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Systems Integration Group, Inc.



Office of Pesticide Programs Biopesticides and Pollution Prevention Division (7511C) 401 M St., S.W. Washington, D.C. 20460

Number: 72305-1 Date of Issuance:

May 3 1999

Term of Issuance:

Unconditional

Name of Pesticide Product:

TARGA Biological Larvicide Wettable Powder

NOTICE OF PESTICIDE: X Registration

(under FIFRA, as amended)

Name and Address of Registrant (include 2IP Code):

Cillus Technology Inc. 8801 Long Street Lenexa, KS 66215

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

Reregistration

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This registration does not eliminate the need for continual reassessment of the pesticide. If EPA determines at any time, that additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under section 3(c)(2)(B) of FIFRA.

This product is registered in accordance with FIFRA section 3(c)(5) and is subject to the following terms and conditions:

- 1. Make the following modification to your label before the release of your product for shipment:
  - a) EPA Reg. No. 72305-1
- 2. Submit five (5) copies of the final printed labeling to the Agency before the release of the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

A stamped copy of the label is enclosed for your records.

Signature of Approving Official:

May 3, 1999

EPA Form 8570-6

				CONCURRENCES				
SYMBOL	7511C	75/1C	7511C					
SURNAME	BALL	16-5TA	KNOX					
DATE	4/27/99	4/80/99	5/3/99	T		• • • • • • • • • • • • • • • • • • • •		
EPA Form	n 1320-1A (1/90)	7/	111	Printed on Recycled Pa	Der		OFFICI.	AL FILE COPY

# Targa

# Biological Larvicide Wettable Powder

This product is for use against insects of the order Lepidoptera on terrestrial food crops, greenhouse nonfood crops, domestic outdoor uses, and forestry uses.

ACTIVE INGREDIENT: Bacillus thuringiensis subspecies kurstakl INERT INGREDIENTS: ......94.56% TOTAL ...... 100,00%

\*Not less than 32,000 International Units per milligram. Potency units should not be used to adjust rates beyond those specified in the Directions for Use section. There is no direct relationship between intended activity (potency) and the Percent Active Ingredient by Weight.

### KEEP OUT OF REACH OF CHILDREN

# CAUTION

#### STATEMENT 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. Call a physician if imitation persists.

Cillus Technologies, Inc. 8801 Long Street Lenexa, Kansas 66215

**Net Weight:** 

Lot No.:

EPA Reg. No.: 72305-

EPA Establishment No.: 44616-MO-1

ACCEPTED 3 1999

Under the Federal Insecticide, Fungicide, and Rodenticilde Act. as amended, for the pesticide registered under 12305

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## PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Harmful if inhaled or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. As a general precaution when exposed to potentially high concentrations of living microbial products such as this, all mixers/loaders and applicators not in enclosed cabs or aircraft must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95.

PERSONAL PROTECTIVE EQUIPMENT (PPE): Applicators and other handlers must wear:

- \* Long-sleeved shirt and long pants
- Waterproof Gloves
- \* Shoes plus socks

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

### **USER SAFETY RECOMMENDATIONS:**

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

#### **ENVIRONMENTAL HAZARDS**

Do not contaminate water when disposing of equipment wash waters. Avoiding spray drift at the applications site is the responsibility of the applicator. The interaction of many equipment- and weatherrelated factors determines the potential for spray drift. The applicator and grower are responsible for considering all these factors when making decisions.

### STORAGE AND DISPOSAL

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

aga <u>rayung</u> dan gapat <mark>akampa</mark> sa ma<mark>ndakkakakaka</mark>ka da magaka sa sa man<mark>dakkan pi</mark>kikan pikibas da basar sa m

Storage: Reclose containers of unused Targa. Store in a cool, dry place.

Pesticide Disposal: 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 daits. 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 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 interval (REI). 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 REI of 4 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:

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

Targa is a microbial larvicide for use against the listed lepidopterous pests. Close scouting and early attention to insect infestations are recommended. Targa must be ingested to be effective. The following directions should always be followed:

- 1. Larvae must be actively feeding on exposed plant parts.
- 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 Targa in combination with another, approved insecticide.
- Thorough spray coverage with Targa 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.
- 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.
- 7. Targa 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.

Targa may be applied in conventional aerial and ground equipment with sufficient water to provide thorough coverage. Approved spreader-stickers should be added to the mixtank after Targa has been mixed with the appropriate amount of water.

Land Book St. Commercial

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#### MIXING INSTRUCTIONS

Fill tank with 1/2 to 2/3 of the desired amount of spray water. Initiate vigorous agitation and continue throughout mixing. Slowly pour Targa into water where surface turbulence is greatest. After all wettable powder is dispersed, fill tank with remaining water and continue agitation for 10 minutes before spraying. Completely mix Targa before adding other products in a tank mix. Maintain continuous agitation during spraying.

