

Reg # 352-342

PM-19

File
1918

United States Environmental Protection Agency
Washington, D.C. 20460

Office of
Prevention, Pesticides and
Toxic Substances

OCT 4 1993

Charles S. Baer
E. I. DU PONT DE NEMOURS AND CO, INC.
BARLEY MILL PLAZA, WALKER'S MILL
WILMINGTON DE 19880

Subject: Label Amendment Submission of 05/28/93
in Compliance with WPS Labeling Requirements
EPA Reg No. 352-342
DUPONT LANNATE INSECTICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is accepted subject to the comments listed below.

Based on your certification, the Agency has accepted only those changes to your labeling which are necessary to comply with PR Notices 93-7 and 93-11, which reflect the WPS labeling requirements of 40 CFR part 156, subpart K. Any other labeling changes submitted in connection with this amendment application and not directly related to compliance with PR Notice 93-7 or 93-11 have neither been reviewed nor accepted by the Agency. If you wish to make any such changes, you must submit a separate amendment application proposing them. If your product registration is currently suspended, acceptance of this labeling amendment does not affect the suspension in any way.

A copy of your proposed labeling stamped "Accepted with comments" is attached. Make any required changes described in the attached and send three copies of final labeling as soon as it is available to:

Document Processing Desk (FIN-LABEL)

Office of Pesticide Programs (H-7504C)
U.S. Environmental Protection Agency
401 M Street SW
Washington, DC 20460-0001

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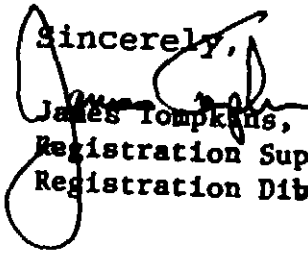
Hand or courier deliveries of final labels may be made to:

Document Processing Desk (FIN-LABEL)
Room 266A Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Please correct the typographical errors circled on the draft before printing final labeling.

In your final labeling the "Agricultural Use Requirements" text must be contained in a clearly separate box. This box may be set apart by a line, by another graphical device, by a different color background, or in any other way that clearly distinguishes it from surrounding text.

Sincerely,


James Tompkins, Deputy Chief
Registration Support Branch
Registration Division (7505W)

WPS Label

39 18

RESTRICTED USE PESTICIDE

Due to High Acute Toxicity to Humans.

For retail sale to and use only by certified applicator or persons under their direct supervision and only for those uses covered by the certified applicator's certification. Direct supervision for this product is defined as the certified applicator being physically present during application, mixing, loading, repair and cleaning of application equipment. Commercial certified applicators must also ensure that all persons involved in these activities are informed of the precautionary statements.

ACCEPTED
with COMMENTS
in EPA Letter Dated

007 1983

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

352-342



LANNATE®

INSECTICIDE

WATER SOLUBLE POWDER

ACTIVE INGREDIENT

BY WEIGHT

Methomyl(S-methyl-N-[(methylcarbamoyl)oxy]thioacetimidate) 90%

INERT INGREDIENTS 10%

TOTAL 100%

EPA Reg. No. 352 342

KEEP OUT OF REACH OF CHILDREN

DANGER



POISON

PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

STATEMENT OF PRACTICAL TREATMENT

This Product is an N-Methyl Carbamate Insecticide.

If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching the back of throat with finger. Do not induce vomiting in, or give anything by mouth to an unconscious or convulsing person.

If inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

If in eyes: Hold eyelids open and flush with a steady gentle stream of water for 15 minutes. Get medical attention.

If on skin: Wash with plenty of soap and water. Get medical attention.

ATROPINE IS AN ANTIDOTE --SEEK MEDICAL ATTENTION AT ONCE IN ALL CASES OF SUSPECTED POISONING.

If warning symptoms appear (see WARNING SYMPTOMS), get medical attention.

For medical emergencies involving this product, call toll free 1-800-441-3637.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER - FATAL IF SWALLOWED. MAY BE FATAL IF INHALED OR ABSORBED THROUGH EYES. HARMFUL IF ABSORBED THROUGH THE SKIN.

Do not get in eyes, on skin, or on clothing. Do not breathe vapors or spray mist. Pilot should not assist in the mixing and loading operation.

(*PRECAUTIONARY STATEMENTS* Continued on next page)

PRECAUTIONARY STATEMENTS(continued)

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING SYMPTOMS — Methomyl poisoning produces effects associated with anticholinesterase activity which may include weakness, blurred vision, headache, nausea, abdominal cramps, discomfort in the chest, constriction of pupils, sweating, slow pulse, muscle tremors. If warning symptoms appear, refer to "Statement of Practical Treatment" on front of "Lannate" label and seek medical attention at once.

