

CAUTION

EPA Registration No. 275-103 EPA Est. No. 33762-IA-1

STATEMENT OF PRACTICAL TREATMENT

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

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed, inhaled, or absorbed through the skin. May cause eye irritation. Avoid breathing dust or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants.
- · Waterproof gloves.
- · Shoes plus socks.
- Dust/mist respirator (MSHA/NIOSH approval number prefix TC-21C).

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep

USER SAFETY RECOMMENDATIONS

Users should:

 Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

ENVIRONMENTAL HAZARDS

Do not contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. 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 with 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 intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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.

Do not enter or allow worker entry into treated areas during the Restricted Entry Interval (REI) 4 hours.

PPE required for early entry to 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.

STORAGE AND DISPOSAL

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

Storage: Reclose containers of unused DiPel DF. Store in a dry place inaccessible to children and out of sunlight.

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: Plastic Bottle: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Paper and Plastic Bags: Completely empty bag into application equipment. Then dispose of empty bag in sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning, If burned, stay out of sinoke.

Metal can: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authori-

DIRECTIONS FOR USE

See Chemigation section for chemigation use directions.

Days to Harvest: There are no restrictions on applying DiPel DF up to the time of harvest. Individual state regulations may vary and should be consulted for allowable pre-harvest application intervals.

Sites: DiPel DF may be used for any labeled pest in both field and greenhouse use.

DiPel DF is an insecticide for use against listed caterpillars (larvae) of lepidopterous insects. Close scouting and early attention to infestations is highly recommended. Larva must eat deposits of DiPel DF to be affected. Always follow these directions:

- Treat when larvae are young (early instars) before the crop is damaged.
- Larvae must be actively feeding on treated, exposed plant surfaces.
- Thorough spray coverage is needed to provide a uniform deposit of DiPel DF at the site of larval feeding. Use overhead and drop nozzles to obtain good spray coverage on both sides of foliage. Use sufficient spray volume to insure uniform deposition on all plant surfaces.
- Under heavy pest population pressure, use the higher label rates, shorten the spray interval, and/or raise spray volume to improve spray coverage
- Repeat applications at an interval sufficient to maintain control, usually 3 to 14 days depending on plant growth rate, moth activity, rainfall after treating, and other factors. If attempting to control a pest with a single spray, make the treatment when egg hatch is essentially complete, but before crop damage occurs.
- A spreader-sticker which has been approved for use on growing and harvested crops should be added for hard-to-wet crops such as cabbage, or to improve weather-fastness of the spray deposits.
- DiPel DF is a non-restricted use pesticide and does not require a restricted use permit for purchase and use.
- DiPel DF may be tank mixed with other labeled insecticides to enhance control. Use of the resulting tank mix must be in accordance with the more restrictive label limitations and precautions. No dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing. Before tank mixing DiPel DF with other labeled products, including spreader stickers, check for tank mix compatibility.

After ingesting a lethal dose of DiPel DF, larvae stop feeding within the hour, and will die within several hours to 3 days. Mortality varies with larval size (instar), lepidopteran species, and dose consumed. Following ingestion, larvae become sluggish, discolor, then shrivel, blacken and die. Smaller larvae die more quickly.

DiPel DF may be applied in conventional ground or aerial equipment with quantities of water sufficient to provide uniform coverage of infested plant parts. The volume of water needed per acre will depend on crop development, relative humidity, spray equipment, and local experience. Usually, selection of moderate to high spray volume will provide the best results in most equipment. For optimal results, use at least 3 gallons of water per acre by air; exception arid areas, where 5 to 10 gallons are required. Add water to the mix tank and provide

other spray materials, if any. Add remaining water, if any, and agitate until fully mixed. Maintain the suspension with moderate agitation while loading and spraying. Do not mix more DiPet DF than an be used in a 3 day period.

For Smaller Spray Volumes: Use This Amount Per Gallon (wt)

1/4 lb. / acre or 100 gals. 1/2 tsp. (0.54 oz) 1/2 lb. / acre or 100 gals. 1 tsp. (0.68 oz) 1 lb. / acre or 100 gals. 2 tsps. (0.66 oz) 2 lb. / acre or 100 gals. 4 tsps. (0.32 oz)

CHEMIGATION USE DIRECTIONS

Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation systems. Do not connect an irrigation system (including greenhouse systems) used for pesticide applications to a public water system.

