

log # 62637-4

PM-18

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

SEP 13 1994

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Becker Microbial Products, Inc.
c/o Ms. Christine Dively
Jellinek, Schwartz & Connolly, Inc.
1015 15th Street, NW, Suite 500
Washington, D.C. 20005

Dear Ms. Dively:

Subject: BMP 123 (32 LC) Revised Label and Confidential Statement
of Formula Submitted with Your Letter Dated March 9, 1994
EPA File Symbol: 62637-4

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments listed below. One copy of the finished labeling must be submitted prior to releasing the product for shipment.

1. Modify "Harmful if inhaled." to read "Harmful if inhaled or absorbed through the skin." in the Hazards to Humans and Domestic Animals section.
2. Add a net weight statement.
3. Delete "-2-" at the bottom of page 1 of your label.
4. Replace the storage and disposal statement "Do not contaminate water, food, or feed by storage and disposal." with "Do not contaminate water, food or feed by storage or disposal."
5. List the actual establishment number on the label.

The Confidential Statement of Formula (CSF) dated 3/9/94 has been received and placed in your product's file. However, you must submit a revised CSF correcting the potency statement as specified in the 8/5/93 notice of registration for this product.

Sincerely,

Phillip Hutton
Product Manager 18

CONCURRENT Insecticide-Rodenticide Branch
Registration Division (75050)

SYMBOL	<i>3011</i>						
SURNAME	<i>Phillip Hutton</i>						
DATE	<i>9/13/94</i>						

298

BMP 123 (32 LC)
BIOLOGICAL LARVICIDE AQUEOUS SUSPENSION

ACTIVE INGREDIENT: *Bacillus thuringiensis* subspecies *kurstaki* strain BMP 123...1.6%
POTENCY: 8,000 International Units (IU) per milligram (Equivalent to 32.0 Billion IU per gallon: 8.45 Billion IU / Liter).
Potency units should not be used to adjust rates beyond those specified in the Directions for Use Section.

INERT INGREDIENTS.....98.40%
TOTAL.....100.00%

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

STATEMENTS OF PRACTICAL TREATMENT

IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irritation persists.
IF INHALED: Remove victim to fresh air.
IF IN EYES: Flush eyes with plenty of water. Get medical attention if irritation persists.

ACCEPTED
with COMMENTS
in EPA Letter Dated
SEP 13 1994
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
62637-4

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE): Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes and socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS:

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

ENVIRONMENTAL HAZARDS STATEMENT: Do not contaminate water when disposing equipment wash waters.

DIRECTIONS FOR USE:

It is a violation of federal law to apply 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.

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AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and 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 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 the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

BMP 123 (32 LC) is a microbial larvicide for use against the listed lepidopterous insects. Close scouting and early attention to insect infestations are recommended. BMP 123 (32 LC) must be ingested to be effective. The following directions should always be followed:

1. Larvae must be actively feeding on exposed plant parts.
2. Applications must be made when larvae are in the early instars before extensive crop damage occurs. For control of mixed insect populations or overlapping generations, use BMP (32 LC) in combination with another approved insecticide.
3. Thorough spray coverage with BMP 123 (32 LC) is required for consistent control. Spray nozzles and volume applied will vary depending on crop and pest. Under heavy pressure, higher rates, increased gallonage, and shorter spray intervals will improve crop coverage and pest control.
4. Repeat applications at 3-14 day intervals to maintain control. This will depend on weather, plant growth rate, and insect activity.
5. In applications on hard to wet crops such as cole crops, a spreader sticker approved for use on growing and harvested crops, should be added to improve coverage and weathering properties.
6. Unless otherwise indicated use at least two (2) gallons of water per acre except in California where five (5) to ten (10) gallons are typically used.

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- 7. BMP 123 (32 LC) may be applied as a pre and post harvest treatment to raw agricultural commodities.
- 8. Do not apply this product through any kind of irrigation system.

BMP 123 (32 LC) may be applied in conventional aerial and ground equipment with sufficient water to provide thorough coverage. Approved spreader/stickers should be added to the mix tank after BMP 123 (32 LC) has been mixed with the appropriate amount of water.