Targa 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 Targa has been mixed with the appropriate amount of water.

ADDI	1C AT	NOF	DATE

Crop	Pest	Pounds/Acre	
Vegetables and commercial	Loopers	1/2 to 1.0	
crops of the following groups:	Hornworms	1/2 to 1.0	
Root and Tuber	Imported Cabbageworms	1/2 to 1.0	
Leaves of Root and Tuber	Diamondback moth	1/2 to 1 1/2	
Bulb	Green Cloverworm	1/2 to 1.0	
Leafy	Webworm	1/2 to 1.0	
Brassica (Cole Leafy)	Armyworms*	1/2 to 2.0	
Legume	Saltmarsh Caterpillar	1/2 to 1.0	
Foliage of Legume	Heliothis (Helicoverpa) Spp.**	1/2 to 2.0	
Fruiting	Cutworms	1/2 to 1.0	
Curcurbit (Melons, Squash,	Pickleworm	1/2 to 1.0	
Cucumbers, etc.)	Melonworm	1/2 to 1.0	
·	Rindworm Complex***	1/2 to 1 1/2	

\* Targa 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	Pounds/Acre	
Sunflowers	Loopers	1/2 to 1.0	
Peanuts	Green Cloverworms	1/2 to 1.0	
Safflower	Velvetbean Caterpillar	1/2 to 1.0	
Mint	Podworm*	1/2 to 1.0	
Canola	Armyworms*	1/2 to 2.0	
Rape	Diamondback Moth	1/2 to 1 1/2	
Cereal Grains	Saltmarsh Caterpillar	1/2 to 1.0	
Amaranth	Hornworms	1/4 to 1/2	
Jojoba	Heliothis (Helicoverpa) spp.**	1.0 to 2.0	
Okra	, , , , , ,		
Pawpaw			
Lentils			

Targa can be used to suppress podworm and armyworms in an integrated pest management program.

Suppression only.

Сгор	Pest	Pounds/Acre	
Artichokes	Armyworms	1/2 to 2.0	
	Loopers	1/2 to 1 1/4	
Cotton	Tobacco Budworm*	1/2 to 2.0	,,,,,
	Cotton Bollworm*	1/2 to 2.0	, , , ,
	Loopers	1/2 to 1.0	, ,
	Cotton Leaf Perforator	1/2 to 1.0	11.
	Cotton Leafworm	1/2 to 1.0	,
	Saltmarsh Caterpillar	1/2 to 1.0 🚶 🐪	,
	Armyworms	1/2 to 2.0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

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 bodworms tankmixing of Targa with an approved ovicide is recommended. Use of the resulting tank mix must be in accordance with the most restrictive of liquid 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	Pounds/Acre	<u>-</u>
Tobacco	Tobacco Budworm Hornworms Loopers	1/2 to 2.0 1/4 to 1/2 1/2 to 1.0	

Targa may be applied in conjunction with sucker control products at the recommended label rates. Observe label precautions for all products used. Apply Targa as necessary to maintain control.

Crop	Pest /	Pounds/Acre
Greenhouse	Loopers	1/4 to 1/2
Flowers	Tobacco Budworm	1/4 to 1/2
Ornamentals	Omnivorous Looper	1/4 to 1/2
Bedding Plants	Omnivorous Leafroller	1/4 to 1/2
(Ground Only)	Diamondback Moth	1/2 to 1.0
	Armyworms	1/2 to 2.0
	Ello Moth (Hornworm)	1/4 to 1/2
	lo Moth	1/4 to 1/2
	Oleander Moth	1/4 to 1/2
	Azalea Caterpillar	1/4 to 1/2
Pastures, Cereal Grain,	Loopers	1/2 to 1.0
Forage, Fodder, Straw, Grass	Alfalfa Caterpillar	1/2 to 1.0
and nongrass commodities	European Skipper	1/2 to 1.0
-	Armyworms*	1/2 to 2.0
Rangeland	Rangeland Caterpillars**	1/4 to 1.0

Targa may be used to suppress 1st and 2nd instar armyworm larvae when populations are light and full coverage ground applications are used.

Apply in a minimum of 1/2 to 1.0 gallon per acre.

