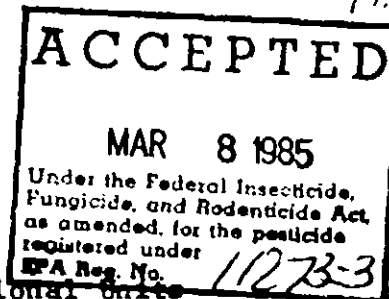


R. # 11012-3 1085
11.17

THURICIDE® HP WETTABLE POWDER



ACTIVE INGREDIENT:

Bacillus thuringiensis Berliner potency of 16,000 International Units
(at least 30 million viable spores) per milligram*.....3.2%
INERT INGREDIENTS.....96.8%
TOTAL 100.0%

*Equivalent to 7.2 billion International Units per pound

KEEP OUT OF REACH OF CHILDREN

CAUTION

AVOID INHAULATION OR CONTACT WITH EYES OR OPEN WOUNDS.
APPLY THIS PRODUCT ONLY AS SPECIFIED ON THIS LABEL.

STORE IN A COOL PLACE

DIRECTIONS FOR USE

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

GENERAL: Apply at first sign of infestation when worms are small and repeat at weekly intervals as needed to maintain control. Thuricide HP Wettable Powder attacks the larval gut and must be eaten by the insect to be effective. Thorough underleaf coverage is therefore, essential for best results. After eating Thuricide HP Wettable Powder, worms stop feeding and die within 2-3 days. Since the active ingredient, Bacillus thuringiensis, is exempt from tolerance requirements. Thuricide HP Wettable Powder may be applied up to the day of harvest.

MIXING: Pour recommended amount onto surface of partially filled spray tank. Maintain agitation until tank is filled to desired level. Spray tanks equipped with bypass agitation only should maintain pump circulation at full capacity until mixing is complete.

Use the higher rates against very heavy worm infestations, or where it is difficult to get good coverage due to rank foliage. Do not allow dilute sprays to stand in the tank for more than 12 hours. Combinations with chemical insecticides, fungicides, spreader-stickers, and stickers in the tank are generally not deleterious to Thuricide HP Wettable Powder if the mix is used promptly.

GROUND APPLICATION: Use recommended amount of Thuricide HP Wettable Powder in a minimum of 5 to 50 gallons of water, depending on the type of crop and requirements of state regulations. Add a sticker, adhesive or deposit builder where heavy dew or rain is encountered.

GROUND APPLICATION, TREES: Use recommended amount of Thuricide HP Wettable Powder in 100 gallons of water in high pressure, high gallonage, hydraulic sprayers. Wet foliage thoroughly with spray but not to the point of excessive runoff. For mist blowers use recommended amount in 10 gallons of water. To prevent washoff by rain add a sticker to the finished spray.

AERIAL APPLICATION: Use recommended amount of Thuricide HP Wettable Powder in 5 to 20 gallons of water. A sticker should be added under conditions of heavy dew or rain. Apply early morning or evening when the air is calm.

RECOMMENDATIONS: Thorough coverage is essential when using THURICIDE® HP Wettable Powder.

STORAGE AND DISPOSAL

STORAGE: Store in a cool place. Activity may be impaired by storage at temperatures above 90°F. Do not contaminate water, food or feed by storage or disposal.

DISPOSAL: Pesticide - wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Container - 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.

WARRANTY AND CONDITIONS OF SALE

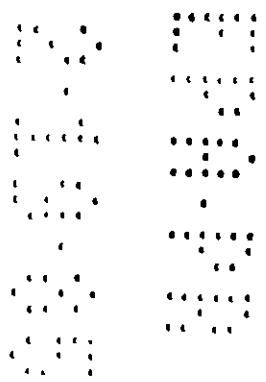
Zoecon Corporation warrants that the chemical composition of this product conforms to the chemical description on the label and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use. Zoecon makes no other warranty, express or implied, concerning the use of this product other than as indicated on the label. Buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given on the label.

