

Crymax®

WETTABLE POWDER BIOINSECTICIDE

CRYMAX® wettable powder bioinsecticide is a biological insecticide for the control of lepidopteran pests.

Active Ingredient:

Bacillus thuringiensis subspecies *kurstaki* strain EG7841 solids, spores and Lepidopteran active toxins40.00%

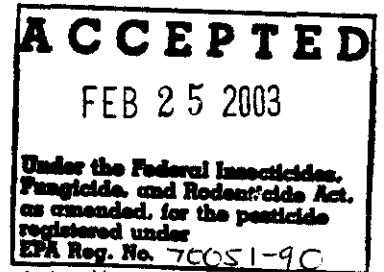
Inert Ingredients:.....60.00%

Total.....100.00%

The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

Net Contents:
5 U.S. Pound Bag

EPA Reg. No. 70051-90
EPA Est. No. 42761-MS-1



KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

If in eyes: Hold eye open and rinse slowly and gently for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or ambulance, then give

artificial respiration, preferably mouth-to-mouth, if possible.

If swallowed: Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person.

Call Poison control center or doctor for treatment advice.

Manufactured by
Certis USA
9145 Guilford Road
Suite 175
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CERTIS

Hot Line Number: 1-800-255-3924

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if inhaled. Avoid breathing dust or spray mist. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Personal Protective Equipment (PPE):

Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Shoes plus socks

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.

Mixers/loaders and applicators must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

User Safety Recommendations

User should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place inaccessible to children.

Pesticide Disposal: Do not contaminate water when disposing of equipment washwaters. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. 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. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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 intervals. The requirements in this section only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, waterproof gloves, protective eyewear, shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to the 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 treated areas without protective clothing until sprays have dried.

Preharvest Interval: CRYMAX may be applied to the crops listed in the APPLICATION RATE TABLE at any time, up to and on the day of harvest.

Mode of Action: After consuming a lethal dose of CRYMAX, larvae will cease to feed, but may remain alive on foliage for several days before disappearing. Immediately after ingestion of Crymax WDG larvae begin to move slowly, become discolored, shrivel and blacken prior to death.

MIXING INSTRUCTIONS

CRYMAX may be applied with conventional ground, aerial or hand held application equipment with quantities of water sufficient to provide thorough coverage of infested plants. To obtain a suitable mixture with water, add enough water to allow maximum agitation. With agitator running, slowly add in the CRYMAX. Continue agitation. Add remainder of water and other spray materials and agitate until mixed. Maintain suspension while loading and spraying. Do not mix more CRYMAX than can be used in a 24-hour period. Rinse and flush spray equipment thoroughly following each use. Do not contaminate water when disposing of equipment washwaters.

In order to make proper decisions on application rates to be used, follow the recommendations in the APPLICATION RATE TABLE.

APPLICATION INSTRUCTIONS

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction 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.

CRYMAX is a bioinsecticide for use against the lepidopteran larvae listed in the APPLICATION RATE TABLE. Larvae must consume deposits of CRYMAX WDG to be affected. Always follow these directions:

- Make applications when larvae are still small (early instars) and actively feeding on foliage or other plant parts.
- Make applications before noticeable foliar damage occurs.
- Thorough spray coverage is essential for good insect control. For ground applications, directed drop nozzles should be used for certain vegetable crops.
- When insect infestations are heavy, use the higher label rates, shorten the spray interval, and/or use larger total spray volume to improve spray coverage.
- Applications should be repeated at an interval sufficient to maintain control, depending upon plant growth, insect pressure and weather conditions after spraying.
- For crops such as Fruits, Nuts, and Vines, applications are often timed to stage of development and recommendations from local Extension personnel should always be followed.
- Local conditions may affect the use of CRYMAX. Consult your State Agricultural Extension Specialist for specific recommendations related to local crop protection problems.
- Spray water/spray tank solutions should not exceed pH 8.0. If necessary, buffer water to near neutral pH.

HAND HELD EQUIPMENT

When using hand held equipment, mix 3 teaspoons per gallon of water or 2 pounds per 100 gallons of spray solution. Spray to wet, but not to runoff.

TANK MIX

Combinations of CRYMAX with commonly used insecticides, fungicides, or other spray tank adjuvants are generally not deleterious to performance. It is advisable to test physical compatibility by mixing all components in a small container in proportionate quantities prior to mixing in spray tank. This product cannot be mixed with any product containing a label prohibition against such mixing. No label dosage rate should be exceeded. Application must be made in accordance with the more restrictive of label limitation and precautions.

For improved durability of spray deposits, a spreader/sticker approved for use on growing crops may be used for hard-to-wet crops such as cole crops.

CHEMIGATION

Apply this product only through center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move sprinkler systems. **Do not apply this product through any other type of irrigation system.** Crop injury or lack of effectiveness can result from non-uniform distribution of treated water.

If you have questions about calibration, contact your State Extension Service Specialist, 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 its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

CHEMIGATION SYSTEM CONNECTED TO PUBLIC WATER SYSTEMS

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

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 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 water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use 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.