NOTE TO PHYSICIAN

TREATMENT — Atropine sulfate should be used for treatment. Administer repeated doses, 1.2 to 2.0 mg. intravenously every 10 to 30 minutes until full atropinization is achieved. Maintain atropinization until the patient recovers. Artificial respiration or oxygen may be necessary. Allow no further exposure to any cholinesterase inhibitor until recovery is assured.

Do not use 2-PAM for exposure to "Lannate" alone. However, for exposure to combinations of "Lannate" and organophosphorous insecticides, 2-PAM may be used as required to supplement the atropine sulfate treatment. Do not use morphine.

For medical emergencies involving this product, call toll free 1-800-441-3637.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- Long-sleeve shirt and long pants.
- Waterproof gloves.
- Shoes plus socks.
- Protective eyewear.

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For exposures in enclosed areas, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

For exposure outdoors, Dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C).

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROL STATEMENTS

Human flaggers must be in enclosed cabs.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

The enclosed cabs must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

- USERS SHOULD:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

PHYSICAL AND CHEMICAL HAZARDS

Keep container closed. Use with adequate ventilation.

GENERAL INFORMATION

Scouting — Monitoring insect populations to determine whether or not there is a need for application of "Lannate" is recommended. More than one treatment of "Lannate" may be required to control a population of pests.

insect Predators — "Lannate" at rates of 1/8 to 1/4 lb. per acre helps conserve certain beneficials, including big-eyed bugs, damsel bugs, flower bugs and spiders in cotton and soybeans. While these beneficials cannot be relied upon to control pests, they are of potential value and should be monitored along with pests in pest management programs on these crops.

Compatibility — Since formulations may be changed and new ones introduced, it is recommended that users premix a small quantity of a desired tank mix and observe for possible adverse changes (settling out, flocculation, etc.). Avoid mixtures of several materials and very concentrated spray mixtures.

Do not use "Lannate" with Bordeaux mixture, "Du Ter" (triphenyltin hydroxide), lime sulfur, "Rayplex" iron nor in highly alkaline solutions. Use mildly alkaline mixtures immediately after mixing to prevent loss of insecticidal activity.

Tank-mix solutions containing Boron may affect solubility of the water soluble film. When using Boron containing solutions in a tank-mix, follow these procedures:

- Add the correct amount of "Lannate" water soluble packets first
- Be sure the soluble packets are completely dissolved
- Introduce Boron containing solutions last

If the above procedure cannot be followed, and Boron is an essential part of the spray mix, substitute "Lannate" L formulation for the water soluble packets.

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 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.

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 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).

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.
- Protective eyewear.

Du Pont "Lannate" Insecticide should be used only in accordance with recommendations on this label, or in separate published Du Pont recommendations available through local dealers.

Du Pont will not be responsible for losses or damages resulting from use of this product in any manner not specifically recommended by Du Pont. User assumes all risks associated with such non-recommended use. "Lannate" is a dry powder to be dissolved in water for application by ground or air equipment. Use only in commercial and farm plantings; do not use in home plantings. Pilot should not assist in the mixing and loading operation.

SPRAY PREPARATION

Fill spray tank 1/4 to 1/2 full of water. Add "Lannate" directly to spray tank. Mix thoroughly to fully dissolve the insecticide; once dissolved continued agitation is not required. Use mechanical or hydraulic means; do not use air agitation. Be sure the soluble packet is completely dissolved before adding any other ingredients. Spray mix should not be stored overnight in spray tank.

Do not apply this product through any type of irrigation system.

APPLICATION

Apply at the recommended rates when insects first appear. Unless otherwise noted, continue application at 5- to 7-day intervals or as needed. On the following crops the minimum interval between treatments is: Sweet corn, - 1 day; Broccoli, brussels sprouts, cabbage, cauliflower, lettuce - 2 days; Peas - 3 days; Apples, bulb onions - 7 days. Use sufficient water to obtain thorough, uniform coverage. Since "Lannate" is a fast acting contact insecticide, best results follow direct spraying of the target insect. This can be accomplished with fine spray droplets at low volume.

For aerial, use a minimum of 2 gals. per acre (gpa) except 10 gpa for grapes, nectarines and strawberries; 15 gpa for oranges, lemons, grapefruit, tangelos and tangerines.