Zoecon Corporation,
A Sandoz Company,
Palo Alto, California 94304

Lot No. _____

(0523m)

NET CONTENTS:



Crop	Pest	Lbs. per acre
ALFALFA	Alfalfa caterpillar	1/8-1/4
ALMONDS'	Redhumped caterpillar	1/2-1
ALMONDS, CHERRIES'	Tent caterpillar	1/2-1
Apply when caterpillars are actively feeding (2-4th instar).		
APPLES, PEARS'	Redbanded leafroller	1/2-1
Apply when eggs or newly hatched larvae first appear. Continue applying as a part of the normal cover spray program until pest is adequately controlled.	Tufted apple budmoth	
	Variogated leafroller	
	Tent caterpillar	
	Fruit tree leafroller	
	Gypsy moth	
BROCCOLI, BRUSSELS SPROUTS,	Cabbage looper	1/2-1
CABBAGE, CAULIFLOWER, COLLARDS,	Imported cabbage worm	1/4-1/2
KALE, MUSTARD GREENS, TURNIP GREENS	Diamondback moth	1/4-1/2
	Green cloverworm	1/4-1/2
BEANS, BEETS, CARROTS, CELERY,		
CHARD, CHINESE CABBAGE (Choy sum),		
COS LETTUCE, ENDIVE, ESCAROLE,		
GARLIC, KOHLRABI, LENTILS, LETTUCE,	Cabbage looper	1/2-1
ONIONS, PARSLEY, RADISHES, SPINACH,		
SQUASH, PEAS		
CUCUMBERS, MELONS	Cabbage looper	1/2-1
Begin treatment when worms are small to avoid damage and scarring to the crop.		
EGGPLANT, PEPPERS	Tomato hornworm	1/4-1/2
	Tomato fruitworm'	1/2-1
	Cabbage looper	
CURRENTS, BLUEBERRIES, CANEBERRIES	Omnivorous leafroller	1/2-1
(BLACKBERRIES, DEWBERRIES,		
RASPBERRIES)		
Apply by ground equipment only. Begin treatment as soon as possible after hatching and before larvae are protected by leaf folds.		
COTTON	Tobacco budworm, Cotton bollworm	1/2-1
For the suppression of light to moderate infestations, apply at first sign of egg laying or newly hatched worms (1st and 2nd instar larvae). Reapply at 3-5 day intervals to sustain worm suppression or until adequate reduction of worm population is achieved. Use Thuricide HP wettable powder under a pest management program that includes close scouting. If heavy worm populations occur, it may be necessary to apply an insecticide with rapid knockdown and good larvicidal activity as a replacement. Apply from 5-15 gallons total spray per acre with ground equipment and from 2-5 gallons total spray per acre with aerial equipment.		

DIRECTIONS FOR USE OF TANK-MIX COMBINATIONS OF THURICIDE HP WETTABLE POWDER AND CHLORDIMEFORM (FUNDAL' OR GALECRON' SP OR 4EC).

Crop	Insecticide	Pest	Rate per acre
COTTON	Thuricide HP	Tobacco budworm	1/8-1/4 lb.
	+	Cotton bollworm	+
	chlordimeform SP		1/8-1/4 lb.
	or		dr
	chlordimeform 4EC		1/4-1/2 pt.

Use Thuricide HP plus chlordimeform for a combined ovicide/larvicide effect. Use the low rates for suppression of light infestations, and the high rates for suppression of moderate infestations. Apply at first sign of egg laying or newly hatched worms. Reapply at 3-5 day intervals to sustain suppression, or until adequate worm reduction is achieved. Apply from 2-5 gallons total spray per acre with aerial equipment. Follow all restrictions, safety precautions and directions contained on the FUNDAL or GALECRON labels.

DIRECTIONS FOR USE OF TANK-MIX COMBINATIONS OF THURICIDE HP WETTABLE POWDER AND ELCAR INSECTICIDE (EPA REG. NO. 11273-17) IN THE SOUTHWEST, ONLY.