SPRINKLER CHEMIGATION

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 water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use 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.

The active ingredient in CRYMAX will settle in the tank and injection lines; adequate agitation must be provided before and

during the injection period. Use only in systems that apply uniformly and have appropriate check valves. When application is complete, thoroughly flush the injection system and sprinkler lines.

MIXING RECOMMENDATIONS FOR CHEMIGATION:

Follow general MIXING INSTRUCTIONS and keep the ratio at three parts water to one part CRYMAX. Also, provide mild uniform agitation throughout the solution but do not agitate excessively.

SPRAY VOLUME

For chemigation, use irrigation levels of 0.15 to 0.5 inches of water per acre. Up to 1 inch of irrigation water may be used, but efficacy may be reduced. The product should be applied continuously for the duration of the water application.

APPLICATION RATE TABLE

I. Vegetable & Cole CROPS		
Crop such as:	Insect Pest	
Artichokes	Lentils	Alfalfa looper
Arugala	Lettuce (Head,	Armyworm
Asparagus	Leaf, Romaine)	Artichoke plume moth
Beans	Malanga	Beet armyworm
Beets	Melons	Cabbage budworm
Bok Choy	(Cantaloupe,	Cabbage looper
Broccoli	Crenshaw,	Cabbage Webworm
Brussels sprouts	Honeydew,	Celery leaf-tier
Cabbage	Muskmelon,	Corn earworm
Cardoni	Watermelon,	Cross-striped
Carrots	etc.)	cabbageworm
Cauliflower	Napa	Diamondback moth
Celeriac	Okra	European corn borer
Celery	Onions	Green cloverworm
Chick peas	Parsley	Imported cabbageworm
Chicory	Parsnips	Melonworm
Chinese cabbage	Peas	Omnivorous leafroller
Collards	Peppers	Pickleworm
Cucumber	Potatoes	Rindworm complex
Cucurbits	Pumpkins	Saltmarsh caterpillar
Dry bulb onions	Radishes	Southern armyworm
Eggplant	Rutabaga	Soybean looper
Escarole	Salsify	Tobacco budworm
Endive	Shallots	Tomato fruitworm
Garlic	Soybean foliage	Tomato hornworm
Green onions	Spinach	Tomato pinworm
Greens (Beets,	Squash	Velvetbean caterpillar
China,	Sugar beets	Yellowstriped armyworm
Dandelion,	Sweet potatoes	
Mustard,	Swiss chard	
Turnip)	Tomatoes	
Horseradish	Turnips	
Kale	Watercress	
Kohlrabi		

Rate/Acre: 0.5 - 2.0 pounds

II. HERBS & SPICES

Crop such as:	Insect Pest	
Basil	Alfalfa looper	
Chives	Armyworm	
Cilantro	Diamondback moth	
Dill	European corn corer	
Oregano	Green cloverworm	
Peppermint	Imported cabbageworm	
Thyme	Loopers	
	Saltmarsh caterpillar	

Rate/Acre: 0.5 - 2.0 pounds

III. PASTURE & HAY CROPS

Crop such as:	Insect Pest
Alfalfa (hay & seed) Pasture (grasses & hay) Silage	Alfalfa caterpillar Armyworm Beet armyworm European skipper Loopers Webworm Yellowstriped armyworm

Rate/Acre: 0.5 - 2.0 pounds

IV. FRUIT, NUT & VINE CROPS

Crop such as:	Insect Pest	
Pome and Stone	Cankerworm (Spring & Fall)	Pandemis leafroller
Fruit Trees:	Cherry fruitworm	Peach twig borer
Apples	Eastern tent caterpillar	Redbanded leafroller
Apricots	Fall webworm	Redhumped caterpillar
Cherries	Fruittree leafroller	Tortrix moth (Orange and Garden)
Nectarines	Green fruitworm	Tufted apple budmoth
Peaches	Gypsy moth	Variegated leafroller
Pears	Navel orangeworm	Walnut caterpillar
Plums	Obliquebanded leafroller	Western tent caterpillar
Prunes	Omnivorous leafroller	
Quince	Oriental fruit moth	
Nut Trees:	Citrus cutworm	Omnivorous leafroller
Almonds	Filbert leafroller	Pecan nut casebearer
Chestnuts	Filbert webworm	Peach twig borer
Filberts	Fruittree leafroller	Redhumped caterpillar
Pecans	Hickory shuckworm	Roughskinned cutworm
Pistachios	Navel orangeworm	Western tent caterpillar
Walnuts	Obliquebanded leafroller	
Citrus:	Amorbia	Omnivorous leafroller
	Citrus cutworm	Orangedog
	Fruittree leafroller	
Small Fruit and Berries:	Achema sphinx moth	Omnivorous looper
Blackberries	Armyworms	Tobacco budworm
Blueberries	Blackheaded fireworm	
Boysenberries	Blueberry leafroller	
Cranberries	Cranberry girdler	
Currants	Fruittree leafroller	
Longanberries	Grape berry moth	
Raspberries	Gypsy moth	
Strawberries	Loopers	
	Obliquebanded leafroller	
Grapes:	Grape berry moth	Omnivorous leafroller
	Cherry fruitworm	Orange tortrix
	Grape leafroller	Saltmarsh caterpillar
	Grapeleaf skeletonizer	Yellowstriped armyworm
	Green fruitworm	
Tropical and Other Fruit:	Amorbia	Omnivorous leafroller
Avocados	Loopers	Omnivorous looper
	Orange tortrix	Spanworm
Bananas	Banana skipper	
Kiwi	Omnivorous leafroller	
Persimmons	Citrus cutworm	Omnivorous leafroller
Pomegranate	Fall webworm	Redhumped caterpillar
	Filbert webworm	Tent caterpillar
Pineapple	Gummosos-Batrachedra commosae	
	Thecia-Thecia basiides	
Tropical fruits	Hornworms	Loopers
	Leafrollers	Omnivorous leafroller