Spray Preparation

First prepare a suspension of DiPel DF in a mix tank. Fill tank with 1/2 to 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Add the required amount of DiPel DF, and then the remaining volume of water. Then set the sprinkler to deliver a minimum of 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly inject the suspension of DiPel DF into the irrigation water line so as to deliver the desired rate per acre. The suspension of DiPel DF should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. Any questions on calibration should be directed to your State Extension Service Specialists, to equipment manufacturers or other experts.

NOTE: When treatment with Dipel DF has been completed, further field irrigation over the treated area should be avoided for 24 to 48 hours to prevent washing the material off the crop.

GENERAL PRECAUTIONS FOR APPLICATIONS THROUGH SPRINKLER IRRIGATION SYSTEMS

Maintain continuous agitation in the mix tank during mixing and application to insure a uniform suspension.

Greater accuracy in calibration and distribution will be achieved by injecting a larger volume for a more dilute solution per unit time.

Crop injury, lack of effectiveness, or illegal residues in the crop can result from nonuniform distribution of treated water. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection

The pesticide injection pipeline must also contain

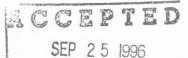
pump and connected to the system interlock to vent fluid from being withdrawn from the s tank when the irrigation system is either auto cally or manuffy shut down.

The system must contain functional interlo control to automatically shut off the pest injection pump when the water pump motor st

The irrigation line or water pump must incl functional pressure switch which will sto water pump motor when the water pres decreases to the point where pesticide distribute and versely affected.

Ststems must use a metering pump, such positive displacement injection pump (diaphragm pump) effectively designed and structed of materials that are compatible with ticides and capable of being fitted with a syinterlock. Do not apply when wind speed f drift beyond the area intended for treatment.

Do not apply when wind speed favors drift, system connections or fittings leak, when not do not provide uniform distribution or when containing the product must be dismantled drained.



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Biological Insecticide					
NiP	el [®] BF	: .			
Dr	Flauricia				
Dry Flowable					
PPLICATION RATE rop Group Miscellaneous)	Pests Pou	nds/Acre			
Ifalfa (Hay and	Looper	1/2 - 14			
eed), Hay and Other brage Crops	Alfalfa Caterpillar European Skipper (Essex Skipper	12-1 12-1			
	Armyworm ¹	1 - 2			
erries and small ruit such as Grape	Grapeleaf Skeletonizer (ground only)	1/2 - 1			
trawberry, and lackberry	Grape Leafroller Achema Sphinx Moth (Hornworm)	1/2 - 1 1/2 - 1			
	Saltmarsh Caterpillar	1/2 - 1			
	(ground only) Omnivorous Leafroller (ground only)	1/2 - 1			
	Looper	1/2 - 1			
	Orange Tortrix Oblique Banded Leafroller	1/2 - 1 1/2 - 1			
	Armyworm ¹	1 - 2			
	Tobacco Budworm Grape Berry Moth	1/2 - 2 1/2 - 1			
	Melonworm Cutworm	1/2 - 1 1/2 - 1			
ulb such as Leek,	Looper	1/2 - 1			
arlic and Onion treen and bulb)	Omnivorous Leafroller Hornworm	1/2 - 1 1/4 - 1			
freeli and baild	Imported	1/4 - 1			
	Cabbageworm Diamondback Moth ¹	1/4 - 1			
	Green Cloverworm	1/2 - 1 1/2 - 1			
	Webworm Saltmarsh Caterpillar	1/2 - 1			
	Armyworm ¹	1 - 2			
	Cutworm Cross-striped	1/2 - 1 1/2 - 1			
	Cabbageworm Heliothis	1/2 - 2			
weathis Venetables		1/2 - 1			
urcurbit Vegetables uch as Melon,	Looper Melonworm	1/2 - 1			
ucumber and quash	Rindworm complex Armyworm ¹	1/2 - 1 1 - 2			
lowers, Bedding	Looper	1/4 - 1			
lants and	Tobacco Budworm	1/4 - 1			
rnamentals (Ground pplication only)*	Omnivorous Looper Omnivorous Leafroller	1/4 - 1 1/4 - 1			
ррисацоп отгу	Diamondback Moth	1/4 - 1			
	Armyworm ¹ Ello Moth (Hornworm)	1 - 2 1/4 - 1			
	lo Moth	1/4 - 1 1/4 - 1			
	Oleander Moth Azalea Caterpillar	1/4 - 1			
uiting Vegetables	Looper	1/2 - 1			
uch as Tomato,	Hornworm	1/4 - 1 1/2 - 1			
epper and Eggplant	Tomato Fruitworm Variegated Cutworm	1/2 - 1			
	Saltmarsh Caterpillar Armyworm ¹	1/2 - 1 1 - 2			
reenhouse/Shade-	Looper	1/2 - 1			
ouse and Outdoor ursery Crops such as	Heliothis	1/2 - 2			