For certain crops a minimum of 1 gallon per acre may be used providing the following conditions are met:

- equipment is capable of delivering small spray droplets to insure thorough coverage,
- equipment is adjusted to distribute spray uniformly over the spray swath,
- wind conditions and other factors such as temperature and humidity are such that the spray is delivered to the target area,
- local regulations do not prohibit low-volume aerial sprays,
- use rates are applied as directed on the package label or supplemental labeling for the following crops:

Alfalfa	Collards	Peppers
Anise	Corn	Potato
Asparagus	Cotton	Rye
Barley	Cucumber	Sorghum
Beans	Lettuce	Soybean
Broccoli	Melons	Spinach
Brussels sprouts	Mint	Sugar beet
Cabbage	Oats	Summer Squash
Carrot	Peanuts	Wheat
Cauliflower	Peas (succulent)	
Celery	Peppermint	

Apply the low rates on small plants, small insects and light infestations of insects. Use intermediate rates on large insects and heavier infestations of insects. Use 1 to 3 applications of the highest recommended rate for controlling severe infestations. Thereafter, use the lowest rate possible to maintain control.

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Crops	Insects	RATES	LAST APPLICATION-DAYS			Further Use In
		"Lannate" Lbs. Per Acre	To Harvest	To Livestock Grazing/ Feeding	REI	
Alfalfa	Pea Aphid, Lygus Bugs, Blotch Leafminer, Aphids, Egyptian Alfalfa Weevil Larvae	1/2 -1		7	48 hours	Do not apply to when min. daily Do not apply m Do not make m
	Fall Armyworm	1/2				
	Alfalfa Weevil Larvae	1				
	Loopers, Yellowstriped Armyworm, Western Yellowstriped Armyworm, Armyworm	1/4-1/2				
	Variegated Cutworm, Beet Armyworm	1/4-1				
	Alfalfa Caterpillar	1/4-1/2				
Anise (Fennel)	Cabbage Looper	1	7		48 hours	Do not apply m Do not make m
	Beet Armyworm	1/2-1				
Apple Ground application only	Apple Aphid, Rosy Apple Aphid, Tufted Apple Budmoth, Green Fruitworm, Tarnished Plant Bug,	1/2-1 *	14	10	72 hours	Do not use on E Do not apply m Do not make m *Apply in a min per acre.
	Codling Moth (10-12 day intervals)					
	Leafrollers (Fruittree, Obliquebanded, Redbanded, Variegated), Lesser Appleworm, White Apple Leafhopper, Tentiform Leafminer, Cutworm	1 *				
Asparagus	Beet Armyworm, Western Yellowstriped Armyworm, Asparagus Beetle, Spotted Asparagus Beetle, White Cutworm, Redbacked Cutworm	1/2-1	1		48 hours	Do not apply m Do not make m
	Variegated Cutworm	1/2				
Avocado	Western Avocado Leafroller, Omnivorous Looper	1/2-1	1	10	48 hours	Do not apply m Do not make m

4

Crops	Insects	RATES	LAST APPLICATION--DAYS			Further Use Information
		"Lannate" Lbs. Per Acre	To Harvest	To Livestock Grazing/ Feeding	REI	
Barley	Armyworms, Cereal Leaf Beetle, Aphids	1/4-1/2	7	10	48 hours	Do not apply more than 1.8 lbs a.i./acre/crop Do not make more than 4 applications/crop
Beans(Succulent) (Includes Blackeyed Peas & Cowpeas)	Leafhopper, Mexican Bean Beetle	1/4-1	Succulent Beans 1/4-1/2 lb. --1, over 1/2 lb. --3;	3 Vines 7 Hay	48 hours	Succulent Beans - Do not apply more than 4.5 lbs a.i./acre /crop Do not make more than 10 applications/crop *Not recommended in AI & GA.
	Fall Armyworm, Variegated Cutworm	1/2				
	Beet Armyworm, Loopers, Corn Earworm, Saltmarsh Caterpillar, Yellowstriped Army- worm, Western Yellowstriped Armyworm, Lygus Bugs, Thrips, Aphids, Loopers*	1/2-1				
	European Corn Borer(Ovicide & Larvacide) --Initiate when moth flights first appear and- continue preventive treatments at 3-4 day intervals to control eggs and larvae					
	Spotted Cucumber Beetle	1/4-1/2				
Beans(Dry)	(Same as Succulent Beans)	(Same as Succulent Beans)	14 *	14 Vines * 14 Hay *	48 hours	Do not apply more than 4.5 lbs a.i./acre /crop Do not make more than 10 application/crop *Do not apply within 14 days of cutting.
Beets (Table)	Imported Cabbageworm, Beet Armyworm, Cabbage Looper, Diamondback Moth	1/4-1	0 - roots		48 hours	Do not apply more than 3.6lbs.a.i./acre/crop Do not make more than 8 applications/crop
	Cucumber Beetle, Variegated Cutworm	1/2	14 - tops			
Bermudagrass pasture	Fall Armyworm, Armyworm	1/4-1		7 Forage 3 Dehydrated Hay	48 hours	Do not apply more than 0.9 lbs.a.i./acre/crop Do not make more than 4 applications/crop
Blueberries	Blueberry Leafhopper, Aphids, Tussock Moth, Weevil, Sharp-Nosed Leafhopper	1/2	3		48 hours	Do not apply during bloom Do not apply more than 3.6 lbs.a.i./acre/crop Do not make more than 4 applications/crop
	Cranberry Fruitworm, Cherry Fruitworm	1/2-1				
	Flea Beetle (larvae), Sawfly (larvae), Blueberry Leafroller	1				
	Blueberry Maggot	1/4-1/2				

