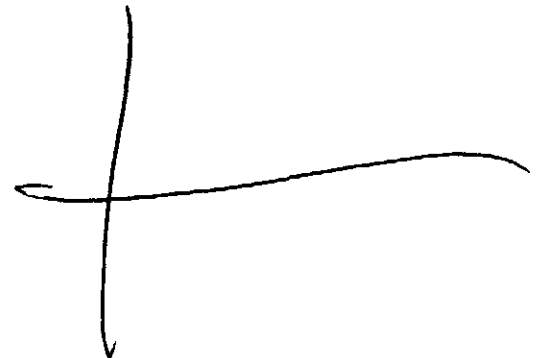


APR 24 1990

Mr. Daniel J. Rushforth
Abbott Laboratories
Chemical and Agricultural Products Division
14th and Sheridan Road
North Chicago, IL 60064

Dear: Mr. Rushforth,

Subject: Dipel 8L
EPA Reg. No. 275-51



Your submission of April 5, 1991

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable, and a stamped copy is enclosed for your records.

NOTE: This approval for the following Label amendment to expand the ground and aerial application rate for Gypsy moth, add Hemlock Looper and the update of the Worker Protection and Chemigation statements.

Sincerely yours,
William H. Nelson
Phil Hutton, PM-17
Insecticide-Rodenticide Branch
Registration Division (H7505C)

BEST AVAILABLE COPY

DIPEL 8L
EMULSIFIABLE SUSPENSION
BIOLOGICAL INSECTICIDE

ACTIVE INGREDIENT: <i>Bacillus thuringiensis</i> , var. <i>kurstaki</i> , 17,600 International Units of Potency per mg (64 Billion International Units per gallon)	3.5%
INERT INGREDIENTS	96.5%
TOTAL	100.0%

E.P.A. Reg. No. 275-51

E.P.A. Est. No. 33762-IA-1

CAUTION: KEEP OUT OF REACH OF CHILDREN

PRECAUTIONARY STATEMENTS

Avoid contact with skin, eyes or clothing. In case of contact immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

DIRECTION FOR USE

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

STORAGE AND DISPOSAL

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

REENTRY STATEMENT

Do not enter treated areas without protective clothing until sprays have dried.

STORAGE

Keep containers tightly closed when not in use. Do not store at temperatures below 0°F or above 90°F. Roll or shake the drum before dispensing.

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

Triple rinse (or equivalent), then puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

ACCEPTED
WITH COMMENTS
in EPA Letter Date:

1991

DIPEL 8L
05-April-1991

Under the Federal Insecticide,
Fungicide and Rodenticide Act as
amended, for the pesticide
registered under EPA Reg. No.

275-51

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 through any type of irrigation system.

DIPEL 8L is a highly selective insecticide for use against listed caterpillars (larvae) of lepidopterous insects. Close scouting and early attention to infestations is highly recommended. Larvae must eat deposits of DIPEL 8L to be affected. Always follow these directions:

- Treat when larvae are young (early instars) before extensive damage has occurred.
- Larvae must be actively feeding on treated, exposed plant parts.
- Thorough spray coverage is needed to provide a uniform deposit of DIPEL 8L at the site of larval feeding.
- Under heavy pest population pressure, use the higher label rates and/or consider a second application.
- If attempting to control a pest with a single spray, make the treatment when egg hatch is essentially complete, but before extensive crop damage occurs.
- An approved spreader-sticker may be added to diluted tank mixes to improve weather-fastness of the spray deposits. Do not add sticker to the undiluted product.

After eating a lethal dose of DIPEL 8L, larvae stop feeding within the hour and will die within several days. Dying larvae move slowly, discolor, then shrivel, blacken and die.