Crop	Insecticide	Pest	Rate per acre
COTTON	THURICIDE HP	Cotton bollworm	1/4-1/2 lb.
	+	Tobacco budworm	+
	Elcar		1/10-1/8 lb.

Use THURICIDE HP in combination with ELCAR for an increased larvicide effect. Use the low rate combination for light infestations, and use the high rate combination for control of moderate infestations. Apply at first sign of egg deposition or newly hatched worms, and repeat as long as egg deposition continues at 3-7 day intervals.

Crop Pest Lbs. per acre

COTTON
PEANUTS

Cabbage looper $\frac{1}{2}$ -1
Cabbage looper } $\frac{1}{4}$ - $\frac{3}{4}$
Velvet bean caterpillar }
Podworms¹ $\frac{1}{2}$ -1

POTATOES
SOYBEANS

Cabbage looper $\frac{1}{2}$ -1
Soybean looper $\frac{1}{2}$ - $\frac{3}{4}$
Cabbage looper } $\frac{1}{4}$ - $\frac{3}{4}$
Green cloverworm }
Velvetbean caterpillar }
Podworms¹ $\frac{1}{2}$ -1

SUGARBEETS

Cabbage looper } $\frac{1}{2}$ -1
Omnivorous leafroller }

TOBACCO

Cabbage looper $\frac{1}{2}$ - $\frac{3}{4}$
Tobacco budworm } $\frac{1}{4}$ - $\frac{3}{4}$
Tobacco hornworm }

TOMATOES

Tomato hornworm $\frac{1}{4}$ - $\frac{1}{2}$
Cabbage looper } $\frac{1}{2}$ -1
Tomato fruitworm¹ }

WATERMELONS (Florida)

Rindworm complex $\frac{1}{4}$ - $\frac{3}{4}$

GRAPES

Grape leaf folder $\frac{1}{2}$ -1

Start treating as soon as possible after hatching and before larvae are protected by leaf folds. Apply by ground equipment in up to 200 gallons total spray per acre to obtain thorough coverage of leaf surfaces.

GRAPES

Omnivorous leafroller $\frac{1}{2}$ -1

MINT

Cabbage looper $\frac{1}{2}$ -1

STRAWBERRIES

Cabbage looper } $\frac{1}{2}$ -1
Rough skinned cutworm }

Use 20 gallons water minimum per acre when using ground equipment and 5 gallons water minimum per acre by aircraft.

SUGAR MAPLE

Spring & Fall cankerworm } $\frac{1}{2}$ -1
Fall webworm }
Tent caterpillar }
Gypsy moth }

PEACHES, NECTARINES

Redhumped caterpillar } $\frac{1}{2}$ -1
Tent caterpillar }
Omnivorous leafroller }

BANANAS (Hawaii)

Banana skipper $\frac{1}{2}$ -1

Use calibrated ground equipment with adequate water to apply to point of runoff.

ORANGES

Fruit tree leafroller $\frac{1}{2}$ -1
Orange dog $\frac{1}{4}$ - $\frac{1}{2}$

ORANGES

Citrus cutworm $\frac{1}{2}$ -1

Use 50 gallons water minimum to 600 gallons maximum per acre when using ground equipment, and 10 gallons water minimum per acre by aircraft.

FILBERTS¹

Filbert leafroller¹ $\frac{1}{2}$ -1
Tent caterpillar¹ $\frac{1}{2}$ -1

¹Apply at 10% egg hatch

²Apply when caterpillars are actively feeding. (2-4th instar)

PECANS¹

Redhumped caterpillar } $\frac{1}{2}$ -1
Fall webworm }
Tent caterpillar }

WALNUTS¹

Redhumped caterpillar $\frac{1}{4}$ -1
Tent caterpillar } $\frac{1}{2}$ -1
Fall webworm }
Omnivorous leafroller }

Use 50 gallons water minimum to 600 gallons maximum per acre when using ground equipment, and 10 gallons minimum per acre by aircraft.