APPLICATION RATE

Crop	Pest	Ounces / Acre
Vegetables and commercial crops of the following groups: Root and Tuber Leaves of Root and Tuber Bulb Leafy Brassica (Cole Leafy) Legume Foliage of Legume Fruiting Cucurbit (Melons, Squash, Cucumbers, etc.)	Loopers	32 to 64
	Hornworms	32 to 64
	Imported Cabbageworms	32 to 64
	Diamondback moth	32 to 96
	Green Cloverworm	32 to 64
	Webworm	32 to 64
	Armyworms*	32 to 128
	Saltmarsh Caterpillar	32 to 64
	Heliothis (Helicoverpa) Spp.**	32 to 128
	Cutworms	32 to 64
	Pickleworm	32 to 64
	Melonworm	32 to 64
	Rindworm Complex***	32 to 96

* BMP 123 (32 LC) may be used to suppress 1st and 2nd instar armyworm larvae when populations are light and full coverage ground applications are used.

** Tobacco Budworm, Tomato Fruitworm, Corn Earworm. On tomatoes apply weekly in a preventative program.

*** Apply weekly in a preventative program.

Crop	Pest	Ounces / Acre
Sunflowers	Loopers	32 to 64
Peanuts	Green Cloverworms	32 to 64
Safflower	Velvetbean Caterpillar	32 to 64
Mint	Podworm*	32 to 64
Canola	Armyworms*	32 to 128
Rape	Diamondback Moth	32 to 96
Cereal Grains	Saltmarsh Caterpillar	32 to 64
Amaranth	Hornworms	16 to 32
Jojoba	Heliothis (Helicoverpa) spp.	32 to 128
Okra		
Pawpaw		
Lentils		

* BMP 123 (32 LC) can be used to suppress podworm and armyworms in an integrated pest management program.

** Suppression only.

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Crop	Pest	Ounces / Acre
Artichokes	Armyworms	32 to 128
	Loopers	16 to 80
Cotton	Tobacco Budworm*	32 to 128
	Cotton Bollworm*	32 to 128
	Loopers	32 to 64
	Cotton Leaf Perforator	32 to 64
	Cotton Leafworm	32 to 64
	Saltmarsh Caterpillar	32 to 64
	Armyworms	32 to 128

* Use in conjunction with regular scouting in an integrated pest management program when beneficial insects are present. Applications should be made against light to moderate populations of 1st and 2nd instar larvae. Repeat applications at 3 to 5 day intervals as required and as long as population suppression is satisfactory. For added control of budworms and bollworms tankmixing of BMP 123 (32 LC) with an approved ovicide is recommended. Use of the resulting tank mix must be in accordance with the most restrictive of label limitations and precautions. No label dosage rates should be exceeded. This product can not be mixed with any product containing a label prohibition against such mixing.

Crop	Pest	Ounces / Acre
Tobacco	Tobacco Budworm	32 to 128
	Hornworms	16 to 32
	Loopers	32 to 64

BMP 123 (32 LC) may be applied in conjunction with sucker control products at the recommended label rates. Observe label precautions for all products used. Apply BMP 123 (32 LC) as necessary to maintain control.

Crop	Pest	Ounces / Acre
Greenhouse	Loopers	16 to 32
Flowers	Tobacco Budworm	16 to 32
Ornamentals	Omnivorous Looper	16 to 32
Bedding Plants (Ground Only)	Omnivorous Leafroller	16 to 32
	Diamondback Moth	32 to 64
	Armyworms	32 to 128
	Ello Moth (Hornworm)	16 to 32
	Io Moth	16 to 32
	Oleander Moth	16 to 32
	Azalea Caterpillar	16 to 32

Crop	Pest	Ounces / Acre
Pastures, Cereal Grain, Forage, Fodder, Straw, Grass and nongrass commodities	Loopers	32 to 64
	Alfalfa Caterpillar	32 to 32
	European Skipper	8 to 16
Rangeland	Armyworms	64 to 128
	Rangeland Caterpillars*	16 to 64

* Apply in a minimum of 1/2 to 1 0 gallon per acre.