Rate/Acre: 0.5 - 2.0 pounds

V. FIELD CROPS

Crop such as:	Insect Pest	
Canola/ Rape Seed	Armyworm	
Evening Primrose	Diamondback moth	
Meadow foam	Imported cabbageworm	
	Loopers	
Corn (Field, Sweet, Popcorn, Seed)	Armyworm	
	European corn borer	
	Southwestern corn borer	
Cotton*	Beet armyworm	Saltmarsh caterpillar
	Bollworm	Soybean looper
	Cabbage looper	Tobacco budworm
	Cotton leaf perforator	Yellowstriped armyworm
Hops	Armyworm	Omnivorous leaftier
	Loopers	Spotted cutworm
	Obliquebanded leafroller	
Jobba	Looper (<i>Anacamptodes sp.</i>)	
Peanuts	Green cloverworm	Podworm
	Loopers	Velvetbean caterpillar
Rice	Armyworm	Saltmarsh caterpillar
	Green cloverworm	Velvetbean caterpillar
	Loopers	
Safflower	Armyworm	Saltmarsh caterpillar
	Loopers	
Small Grains (Barley, Oats, Rye, Wheat, etc.)	Armyworm	
	Loopers	
Sorghum	European corn borer	Saltmarsh caterpillar
	Headworm	Velvetbean caterpillar
Soybeans	Green cloverworm	Soybean looper
	Podworm	Velvetbean caterpillar
Sunflowers	Banded sunflower moth	Loopers
	Beet armyworm	Sunflower moth
	Headmoth	
Tobacco	Tobacco budworm	
	Tobacco hornworm	
	Loopers	

Rate/Acre: 0.5 - 2.0 pounds

* Use CRYMAX at 0.25 lb/acre to control light to moderate populations of newly hatched tobacco budworm and bollworm in integrated pest management programs. Repeat treatments at four to five day intervals or as long as necessary until results are acceptable. Ovicides or synthetic pyrethroids can be combined with CRYMAX in accordance with the more restrictive of label limitations and precautions. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

VI. COMMERCIAL FLOWERS & ORNAMENTAL PLANTS

Crop such as:	Insect Pest	
Bedding plants	Armyworm	Oleander moth
Flowers	Azalea moth	Omnivorous leafroller
(Greenhouse and Field)	Beet armyworm	Omnivorous looper
Greenhouse	Diamondback moth	Tobacco budworm
Ornamentals	Ello moth (hornworm)	
Greenhouse	Florida fern caterpillar	
Vegetables	lo moth	
Container Stock	Loopers	

Rate/Acre: 0.5 - 2.0 pounds

VII. FOREST, SHADE TREE & NURSERY STOCK

Crop such as:	Insect Pest	
Forest	Bagworm	Pine butterfly
Shade trees	Blackheaded budworm	Redhumped caterpillar
Nursery trees	Browntail moth	Saddleback caterpillar
	California oakworm	Saddle prominent caterpillar
	Douglas fir tussock moth	Spring and Fall cankerworm
	Elm spanworm	Spruce budworm
	Fall webworm	Tent caterpillar
	Fruittree leafroller	Tortix
	Greenstriped mapleworm	Western tussock moth
	Gypsy moth	
	Jack pine budworm	
	Mirrosa webworm	

Rate/Acre: 0.5 - 2.0 pounds

VIII. TURF

Crop such as:	Insect Pest	
Turf	Armyworm	Sod webworm
		Tropical sod webworm

Rate/Acre: 0.5 - 2.0 pounds

WARRANTY

Certis USA, L.L.C. warrants that the material contained herein conforms to the description on the label and is reasonably fit for the purposes referred to in the directions for use. Timing and method of application, weather, watering practices, nature of soil, the insect problem, condition of the crop, incompatibility with other chemicals not specifically recommended, and other influencing factors in the use of this product are beyond the control of the seller. Buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given herein. NO OTHER EXPRESS OR IMPLIED WARRANTY OF THE FITNESS OR MERCHANTABILITY IS MADE.

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