Стор	Pest	Pounds/Acre	
Turf	Sod Webworm	1.0 to 2.0	
Crop	Pest	Pou	nds/Acre
		Ground*	Air**
Forest	Gypsy Moth	1/2 to 1.0	1/2 to 2.0
Shade Trees	Eastern Tent Caterpillars	1/4 to 1/2	1/4 to 1/2
Shrubs	Spruce Budworm	1/2 to 1 1/2	1/2 to 1 1/2
Ornamentals	Douglas Fir Tussock Moth	1/4 to 1.0	1/4 to 1.0
Sugar Maple Trees	Western Tussock Moth	1/4 to 1/2	1/4 to 1/2
•	Browntail Moth	1/4 to 1/2	1/4 to 1/2
	Bagworm	1/8 to 1/4	1/8 to 1/4
	Spring and Fall Cankerworms	1/4 to 1/2	1/4 to 1/2
	Elm Spanworm	1/4 to 1/2	1/4 to 1/2
	Fall Webworm	1/4 to 1/2	1/4 to 1/2
	California Oakworm	1/4 to 1/2	1/4 to 1/2
	Redhumped Caterpillar	1/4 to 1/2	1/4 to 1/2
	Pine Butterfly	1/2 to 3/4	1/2 to 3/4
	Blackheaded Budworm	1/2 to 3/4	1/2 to 3/4
	Jack Pine Budworm	1/2 to 1.0	1/2 to 1.0
	Mimosa Webworm	1/4 to 1/2	
	Saddle Prominent Caterpillar	1/4 to 1/2	1/4 to 1/2, , '
	Saddleback Caterpillar	1/4 to 1/2	1/4 to 1/2
	Fruittree Leafroller	1/4 to 1/2	<u>,</u> ,
	Forest Tent Caterpillars	. 1/4 to 3/4	1/4 to 3/4
	·	j + +	4 4 4 T

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	Pounds/Acre
Grapes	Loopers	1/2 to 1.0
Small Fruits	Grape Berry Moth*	1/2 to 1.0
Berries	Grapeleaf Skeletonizer*	1/2 to 1.0
Hops	Grape Leaffolder	1/2 to 1.0
•	Saltmarsh Caterpillar*	1/2 to 1.0
	Achema Sphinx Moth*	. 1/4 to 1/2
	Omnivorous Leafroller*	1/2 to 1.0
	Blueberry Leafroller	1/4 to 1.0
	Oblique Banded Leafroller	1/2 to 1.0
	Cherry Fruitworm	1/4 to 1/2
	Fruittree Leafroller	1/4 to 1.0
	Gypsy Moth	1/2 to 1.0
	Green Fruitworm	1/4 to 1/2
	Orange Tortrix	1/2 to 1.0
	Grape Leafroller	1/4 to 1.0
	Spotted Cutworm	1/2 to 1.0
	Armyworms**	1/2 to 2.0
	Tobacco Budworm	1/2 to 2.0

Application by ground only.

Targa may be used to suppress 1<sup>st</sup> and 2<sup>nd</sup> instar armyworm larvae when populations are light and full coverage applications are used,

Сгор	Pest	Pounds/Acre	
		Ground	Air
Stone Fruits	Tent Caterpillars	1/2 to 2.0	1/2 to 2.0
Nut Trees	Cankerworms	1/2 to 2.0	1/2 to 2.0
Pomegranates	Fall Webworm	1/2 to 2.0	1/2 to 2.0
Fornegranates	Walnut Caterpillar	1/2 to 2.0	1/2 to 2.0
	Redhumped Caterpillar	1/2 to 2.0	1/2 to 1.0
	Omnivorous Leafroller	1/2 to 2.0	1/2 (0 1.0
	Citrus Cutworm	1/2 to 2.0	1/2 to 2.0
	Filbert Leafroller	1/2 to 1.0	1/2 to 2.0
	Filbert Webworm	1/2 to 2.0	1/2 to 2.0
	Peach Twig Borer	1/2 to 2.0	1/2 to 2.0
Pome Fruits*	Common Markh	4/04-00	4/04-00
TOME FIGUS	Gypsy Moth Cankerworms	1/2 to 2.0 1/2 to 2.0	1/2 to 2.0 1/2 to 2.0
	Tent Caterpillars	1/2 to 2.0	1/2 to 2.0
	Tufted Apple Budmoth	1/2 to 2.0	_
	Variegated Leafroller	1/2 to 2.0	_
D. C	Redbanded Leafroller	1/2 to 1.0	-
Citrus**	Fruittree Leafrolier	1/2 to 2.0	
	Citrus Cutworm	1/2 to 2.0	1/2 to 1.0
	(Apply to light to moderate populations of	-	orm larvae)
_	Orangedog	1/4 to 1.0	-
Avocado	Loopers	1/2 to 2.0	1/2 to 2.0
	Orange Tortrix	1/2 to 2.0	1/2 to 2.0
	Omnivorous Leafroller	1/2 to 2.0	1/2 to 2.0
	Armorbia	2.0	
Tropical			, , , ,
Fruits***	Hornworm	1/2 to 2.0	
Papayas	Leafrollers	1/2 to 2.0	<u> </u>
Mangoes	Omnivorous Looper	1/2 to 2.0	- L
Kiwi	Loopers	1/2 to 2.0	
Persimmons			
Pomegranates		, ,	3 t
Bananas****	Banana Skipper	1/3 to 1.0	;
			2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1
Apply Targa in 50 - 500 gallons / acre		,,	,,,
** 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.		) ) ) · · · · · · · · · · · · · · · · ·
Warranty Statement	_		, , ' '
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