APPLICATION RATE CroppGroup	(continued) Pests Poun	ds/Acre	APPLICA Other Co
(Miscellaneous)	resis roun	uo/Neio	Other of
Herbs, Spices and	Looper	1/2 - 1	Asparagi
Minte such as Basil Chive, Oill and Peppermint	Saltmarsh Caterpillar Armyworm ¹	1/2 - 1 1 - 2	Avocado
Realty and Bole Crops	Looper	1/2 - 1	
such as Lequice	Omnivorous Leafroller	1/2 - 1	
(Imad and leaf), Kale, Celery, Spieach, Broccolf, Cabbage,	Hornworms Imported Cabbageworm	1/4 - 1 1/4 - 1	Вапапаѕ
Mustard Greens,	Diamondback Moth	1/4 - 1	Citrus
Brussels Sprout,	Green Cloverworm	1/2 - 1	
Cauliflower, Collard,	Webworm Soltmarch Catornillor	1/2 - 1 1/2 - 1	
Chinese Cabbage, Endive Kohlrabi and	Saltmarsh Caterpillar Armyworm ¹	1-2	Corn (Sw
Parsley	Cutworm	1/2 - 1	Field and
,	Cross-striped Cabbageworm	1/2 - 1	
	Heliothis	1/2 - 2	Cotton
Legume Vegetables	Looper	1/2 - 1	
such as Bean, Pea,	Soybean Looper	1/2 - 1	
Lentil and Soybean	Green Cloverworm Velvetbean Caterpillar	1/4 - 1 1/4 - 1	
	Armyworm1	1 - 2	Нор
	Podworm	1/2 - 1	Пор
Root and Tuber such	Looper	1/2 - 1	Kiwi Fru
as Carrot, Potato,	Omnivorous Leafroller	1/2 - 1	
Beet and Sugarbeet	Hornworm	1/4 - 1 1/4 - 1	Malanga
	Imported Cabbageworm Diamondback Moth ¹	1/4 - 1	
	Green Cloverworm	1/2 - 1	Peanut
	Webworm	1/2 - 1	
	Saltmarsh Caterpillar	1/2 - 1	
	Armyworm ¹ Cutworm	1/2 - 1	
	Cross-striped Cabbageworm	1/2 - 1	Pineapp
	Heliothis	1/2 - 2	
Stone Fruit such as	Redhumped Caterpillar	1/2 - 2	
Cherry, Plum, Peach,	Tent Caterpillar	1/2 - 2	D 10
Prune, and Nectarine	Omnivorous Leafroller Fall Webworm	1/2 - 2 1/2 - 2	Rape (Ca
Pome Fruit such as	Walnut Caterpillar	1/2 - 2	4.5
Apple and Pear	Cankerworm	1/2 - 2 1/2 - 2	Safflow
Tree Nuts such as Almond, Pecan,	Gypsy Moth Variegated Leafroller	1/2 - 2	
Walnut and Filbert	Redbanded Leafroller	1/2 - 2	
Pomegranate	Tufted Apple Budmoth	1/2 - 2	Sunflow
	Fruittree Leafroller	1/2 - 2	applicat
	Oriental Fruit Moth Cutworm	1/2 - 2 1/2 - 2	Tobacco
	Filbert Leafroller	1/2 - 2	Tonacce
	Obliquebanded Leafroller	1/2 - 2	
	Codling Moth	1/2 - 2	Turf
	Armyworm ¹ Twig Borer	1 - 2 1/2 - 2	
	. This Donor		1 DiPel
Small Grains (Ground application only)	Looper Armyworm ¹	1/2 - 1 1 - 2	and/or tions a Repea
Tropical Fruits	Hornworm	1/2 - 2	heavy
piour riulta	Leafroller	1/2 - 2	should
	Omnivorous Looper	1/2 - 2	2 Use to hatch
	Looper	1/2 - 2	tions.