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5

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Crops	Insects	RATES	LAST APPLICATION-DAYS		REI	Further Use Information
		"Lannate" Lbs. Per Acre	To Harvest	To Livestock Grazing/ Feeding		
Broccoli	Loopers, Imp. Cabbageworm, Diamondback Moth	1/4-1**	3		48 hours	** Add a wetting agent to improve coverage Do not apply more than 7.2 lbs.a.i./acre/crop Do not make more than 10 applications/crop
Brussels Sprouts	Loopers, Imp. Cabbageworm, Diamondback Moth	1/2-1**	3		48 hours	** Add a wetting agent to improve coverage Do not apply more than 5.4 lbs.a.i./acre/crop Do not make more than 10 applications/crop
	Variegated Cutworm	1/2**				
Cabbage	Loopers*, Imp. Cabbageworm, Diamondback Moth	1/4-1**	1		48 hours	** Add a wetting agent to improve coverage Do not apply more than 9.0 lbs.a.i./acre/crop Do not make more than 15 applications/crop *Not recommended in AL & GA.
	Fall Armyworm, Variegated Cutworm	1/2**				
Carrot	Beet Armyworm	1/3-1	1		48 hours	Do not apply more than 6.3 lbs.a.i./acre/crop Do not make more than 10 applications/crop
	Aster Leafhopper	1/2-1				
	Armyworms	1/4-1/2				
	Variegated Cutworm	1/4-1/2				
Cauliflower	Imp. Cabbageworm, Loopers, Diamondback Moth	1/4-1**	3		48 hours	** Add a wetting agent to improve coverage Do not apply more than 9.0 lbs.a.i./acre/crop Do not make more than 10 applications/crop
	Variegated Cutworm	1/2**				
Celery	Beet Armyworm, Aster Leafhopper	1/2-1	7		48 hours	Do not apply more than 9.0 lbs.a.i./acre/crop Do not make more than 10 applications/crop
	Loopers	1				
	Variegated Cutworm	1/2				
	Armyworms	1/4-1/2				
Chicory	Beet Armyworm, Variegated Cutworm, Leafhoppers	1/2-1	80		48 hours	Do not apply more than 1.8 lbs.a.i./acre/crop Do not make more than 2 applications/crop