DIPEL 8L may be applied in conventional ground or aerial equipment with quantities of water sufficient to provide thorough coverage of infested plant parts. The amount of water needed per acre will depend on weather, spray equipment, and plant canopy type. **DIPEL 8L should always be mixed with at least an equal amount of water for diluted applications.** Fill the mix tank or plane hopper with the desired quantity of water. Include rinse water from containers. Start the mechanical or hydraulic agitation to provide moderate circulation before adding DIPEL 8L. Add the desired volume of Dipel 8L to the tank mix or plane hopper and continue circulation. If a spreader-sticker is recommended, add the required volume to the water-Dipel tank mix last and agitate until uniformly suspended. Mild agitation is sufficient to maintain mixture suspension during loading and spraying. Do not mix more DIPEL 8L than can be used in a 144-hour period.

DIPEL 8L can also be applied undiluted from aircraft for control of Spruce Budworms, Hemlock Looper, Jack Pine Budworm, and Gypsy Moth. It is recommended that rotary or other atomizers be used to provide droplet Volume Mean Diameters (VMD) of 20-80 microns for needle conifers and 50-150 microns for deciduous hardwoods. **CAUTION:** Rinse and flush spray equipment thoroughly following each use. Use oil solvent for flushing and rinsing undiluted DIPEL 8L.

DIPEL 8L FOR TREES AND SHRUBS

CROP	PFST	OZ./100 GAL./A.* (GROUND EQUIPMENT)	OZ./ACRE (AERIAL** APPLICATION)	BIU'S/A***
Forest, shade,	Bagworm	8 to 16	8 to 16	4 to 8
	Blackheaded Budworm	16 to 24	16 to 24	8 to 12
Sugar	Browntail Moth	16 to 40	16 to 40	8 to 20
Maple, Trees & Shrubs	California Oakworm	8 to 16	8 to 16	4 to 8
	Douglas Fir Tussock Moth	16 to 32	16 to 32	8 to 16
	Eastern Tent Caterpillar	8 to 16	8 to 16	4 to 8
	Elm Spanworm	8 to 16	8 to 16	4 to 8
	Fall Webworm	8 to 16	8 to 16	4 to 8
	Forest Tent Caterpillar	16 to 32	16 to 32	8 to 16
	Fruittree leafroller	8 to 16	-	4 to 8
	Green Striped Maple Worm	16 to 24	16 to 24	8 to 12
	Gypsy Moth	16 to 80	16 to 80	8 to 40
	Jack Pine Budworm	16 to 32	16 to 32	8 to 16
	Mimosa Webworm	8 to 16	-	4 to 8
	Oak Leaf-tier	16 to 24	16 to 24	8 to 12
	Pine Butterfly	16 to 24	16 to 24	8 to 12
	Redhumped Caterpillar	8 to 16	8 to 16	4 to 8
	Saddleback Caterpillar	8 to 16	-	4 to 8
	Saddled Prominent Caterpillar	8 to 16	8 to 16	4 to 8
	Spring & Fall Cankerworm	8 to 16	8 to 16	4 to 8
	Spruce Budworms ¹	16 to 40	16 to 40	8 to 20
	Western Tussock Moth	8 to 16	8 to 16	4 to 8
	Hemlock Looper	24 to 32	24 to 32	12 to 16

* Water dilution rate for hydraulic sprayer may be varied depending on coverage. For mist blowers, mix the applicable amount (oz.) in up to 10 gallons of water.

** For aerial application, use in up to 10 gallons of water depending on type and density of trees. For best results spray systems which deliver droplet VMD of 150 microns or less should be used. Dipel 8L should always be mixed with at least an equal amount of water for diluted applications. **Note:** For Hemlock Looper use 1-2 applications undiluted, beginning at peak first instar. When applying two applications, apply 8 ounces/A, one application each at peak first instar and second instar. For the high rate, i.e. 16 ounces/A, apply single application only at peak first instar.

*** Billion International Units per acre

¹ Use rates greater than 16 ounces in Northern states for heavy populations. Dipel 8L may be sprayed undiluted for the control of Spruce Budworms, Jack Pine Budworm and Gypsy Moth.

NOTICE TO USER

Seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning 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 accompanying directions.