* For best results, use a ground applicator, a minimum of

50 gallons total mix per acre, 50-100 psi and 3-7 nozzles

APPLICATION RAT Other Crops		inds/Acre
Asparagus	Armyworm ¹	1/2 - 2
Avocado	Amorbia Moth Omnivorous Leafroller Omnivorous Looper Orange Tortrix Spanworm	1/2 - 1 1/2 - 1 1/2 - 1 1/2 - 1 1/2 - 1
Вапапаѕ	Banana Skipper	1/2 -
Citrus	Fruittree Leafroller Orangedog Citrus Cutworm ³	1/2 - 1/4 - 1/2 -
Corn (Sweet and Field and Sorghum)	Armyworm ¹ Headworm European Corn Borer	1 - 1/2 - 1/2 -
Cotton	Tobacco Budworm ² Cotton Bollworm ² Looper Saltmarsh Caterpillar Armyworm	1/2 - 1/2 - 1/2 - 1/2 - 1/2 -
Нор	Looper Armyworm ¹	1/2 - 1 -
Kiwi Fruit	Omnivorous Leafroller	1/2 -
Malanga	Saltmarsh Caterpillar Armyworm ¹	1/2 - 1 -
Peanut	Looper Velvetbean Caterpillar Green Cloverworm Podworm ¹	1/2 - 1/2 - 1/4 - 1/2 -
Pineapple	Gummosos- Batrachedra Comosae (Hodges)	1/4 - 1/
	Thecla-Thecla Basilides (Geyr)	1/4 - 1/
Rape (Canola)	Looper Armyworm ¹ Heliothis	1/2 - 1 - 1/2 -
Safflower	Looper Saltmarsh Caterpillar Armyworm [‡]	1/2 - 1/2 - 1 -
Sunflower (Ground application only)	Looper Head Moth	1/2 - 1/2 -
Tohacco	Tobacco Budworm Hornworm Looper	1/2 - 1/4 - 1/2 -
Turf	Sod Webworm	1 -

DiPel DF may be used to control small armyworms and/or podworms (1st and 2nd instar) when populations are light and full coverage sprays are applied. Repeat treatment as necessary. If mature worms or heavy populations are present a contact insecticide should be used to enhance control.

² Use to control light to moderate populations of newly hatched worms in integrated pest management conditions. Repeat treatments at 4 to 5-day intervals as long as necessary and results are acceptable. Use in combination with ovicidal rates of labeled Heliothis ovicides.

DiPel DF for Trees a <u>Crop</u>	Pest Ibs/100 G	allons ⁵
Forest, Shade, Sugar	Gypsy Moth	1/4 - 1
Maple Trees and	Bagworm	1/4 - 1
Ornamentals	Redhumped Caterpillar	1/4 - 1
	Spring and Fall Cankerworm	1/4 - 1
	Fall Webworm	1/4 - 1
(Ground application	Elm Spanworm	1/4 - 1
only)	Tent Caterpillar	1/4 - 1
, <i>,</i>	California Dakworm	1/4 - 1
	Pine butterfly	1/4 - 1
	Spruce Budworm	1/4 - 1
	Saddle Prominent Caterpillar	1/4 - 1
	Douglas Fir Tussock Moth	1/4 - 1
	Western Tussock Moth	1/4 - 1
	Fruittree Leafroller	1/4 - 1
	Blackheaded Budworm	1/4 - 1
	Mimosa Webworm	1/4 - 1
	Jack Pine Budworm	1/4 - 1
	Saddleback Caterpillar	1/4 - 1
	Greenstriped Mapleworm	1/4 - 1
	Hemlock Looper	1/4 - 1

Forest, Shade, Sugar Maple Trees and Ornamentals.
 Rate for hydraulic sprayer. For mist blowers, mix the applicable amount (lbs.) in 10 gallons of water.

Note: Inclusion of a suitable spreader-sticker approved for forest insect control is recommended to improve coverage, rain fastness and/or resist wash-off.