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Crops	Insects	RATES	LAST APPLICATION-DAYS		REI	Further Use Information
		"Lannate" Lbs. Per Acre	To Harvest	To Livestock Grazing/ Feeding		
Chinese Cabbage Ground application only	Loopers, Beet Armyworm	1/2-1	10		48 hours	Do not apply more than 8.1 lbs.a.i./acre/crop Do not make more than 10 applications/crop
Collards (Fresh market only)	Loopers*, Diamondback Moth, Variegated Cutworm	1/2	10		48 hours	Do not apply when temp. is less than 50° F. Do not apply when crop is less than 10" tall Do not apply more than 5.4 lbs.a.i./acre/crop Do not make more than 8 applications/crop *Not recommended in AL & GA
	Imported Cabbageworm, Beet Armyworm	1/2-1				
Corn (Field & Popcorn)	Earworm, Armyworm, Fall Armyworm, Corn Rootworm (adult beetles), Flea Beetles, Picnic Beetles, Aphids	1/4-1/2	21 Ears	3 Forage 21 Fodder	48 hours	Do not apply more than 2.25 lbs.a.i./acre/crop Do not make more than 10 applications/crop
	Variegated Cutworm, Beet Armyworm	1/2				
Corn (Sweet)	Earworm--Whorl as needed	1/3-1/2	0 Ears	3 Forage	48 hours	Certain hybrid varieties of corn are susceptible to methomyl injury. treat a small area to determine crop safety before fullscale spraying Do not apply more than 7.2 lbs.a.i./acre/crop Do not make more than 28 applications/crop
	Fall Armyworm, Armyworm, Earworm,- (Ovicide/Larvicide), European Corn Borer- Ears 1-3 days or as needed, Corn Rootworm (adult beetles), Flea Beetles, Picnic Beetles, Aphids	1/4-1/2				
	Variegated Cutworm, Beet Armyworm	1/2				
Cotton U.S. --- (continued on next page)	Ovicide/Larvicide Bollworm, Tobacco Budworm (Initiate schedule when significant numbers of eggs are present Continue at 5- to 7-day intervals while eggs are present and larval control is adequate. If significant larvae survive, use higher rates below.) Lygus Bugs (adults and nymphs) start treatment on low level population for suppression.	1/8-1/4 (see Predators)	15	Do not graze or feed	72 hours	Do not apply more than 1.8 lbs.a.i./acre/crop Do not make more than 8 applications/crop Use may redden cotton if excessive stop or alternate with other insecticides

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Crops	Insects	RATES	LAST APPLICATION-DAYS		REI	Further Use Information
		"Lannate" Lbs. Per Acre	To Harvest	To Livestock Grazing/ Feeding		
Cotton (continued)	U.S. ----- Cotton Leafworm	1/4-1/2				Do not apply more than 1.8 lbs.a.i./acre/crop Do not make more than 8 applications/crop Use may redden cotton if excessive stop or alternate with other insecticides
	Cotton Fleahopper (as needed)	1/8-1/4				
	Aphids, Thrips	1/4				
	East of Rockies only ----- (Early Season) Bollworm, Tobacco Budworm, Beet Armyworm, Cotton Leafperforator, Fall Armyworm Lygus Bugs (adults and nymphs) use as occasional spray in regular schedule but not more often than every 10 days.	1/2				
	(Late Season) Bollworm, Tobacco Budworm, Beet Armyworm, Cotton Leafperforator, Fall Armyworm, Lygus Bugs (adult and nymphs) up to 3 applications at 3-5 day intervals after desired boll load set on plants.	1/2				
	West of Rockies only ----- Larvicide for worms Bollworm, Fall Armyworm, Tobacco Budworm, Lygus Bugs	1/2-3/4				
	Beet Armyworm	1/3-1/2				
	Cotton Leafperforator	1/3-3/4				
Cucumber	Loopers, Tobacco Budworm, Beet Armyworm, Yellowstriped Armyworm, Granulate Cutworm, Flea Beetles, Cucumber Beetles, Melon Aphid, Melonworm, Pickleworm	1/2-1	1/2 lb. --1 Over 1/2 lb.--3		48 hours	Do not apply more than 5.4 lbs.a.i./acre/crop Do not make more than 12 applications /crop
	Fall Armyworm, Variegated Cutworm	1/2				
Eggplant	Green Peach Aphid	1/4-1	5		48 hours	Do not apply more than 4.5 lbs.a.i./acre/crop Do not make more than 10 applications/crop
	Tomato Pinworm(Ground Application Only), Beet Armyworm	1/2-1				

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81
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Crops	Insects	RATES	LAST APPLICATION-DAYS		REI	Further Use Information
		"Lannate" Lbs. Per Acre	To Harvest	To Livestock Grazing/ Feeding		
Endive, Escarole	Beet Armyworm	1/2-1	10		48 hours	Do not apply more than 4.5 lbs.a.i./acre/crop Do not make more than 8 applications/crop
Garlic	Beet Armyworm	1/2**	7		48 hours	** Add a wetting agent to improve coverage Do not apply more than 3.6 lbs.a.i./acre/crop Do not make more than 6 applications/crop
Grapefruit CA & AZ only	Thrips, Fruittree Leafroller, Orange Tortrix, Western Tussock Moth, Beet Armyworm	1/2-1	1	10	72 hours	Do not apply more than 2.7 lbs.a.i./acre/crop Do not make more than 4 applications/crop
Grapes East of Rockies only ---	Grape Berry Moth (apply pre- & post- bloom & repeat at 10-14 day intervals or as needed), Leafhoppers	1/2-1	1 Fresh & Raisin		7 days	Do not apply more than 4.5 lbs.a.i./acre/crop Do not make more than 5 applications/crop
U.S. ---	Omnivorous Leafroller, Grape Leafroller, Orange Tortrix		14 Wine Grapes			Leaf hoppers & Grape leaf skeletonizer (Ground Application Only)
	Saltmarsh Caterpillar					
	Leafhoppers					
West of Rockies only ---	Climbing Cutworm (Treat infestation and repeat at 7-14 day intervals as needed)	1				
CA only ---	Grape Leaf Skeletonizer	1/2-1				
	Thrips	1/8-1/4				
Horseradish Ground application only	Aphids, Thrips	1/2	65		48 hours	Do not apply more than 1.8 lbs.a.i./acre/crop Do not make more than 4 applications/crop

