

42502
 JUN 22 1984
 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 43382-2



Biochem Products

A Division of
 Salisbury Laboratories, Inc.
 A Member of
 the Solvay Group
 Montchanin, Delaware 19710

EPA Registration No.
 43382-2

EPA Est. No.

Net Weight:

Lot No.

ACTIVE INGREDIENT: *Bacillus thuringiensis* Berliner, var. *kurstaki*, primary powder fermentation product, potency of 16,000 International Units per milligram of product (equivalent to 7.3 billion International Units per pound of product) 20%
INERT INGREDIENTS: 80%
 100%

CAUTION: KEEP OUT OF REACH OF CHILDREN

PRECAUTIONARY STATEMENTS

Hazards to Humans: Avoid inhalation or contact with eyes or open wounds.

STORAGE AND DISPOSAL

Storage: Tightly reclose containers of unused Bactospeine. Store in cool, dry place.
Disposal: Do not reuse empty container. Perform or crush and discard container according to local trash disposal regulations and in a safe place.

DIRECTIONS FOR USE

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

Bactospeine (*Bacillus thuringiensis*) Wettable Powder provides best control when caterpillars are newly hatched (1st or 2nd instar) and most susceptible to the product which must be eaten. Good leaf coverage is essential to achieve effective insect control. Higher rates are generally necessary when infestations are heavy and foliage is dense.

For armyworm control, apply to plants and thoroughly to adjacent soil when larvae are young.

To obtain a suitable mixture with water, pour the recommended amount into a 1/2 filled tank and agitate. Fill tank and maintain agitation until the mixing process is complete. Bactospeine is compatible with various insecticides, fungicides, spreaders, and stickers except those that are highly alkaline in nature. Reagitate if dilute spray is allowed to stand for more than 6 hours.

WETTABLE POWDER

For most trees, the recommended amount of product may be applied by high pressure hydraulic sprayers in 100 gallons of water per acre. Cover foliage thoroughly, but avoid runoff. Mist blower applications may use 10-20 gallons of water per acre.

Spreaders and stickers improve coverage and are recommended.

For vine, pome, citrus and tropical fruits, use recommended amount per 100 gallons water and apply 100 to 500 gallons of spray dilution per acre.

Aerial applications should use recommended rates in 1/4 to 10 gallons of water per acre during early morning or evening hours when winds are low. Spray systems which produce a 50-300 micron droplet size are preferable.

For small quantity, use 2 teaspoonfuls per gallon of water to provide an application rate of 1 lb/acre in 100 gallons of water.

Note: Because the active ingredient, *Bacillus thuringiensis*, is exempt from tolerance requirements, this product may be applied up to the day of harvest and in storage.

Notice: Local conditions may affect the use of Bactospeine. Consult State Agricultural Extension or Experiment Station Specialists for specific recommendations related to local crop protection problems. Biochem Products makes no warranty, express or implied, including the warranties of commercially acceptable quality and/or fitness for any particular purpose concerning this material, other than those which are contained on this label.

Chickens, Cabbages, Sweet Potatoes	Tobacco
Kohlrabi, Radish, Sweet Corn	Long Leaf Cotton
Tomatoes, Peppers, Eggplant	Long Leaf Cotton
Asparagus, Lettuce, Potatoes	Long Leaf Cotton
Carrots, Cucumbers	Long Leaf Cotton
Melons, Squash, Watermelon	Long Leaf Cotton

Tobacco	Tobacco
	Long Leaf Cotton
	Long Leaf Cotton

To control tobacco moth during storage use 1 lb or 9 for uniformly applied or spray mist to leaf surfaces before h

Safflower, Sugar beets	Tobacco
Musts, Peanuts, Alfalfa	Long Leaf Cotton
Soybeans, Sunflower, Hay	Long Leaf Cotton
Peas, Small grains	Long Leaf Cotton
Forage crop: Green sorghum	Long Leaf Cotton

Turt	Red
Reynold	Red

Grapes, Blueberries	Long Leaf Cotton
Blackberries, Currants	Long Leaf Cotton
Raspberries, Hops	Long Leaf Cotton
Cherries, Nuts	Long Leaf Cotton
Walnuts	Long Leaf Cotton

Cotton	Long Leaf Cotton
	Long Leaf Cotton
	Long Leaf Cotton

Apply at first stage of 1st and 2nd instar budworm or before 2-5 gallons/acre with aerial equipment. To continue work report recommendations.

