. Place formulations on lower shelves and dry formulations above.

#### PESTICIDE DISPOSAL:

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

#### **CONTAINER DISPOSAL:**

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into rinsate collection system. Repeat this rinsing procedure two more times. Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.