Crops	Insects	RATES	LAST APPLICATION-DAYS			Further Use Information
		"Lannate" Lbs. Per Acre	To Harvest	To Livestock Grazing/ Feeding	REI	
Leafy Green Vegetables: Beet (Tops), Dandelions, Kale, Mustard Greens, Parsley, Swiss Chard, Turnip Greens	Beet Armyworm, Cabbage Looper, Diamondback Moth, Imported Cabbageworm Loopers*	1/2-1	10		48 hours	Do not apply more than 3.6lbs.a.i./acre/crop Do not make more than 8 applications/crop * Not recommended in AL & GA.
Lemon CA & AZ only	Thrips, Western Tussock Moth, Orange Tortrix, Beet Armyworm	1/2-1	1	10	72 hours	Do not apply more than 2.7 lbs.a.i./acre/crop Do not make more than 4 applications/crop
Lentils	Western Yellowstriped Armyworm	1/2-1	21	3 - Forage 7 - Hay	48 hours	Do not apply more than 0.9 lbs.a.i./acre/crop Do not make more than 2 applications/crop
Lettuce, (head varieties in U.S. and Leaf varieties in CA and AZ)	Beet Armyworm, Loopers	1/4-1	1/4-1/2 lb. --7 over 1/2 lb. --10		48 hours	Lettuce(head varieties) Do not apply more than 9.0 lbs.a.i./acre/crop Do not make more than 15 applications/crop Lettuce(leaf varieties) - CA & AZ Only Do not apply more than 3.6 lbs.a.i./acre/crop Do not make more than 8 applications/crop
	Thrips, Aphids, Corn Earworm, Aster Leafhopper	1/2-1				
	Variegated Cutworm	1/2				
Melons	Loopers, Tobacco Budworm, Beet Armyworm, Yellowstriped Armyworm, Granulate Cutworm, Flea Beetles, Cucumber Beetles, Melon Aphid, Melonworm, Pickleworm	1/2-1	1/2 lb. --1 day over 1/2 lb. --3 days		48 hours	Do not apply more than 5.4 lbs.a.i./acre/crop Do not make more than 12 applications/crop
	Fall Armyworm, Variegated Cutworm	1/2				

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11

Crops	Insects	RATES	LAST APPLICATION-DAYS			Further Use Information
		"Lannate" Lbs. Per Acre	To Harvest	To Livestock Grazing/ Feeding	REI	
Mint	Variegated Cutworm, Alfalfa Looper	1	14		48 hours	Do not apply more than 1.8 lbs.a.i./acre/crop Do not make more than 4 applications/crop
	Flea Beetles	3/4-1				
Nectarine CA & AZ only	Thrips	1/2-1	1	10	72 hours	Do not apply more than 2.7 lbs.a.i./acre/crop Do not make more than 3 applications/crop
Oats	Armyworms, Cereal Leaf Beetle, Aphids	1/4-1/2	7	10	48 hours	Do not apply more than 1.8 lbs.a.i./acre/crop Do not make more than 4 applications/crop
Onions(Green & Dry Bulb)	Beet Armyworm	1/2-1**	7 Green and Dry Onions		48 hours	** Add a wetting agent to improve coverage Onions, green Do not apply more than 5.4 lbs.a.i./acre/crop Do not make more than 8 applications/crop Onions, dry bulb Do not apply more than 3.6 lbs.a.i./acre/crop Do not make more than 8 applications/crop
	Thrips, Variegated Cutworm	1**				
Oranges CA & AZ only	Thrips, Western Tussock Moth, Orange Tortrix, Fruittree Leafroller, Beet Armyworm Citrus Cutworm	1/2-1	1	10	72 hours	Do not apply more than 2.7 lbs.a.i./acre/crop Do not make more than 4 applications/crop
Ornamentals Ground application only (refer to Suppl. Labeling)		1/4-1/2 per 100 gal***			48 hours	*** On field grown ornamentals Do not apply more than 0.9 lbs.a.i./acre/application
Peaches (continued on next page)	Catfacing Insects (Plant Bugs and Stink Bugs)-- begin at petal fall and continue in cover sprays at 7-to 10-day intervals	1-2 lb (or 1/4-1/2 lb per 100 gal up to 400 gal per acre)	4	10	4 days	Do not apply more than 5.4 lbs.a.i./acre/crop Do not make more than 6 applications/crop