Bactospeine at 25 to 100 lb/acre may be tank mixed with insecticides of early instar larvae.

Crop	Pest
Peaches, Plums	Gypsy moth
Cherries, Walnuts	Walnut caterpillar
Almonds, Pecans	Leafroller
Filberts	Cantharid
Apples, Pears	Tom caterpillar
Avocado, Kiwi	Redthumped caterpillar
	Fall webworm

Forests, Shade trees	Amygdalus
Ornamental plants	Pine butterfly
Flowers, Shrubs	Spruce budworm
	Western spruce budworm
	Douglas fir tussock moth
	Doan's bark moth
	Gypsy moth
	Elm spanworm
	Bogworm, Redlined promelia
	Reddish-brown caterpillar, Leaf
	Looper, Western tussock moth
	Tobacco budworm/Budworm
	to moth, Hessian webworm
	Jack pine budworm
	Chickadee moth
	Fall webworm
	Tom caterpillar
	Redthumped caterpillar
	Cantharid, Oakworm, H

For best control of Gypsy moth, apply when young larvae are
 For best control of spruce budworm, apply on population 1 in 3rd and 4th instar

Citrus, Tropical fruits	Leafroller, Hessianworm, Long
	Oxycodone
Shaded Products: grain legumes, peanuts, soybeans, and other seeds and grains	Indian meal moth
	Almond moth
	Mediteranean flour moth

Continuously agitate spray solution and spray at the rate of conveyor or sugar to a fast thorough mixing. Alternately, process of other lily with one pound Bactospeine in ten g

43302
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 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, this pesticide is registered under EPA Reg. No. 43302-2



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EPA Registration No.
 43302-2

EPA Est. No.

Net Weight:

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PRECAUTIONARY STATEMENTS

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STORAGE AND DISPOSAL

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For armyworm control, apply to plants and thoroughly to adjacent soil when larvae are young.

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Chinese Cabbage, Sweet Potato, Kohlrabi, Endive, Sweet Corn, Tomatoes, Peppers, Eggplant, Squash, Lima Beans, Potatoes, Carrots, Cucumbers, Melons, Squash, Watercress	Tobacco
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To control tobacco moths during storage use 1.6 oz. or 9 level 1/2 cups uniformly applied as a spray mist to leaf surfaces before burlap

Safflower, Sugar beets, Mints, Parsnips, Alfalfa, Soybeans, Sunflower Hay, Pastures, Small grains, Forage crops, Grain sorghum	Tobacco, Looper, Salt marsh, Green cutworm, Skipper, Alfalfa
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Turf, Rangeland	Red weevil, Rangeland
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Grapes, Blueberries, Blackberries, Currants, Raspberries, Hops, Strawberries, Dewberries	Grape, Looper, Grape, Hornworm
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Cotton	Looper, Tobacco, Bollworm
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Apply at first sign of 1st and 2nd instar budworm or bollworm. 2.5 gallons/acre with aerial equipment. To continue worm report recommendations.

Bactospeine at 25 to 100 lb/acre may be tank mixed with insecticides for control of early instar larvae.

Crop	Pest
Peaches, Plums, Cherries, Walnuts, Almonds, Pecans, Filberts, Apples, Pears, Avocados, Kiwis	Gypsy moth, Walnut caterpillar, Leafrollers, Cankerworms, Tent caterpillars, Redhumped caterpillar, Fall webworm

Forests, Shade trees, Ornamental plants, Flowers, Shrubs	Armyworms, Pine butterfly, Spruce budworm, Western spruce budworm, Douglas fir tussock moth, Diamondback moth, Gypsy moth, Elm spanworm, Bagworm, Saddlehorn, Saddleback caterpillar, Leafroller, Looper, Western tussock moth, Tobacco budworm/Bollworm/10 moth, Mimosa webworm, Jack pine budworm, Oleander moth, Fall webworm, Tent caterpillars, Redhumped caterpillar, Cankerworms, Oakworms, Hornworm
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For best control of Gypsy moth, apply when young larvae are present. For best control of spruce budworm, apply on population below 1000 per acre in 3rd and 4th instar.

Citrus, Tropical fruits	Leafroller, Hornworm, Looper, Orangepeel
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Straw Products, grain legumes, peanuts, soybeans, other seeds and grains	Indian meal moth, Almond moth, Mediterranean flour moth
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For best control of Indian meal moth, apply on population below 1000 per acre in 3rd and 4th instar. For best control of Mediterranean flour moth, apply when young larvae are present.