

FUTURA
FLOWABLE CONCENTRATE

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DIRECTIONS FOR USE

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

Futura (Bacillus thuringiensis) Flowable Concentrate provides best control when ~~applied~~ ^{applied} to 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 ¼ filled tank and agitate. Fill tank and maintain agitation until the mixing process is complete. Futura 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.

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 application should use recommended rates in up 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 1.5 teaspoonfuls per gallon of water to provide an application rate of 21 fl. oz. /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 Futura. 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.

ACTIVE INGREDIENT: *Bacillus thuringiensis* Berliner, var. kurstaki, primary powder fermentation product, potency of 12,200 International Units per milligram of product (equivalent to 54.5 billion International Units per gallon of product) 15%

INERT INGREDIENTS: 85%

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 Futura. Store in cool place. Activity may be impaired by storage at temperatures above 90°F.

Disposal: Drums can be used for non-food products after thorough cleaning with water. Smaller sized containers should not be reused. Perforate or crush and discard container according to local trash disposal regulations and in a safe place.



**Biochem
Products**

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APPLICATION RATES FOR FUTURA™

Crop	Pest	Fl. Oz./Acre
Field and Greenhouse vegetables, including:		
Broccoli, Cabbage	Armyworms	21-41
Cauliflower, Kale, Lettuce	Tomato fruitworm/Corn earworm/Bollworm	21 (every 5-7 days)
Turnips, Turnip greens, Beets	Variegated cutworm	21
Celery, Mustard greens, Beans	Salt marsh caterpillar	5-21
Cabbage, Brussels Sprouts, Peas	Mimosa webworm	5-21
Chinese Cabbage, Sweet Potato	Tobacco budworm	5-21
Kohlrabi, Endive, Sweet Corn	Loopers, Moleworms, Pickleworm	5-21
Tomatoes, Peppers, Eggplant	Diamondback moth	5-16
Escarole, Lentils, Potato	Imported cabbageworm	5-16
Spinach, Carrots, Cucumbers	Green cloverworm	5-16
Melons, Squash	Striped worm	5-16
Tobacco	Tobacco budworm	10-21
	Loopers	10-21
	Hornworms	5-16

To control tobacco moth during storage use 2 fluid oz. or 4 tablespoonfuls in one gallon water per 400 lbs tobacco uniformly applied as a spray mist to leaf surfaces before bundling or to opened bundles and to walls and floors of storage area.

Safflower, Sugar beets, Mints, Peanuts, Alfalfa, Soybeans, Sunflowers, Hay, Pastures, Small grains, Forage crops	Tobacco budworm/bollworm	5-21
	Loopers	5-21
	Salt marsh caterpillar	5-21
	Velvetbean caterpillar	5-21
	Green cloverworm	5-21
	Slippers	5-10
	Alfalfa caterpillar	3-5
Turf, Rangeland	Sod webworm	41-83
	Rangeland caterpillar	3-5
Grapes, Blueberries, Blackberries, Currants, Raspberries, Strawberries, Dewberries	Grapeleaf skeletonizer	7-21
	Loopers, Salt marsh caterpillar	7-21
	Grape leafroller/leafrollers	7-21
	Hornworms	5-16
Cotton	Loopers	7-21
	Tobacco budworm	5-21
	Bollworms	5-21

Apply at first sign of 1st and 2nd instar budworm or bollworm larvae. Use at least 7 gallons total spray with ground equipment or 2-5 gallons/acre with aerial equipment. To continue worm suppression reapply at 3-5 day intervals or use scouting report recommendations.

Futura at 5-21 fl. oz./acre may be tank mixed with methomyl at .225 to .675 lbs. active ingredient (AI)/acre to suppress infestations of early instar larvae.

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Crop	Pest	Fl. Oz./Acre
Peaches, Plums, Cherries, Walnuts, Almonds, Pecans, Filberts, Apples, Pears, Avocados	Gypsy moth	21-41
	Western cutworm, Looper	10-21
	Laridiform, Green fruitworm	10-21
	Chickadee	10-21
	Test caterpillar	10-21
	Redumped caterpillar	10-21
	Fall webworm	10
Forests, Shade trees, Ornamental plants, Flowers	Armyworms	21-41
	Pine butterfly	21
	Spruce budworm	21-41
	Western spruce budworm	21
	Douglas fir tussock moth	21
	Shastacypress moth	21
	Gypsy moth	21-41
	Elm spanworm	10-21
	Bayberry, Reddish green	10-21
	Reddish caterpillar, Leafroller	10-21
	Loopers, Western tussock moth	10-21
	Tobacco budworm/bollworm/Corn earworm	10-21
	Is moth, Mimosa webworm	10-21
	Jack pine budworm	10-21
	Oleander moth	10-21
	Fall webworm	10
	Test caterpillars	5-21
	Redumped caterpillar	5-21
	Cankerworms, Oakworms	5-21
	Hornworms	5-21

For best control of Gypsy moth, apply when young larvae are present and when leaf expansion is 40-50%. Repeat in 1 to 3 weeks.

For best control of spruce budworm, apply on populations below 35 larvae per 16-inch branch tip and when 50% of the larvae are in the 3rd and 4th instar.

Citrus, Tropical fruits	Leafrollers, Hornworms, Looper	10-21
	Orangedog	5-16
Stored Products: grain legumes, peanuts, oilseeds, and other seeds and grains	Indian meal moth	6.4 quarts/100 gallons
	Almond moth	(2.1 fluid oz./gallon)
	Mediterranean flour moth	

Continuously agitate spray solution and spray at the rate of six pints per ten bushels to grain going into storage bins or bags on a conveyor or auger to obtain thorough mixing. Alternately, the top 4-6 inches of grain in a bin may be treated during the bin filling process or after filling with one quart in ten gallons water per 500 square feet surface area and raked in.