SHADE TREES, ORNAMENTALS, FOREST

Spring & Fall cankerworm } $\frac{1}{4}$ - $\frac{1}{2}$
Fall webworm, }
Tent caterpillar }
Redhumped caterpillar $\frac{1}{4}$ -1
Oakmoth larvae } $\frac{1}{2}$ -1
Gypsy moth¹ }

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STORED SOYBEANS AND GRAINS

Indian meal moth

Almond moth

To control and prevent Indian meal moth and Almond moth infestations of stored soybeans and grains, prepare a spray mixture which includes one gallon of water for every tenth of a pound of THURICIDE HP wettable powder. The spray mixture may be applied either by treating the top 4 inches of grain as it is being augered into storage (applying 0.8 pint of mixture per bushel in the grain stream), or by treating the surface of grain after it is in the bin. The table below can be used as a guide in determining the total amount of THURICIDE HP needed according to the bin diameter or the number of bushels to be treated.

Bin Diameter (ft.)	Surface Area (sq. ft.)	Bushels (to 4 inch depth)	THURICIDE HP Rate (lbs.)
8	50	13	0.1
12	113	30	0.25
16	201	53	0.4
20	314	84	0.6
24	452	120	0.9
28	615	163	1.25
32	804	214	1.6

To insure thorough coverage when making applications to the grain surface after it is in the bin, apply spray mixture in three applications. Mix the grain with a auger or rake to a depth of 4 inches after each application.

Stored grain may be treated anytime, but for best results, treat grain at the time it is placed into storage or shortly thereafter, or in the early spring prior to egg laying. Full control is normally experienced. Re-treat only if reinfestation occurs.

For the protection of bagged grain, apply spray mixture to entire grain mass, and run thoroughly prior to bagging. THURICIDE HP at 1/4 lb. per 10 gallons of water will treat approximately 100 bushels.

Treated grain may be used at any time after treatment.

GREENHOUSE APPLICATION:

THURICIDE[®] HP wettable powder may also be used in the greenhouse and on flowers at 1/4-1/2 lbs. per 100 gallons of water for control of listed insects on crops on this package label.

- 1) To achieve adequate coverage of large trees or dense foliage, aerial application of not less than 15 gpa is preferred.
- 2) Suppression only.
- 3) FUNDAL[®] 4EC (EPA Reg. No. 2139-100) Nor-Am Ag Prod., Inc.
FUNDAL[®] SP (EPA Reg. No. 2139-98) Nor-Am Ag Prod., Inc.
- 4) GALECRON[®] 4EC (EPA Reg. No. 100-551-AA) Ciba-Geigy Corp.
GALECRON[®] SP (EPA Reg. No. 100-554-AA) Ciba-Geigy Corp.
- 5) GYPSY MOTH: Aerial Application

THURICIDE HP wettable powder may also be applied by air to prevent excessive defoliation by gypsy moth. For best results, spray when leaf expansion reaches 40%-50%, and respray 14 days later. Use one pound of THURICIDE HP wettable powder in 1-4 gallons finished spray per acre. Incorporate in the spray mix an evaporation retardant, such as molasses, Cargill's Insecticide Base, polyethylene glycol E-400, and a film-forming sticker. To obtain thorough coverage use spray equipment suitable to deliver droplets with an average diameter of less than 300 microns.

STATE SLN (24C)

The following are listed on Special Local Need registrations only.

ARIZONA EPA SLN NO. AZ-780007

Directions for use of tank-mix combination of Thuricide HP wettable powder and Methamyl (Mylar[®] or Ginnex[®]) on cotton:

COTTON	Thuricide HP	Tobacco budworm, Cotton bollworm	0.25 to 0.75 lbs.
	Methamyl	Tobacco budworm, Cotton bollworm	0.45 to 0.675 lbs. a.i.

Apply at first sign of egg laying and newly hatched worms. Respray at 3-5 day intervals as long as the worms are adequately suppressed.

[®]Mylar (EPA REG. NO. 201-347) T.M. Shell Chem. Co.

[®]Ginnex (EPA REG. NO. 362-342) T.M. E.I. DuPont Co.

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