81641

12

Crops	Insects	RATES	LAST APPLICATION-DAYS		REI	Further Use Information
		"Lannate" Lbs. Per Acre	To Harvest	To Livestock Grazing/ Feeding		
Peaches(continued)	Oriental Fruit Moth--begin at petalfall; use trapping devices and frequent field inspection to determine need for treatment. Continue treatment in cover sprays and alternate with residual-type insecticides registered for this use.	1-2 lb (or 1/4-1/2 lb per 100 gal up to 400 gal per acre)	4	10	4 days	Oriental Fruit Moth(Ground Application Only)
	Green Peach Aphid					
Peanuts	Com Earworm, Beet Armyworm, Potato Leafhopper	1/4-1	21	Do not feed treated vines	48 hours	"Lannate" has ovicidal and larvicidal control on corn earworm Do not apply more than 3.6 lbs.a.i./acre/crop Do not make more than 8 applications/crop Soybean Looper is difficult to control Do not apply toworms greater than 1/2" long Use higher rate for severe infestations
	Green Cloverworm, Velvetbean Caterpillar, Thrips, Granulate Cutworm--	1/2-1				
	Fall Armyworm	1/4-1/2				
	Cabbage Looper	1/2-1				
	Soybean Looper .	1/2-1				
Pears, Northeast only	Green Fruitworm, Obliquebanded Leafroller	1/2-1 *	7	10	48 hours	Do not apply more than 1.8 lbs.a.i./acre/crop Do not make more than 2 applications/crop *Apply in a minimum of 50 gallons of water per acre
Peas	Armyworm, Green Cloverworm	1/4-1/2	1	5 Forage 14 Hay	48 hours	Do not apply more than 2.7 lbs.a.i./acre/crop Do not make more than 6 applications/crop * Not recommended in AL & GA.
	Loopers*, Pea Aphid, Beet Armyworm, Saltmarsh Caterpillar, Variegated Cutworm	1/2-1				
	Alfalfa Caterpillar	1/4-1				

Crops	Insects	RATES	LAST APPLICATION—DAYS		REI	Further Use Information
		"Lannate" Lbs. Per Acre	To Harvest	To Livestock Grazing/ Feeding		
Pecans Southeast only	Aphids	1/2-1	30	10	48 hours	Do not apply more than 6.3 lbs.a.i./acre/crop Do not make more than 7 applications/crop
Peppers	Green Peach Aphid, Fall Armyworm, Loopers, Beet Armyworm	1/2	3		48 hours	Do not apply more than 4.05 lbs.a.i./acre/crop Do not make more than 10 applications/crop
	Armyworm, Variegated Cutworm	1/4-1/2				
Pomegranates	Omnivorous Leafroller	1	14		48 hours	Do not apply more than 1.8 lbs.a.i./acre/crop Do not make more than 2 applications/crop
Potato	Tuberworm, Loopers, Aphids, Beet Armyworm Leafhoppers	1/2-1	6		48 hours	Do not apply more than 4.5 lbs.a.i./acre/crop Do not make more than 10 applications/crop
	Variegated Cutworm, Fall Armyworm, Flea Beetles	1/2				
Rye	Armyworms, Cereal Leaf Beetle, Aphids	1/4-1/2	7	10	48 hours	Do not apply more than 1.8 lbs.a.i./acre/crop Do not make more than 4 applications/crop
Sorghum	Sorghum Webworm	1/2	14	14	48 hours	Do not apply more than 0.9 lbs.a.i./acre/crop Do not make more than 2 application/crop
	Sorghum Midge--Apply when 50% bloom and 3-5 days later if needed Fall Armyworm (Budworm), Beet Armyworm, Corn Earworm, Armyworm	1/4-1/2				
Soybeans (continued on next page)	Green Cloverworm, Velvet-bean Caterpillar, Mexican Bean Beetle	1/8-1/4(see Predators)	14	Under 1/2 lb. --- 3 Forage 7 Hay	48 hours	Do not apply more than 1.35 lbs.a.i./acre/crop Do not make more than 3 applications/crop
	Light to moderate infestations					
	Moderate to severe infestations	1/4-1/2				
	Corn Earworm	1/8-1/4(see Predators)	1/2 - 1lb. --- 10 Forage 12 Hay			
Light to moderate infestations						
	Moderate to severe infestations	1/4-1/2				