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Crop	Pest	Ounces / Acre
Turf	Sod Webworm	64 to 128

Crop	Pest	Ounces / Acre	
		Ground*	Air**
Forest	Gypsy Moth	32 to 128	32 to 128
Shade Trees	Eastern Tent Caterpillars	16 to 32	16 to 32
Shrubs	Spruce Budworm	32 to 96	32 to 96
Ornamentals	Douglas Fir Tussock Moth	16 to 64	16 to 64
Sugar Maple Trees	Western Tussock Moth	16 to 32	16 to 32
	Browntail Moth	16 to 32	16 to 32
	Bagworm	8 to 16	8 to 16
	Spring and Fall Cankerworms	16 to 32	16 to 32
	Elm Spanworm	16 to 32	16 to 32
	Fall Webworm	16 to 32	16 to 32
	California Oakworm	16 to 32	16 to 32
	Redhumped Caterpillar	16 to 32	16 to 32
	Pine Butterfly	32 to 48	32 to 48
	Blackheaded Budworm	32 to 48	32 to 48
	Jack Pine Budworm	32 to 64	32 to 64
	Mimosa Webworm	16 to 32	---
	Saddle Prominent Caterpillar	16 to 32	16 to 32
	Saddleback Caterpillar	16 to 32	16 to 32
Fruittree Leafroller	16 to 32	---	
Forest Tent Caterpillars	16 to 32	16 to 32	

* Ground applications are made at the rate of 100 gallons per acre for hydraulic sprayers. For mist blowers mix the applicable amount in ten (10) gallons of water.

** Use 1/2 to ten (10) gallons of water depending on the type and density of tree.

Crop	Pest	Ounces / Acre
Grapes	Loopers	32 to 64
Small Fruits	Grape Berry Moth*	32 to 64
Berries	Grapeleaf Skeletonizer*	32 to 64
Hops	Grape Leafroller	32 to 64
	Saltmarsh Caterpillar*	32 to 64
	Achema Sphinx Moth*	16 to 64
	Omnivorous Leafroller*	32 to 64
	Blueberry Leafroller	16 to 64
	Cherry Fruitworm	16 to 32
	Fruittree Leafroller	16 to 64
	Gypsy Moth	32 to 64
	Green Fruitworm	16 to 64
	Orange Tortrix	32 to 128
	Grape Leafroller	16 to 64
	Spotted Cutworm	32 to 64
	Armyworms**	32 to 128
Tobacco budworm	32 to 128	

* Application by ground only.

** BMP 123 (32 LC) may be used to suppress 1st and 2nd instar armyworm larvae when populations are light and full coverage applications are used



13

Crop	Pest	Ounces / Acre	
		Ground	Air
Stone Fruits	Tent Caterpillars	32 to 64	32 to 64
Nut Trees	Cankerworms	16 to 32	16 to 32
Pomegranates	Fall Webworm	32 to 64	32 to 64
	Walnut Caterpillar	16 to 64	16 to 64
	Redhumped Caterpillar	32 to 64	32 to 64
	Omnivorous Leafroller	32 to 64	---
	Citrus Cutworm	32 to 64	32 to 64
	Filbert Leafroller	32 to 64	32 to 64
	Filbert Webworm	32 to 64	32 to 64

Crop	Pest	Ounces / Acre	
		Ground	Air
Pome Fruits*	Gypsy Moth	32 to 96	32 to 96
	Cankerworms	16 to 32	16 to 32
	Tent Caterpillars	32 to 64	32 to 64
	Tufted Apple Budmoth	32 to 64	--
	Variegated Leafroller	32 to 64	--
	Redbanded Leafroller	32 to 64	--
Citrus**	Fruittree Leafroller	32 to 64	--
	Citrus Cutworm	32 to 64	32 to 64
	Orangedog	16 to 32	--
Avocado	Loopers	32 to 128	32 to 128
	Orange Tortrix	32 to 64	32 to 64
	Omnivorous Leafroller	32 to 64	32 to 64
	Amorbia	64	--

Crop	Pest	Ounces / Acre	
		Ground	Air
Tropical Fruits***	Hornworm	32 to 128	--
Papayas	Leafrollers	32 to 128	--
Mangoes	Omnivorous Looper	32 to 128	--
Kiwi	Loopers	32 to 128	--
Persimmons			
Pomegranate			
Bananas****	Banana Skipper	24 to 64	--

* Apply BMP 123 (32 LC) in 50-500 gallons / acre for pest suppression in pest management programs.

** Apply in 100 to 400 gallons per acre.

*** Apply at least 200 gallons per acre.

**** Hawaii Only, Ground Equipment Only, Apply to the point of runoff

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STORAGE AND DISPOSAL

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

Storage: Store in a cool dry place.

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

Container Disposal: Triple rinse (or Equivalent), then puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned stay out of smoke. Do not reuse container.

NOTICE TO USER: Seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with label instructions.

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BECKER MICROBIAL PRODUCTS, INC.
9464 N. W. 11th Street
Plantation, Florida 33322

EPA Registration Number: 62637-4
EPA Establishment Number:

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