APPLICATION RATE (continued)
DiPel DF for Stored Agricultural Commodities
(For all states except California)
Grains, Soybeans, Sunflower Seed, Crop Seed,
Condimental Seeds, Spices, Herbs, Birdseed* and
Popcorn*
Pest Rate

Indian Meal Moth⁶ 3/8 lb./100 bu Almond Moth⁶ (undiluted and diluted)**

* For all states except California.

** As a surface treatment, apply 1/2 lb. DiPel DF in 5-10 gal. of water per 500 sq. ft. of grain surface area, mix into top 4 inches. For commodities coarser than shelled corn, increase depth of treatment according to the habit of the nast

6 For the control and prevention of these pests, apply DiPel DF in a constantly agitated water suspension to the top four inch surface layer of grain in the bin. Use a sprinkler can or sprayer to apply the suspension into the grain stream as the last (top) four inch layer is augured into the bin. Mix 1/20 lb. DiPel DF per gallon of water. Apply 0.6 pint of this mixture per bushel as grain is augured into storage. Dr, sprinkle the suspension onto the surface of the grain in the bin and mix thoroughly with a scoop or rake to the depth of four inches. More through coverage may be achieved by dividing the recommended concentration into three applications and mixing the grain between applications.

For the protection of bagged grain including popcorn, apply the suspension to the entire grain mass and mix thoroughly prior to bagging.

Treatments can be applied to stored grain at any time, but for best results, make application immediately after harvest before moth activity occurs. In areas where late fall harvested grain is not subject to infestation because of low temperatures, application can be delayed until late winter or early spring before moth activity begins. Control for a full

APPLICATION RATE (continued)

DiPel DF for Stored Agricultural Commodities (For all states except California)

Grains, Soybeans, Sunflower Seed, Crop Se Condimental Seeds, Spices, Herbs, Birdseed* Popcorn*. (Continued)

This treatment controls the moth larvae. If an infestation present when the grain is treated, moth emergence may continue for several days. If immediate control of sever infestations is desired, grain should be fumigated prior 1 application of this treatment. DiPel DF will not control weevils or other beetles.

Peanut

est	Rate
ndian Meal Moth	1/4 lb./ton*
limond Moth	

* Apply this rate to the top four to eight feet of nuts whe filling the warehouse.

To prevent an control these pests, spray an even coatin DiPel DF on the farmer stock peanuts while filing the wan house. To make the spray solution, mix 3-3/4 lbs. DiPel I per 5 gallons of water. Apply to 15 tons of commodity. D not pre-mix more spray solution than will be used within hours. Keep the spray suspension agitated during applition, and use pressures and nozzles sufficient to handle this suspension.

Before filling the warehouse, clean thoroughly, then sprinterior of the facility with a DiPel DF suspension at the of 1/2 lb. DiPel DF per 100 gallons water. Spray enough spension to wet all cracks and crevices.

For bagged peanuts, treat the entire quantity at the rate indicated above.

Flue-Cured Tobacco Rate Tobacco Moth 0.2 oz./100 |

* Apply 0.2 ounce {approximately 2 1/2 tsps.} of DiPel DF one quart of water per 100 pounds of tobacco as a fine mist spray. Avoid overwetting. Tobacco should have ju enough moisture to be handled without shattering at the time of application.

Tobacco to be Stored up to Twelve Months.

Spray loose leaves as the tobacco is being bundled fron the curing barn. For tobacco on sticks, treat both sides (leaves.

Stored Tobacco.

For tobacco which is to be carried over, rebundle or restack sticks, fluff up tobacco and spray loose leaves. For tobacco that has been stored over three weeks, app at first sign of infestation; promptly open bundles, spray

loose leaves, then bundle. Treatment of Storage Barns.

If tobacco has been treated, or is going to be treated, trement of the floors and walls may be made to aid in control Sweep out the area, especially cracks and corners, and of the loose tobacco pieces in which the moth might bre Make a spray mixture containing 1/2 oz. (6 tsps.) DiPel D per 2 1/2 gallons of water. Apply this at a rate of 1/2 galloper 1000 sq. ft. of surface area. Be sure to spray into cracks and between floorboards.

NOTICE TO USER

Seller makes no warranty, express or implied, merchantability, fitness or otherwise concern the use of this product other than as indicated the label. User assumes all risks of use, storage handling not in strict accordance with accompaning directions.

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