Crops	Insects	RATES	LAST APPLICATION—DAYS			Further Use Information
		"Lannate" Lbs. Per Acre	To Harvest	To Livestock Grazing/ Feeding	REI	
Soybeans(continued)	Beet Armyworm, Salt Marsh Caterpillar, Bean Leaf Beetle, Fall Armyworm Thrips, Silver Spotted Skipper Light to moderate infestations	1/4-3/8				Do not apply more than 1.35 lbs.a.i./acre/crop Do not make more than 3 applications/crop
	Moderate to severe infestations	3/8-1/2				
Spinach	Loopers, Beet Armyworm	1/2-1	7		48 hours	Do not apply when min. daily temp.is 32° F. or lower Do not apply to seedlings less than 3" diameter Do not apply more than 3.6 lbs.a.i./acre/crop Do not make more than 8 applications/crop
	Fall Armyworm, Variegated Cutworm	1/2				
Strawberry	Beet Armyworm, Thrips, Aphids	1/2-1	3-Fresh Fruit		48 hours	Do not apply more than 4.5 lbs.a.i./acre/crop Do not make more than 10 applications/crop
	Lygus Bugs, Omnivorous Leaf Tiers	1	10-Processing Fruit			
	Amyworms	3/4-1				
Sugar Beet	Beet Webworm, Flea Beetles, Carrion Beetles, Beet Armyworm, Aphids, Western Yellowstriped Armyworm-	1/4-1	7	30 Tops	48 hours	Do not apply more than 4.5 lbs.a.i./acre/crop Do not make more than 10 applications/crop
	Variegated Cutworm	1/2				
Summer Squash	Loopers, Tobacco Budworm, Beet Armyworm, Yellowstriped Armyworm, Granulate Cutworm, Flea Beetles, Cucumber Beetles, Melon Aphid, Melon worm, Pickleworm, Fall Armyworm	1/2-1	1/2 lb. --1 day over 1/2 lb.--3 days		48 hours	Do not apply more than 5.4 lbs.a.i./acre/crop Do not make more than 12 applications/crop

7

Crops	Insects	RATES	LAST APPLICATION-DAYS		REI	Further Use Information
		"Lannate" Lbs. Per Acre	To Harvest	To Livestock Grazing/ Feeding		
Tangelo, Tangerine CA & AZ only	Thrips, Western Tussock Moth, Orange Tortrix, Beet Armyworm	1/2-1	1	10	72 hours	Do not apply more than 2.7 lbs.a.i./acre/crop Do not make more than 4 applications/crop
Tobacco (Except shade)	Flea Beetle, Hornworm	1/4-1/2	5 Flue cured		48 hours	Do not apply more than 2.25 lbs.a.i./acre/crop Do not make more than 5 applications/crop
	Loopers, Aphids, Tobacco Budworm, Fall Armyworm	1/2	14 Air or fire cured			
Tomato	Tomato Fruitworm, Aphids, Hornworm, Loopers, Beet Armyworm, Southern Armyworm, Pinworm	1/2-1	1		48 hours	Do not apply more than 7.2 lbs.a.i./acre/crop Do not make more than 16 applications/crop
	Fall Armyworm, Variegated Cutworm	1/2				
	Armyworm	1/4-1/2				
Turf (For use on sod farms only)	Sod Webworm (after application, sprinkle irrigate for 15 minutes)	1-2 (2/5-4/5 ozs. per 1000 sq. ft.)		Do not graze or feed	48 hours	Do not apply more than 3.6 lbs.a.i./acre/crop Do not make more than 4 applications/crop
Wheat	Armyworms, Cereal Leaf Beetle, Aphids	1/4-1/2	7	10	48 hours	Do not apply more than 1.8 lbs.a.i./acre/crop Do not make more than 4 applications/crop

food or feed by disposal. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Completely empty bag into application equipment. Then dispose of empty package in a sanitary landfill or incinerator, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

NOTICE OF WARRANTY

Du Pont warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Du Pont. In no case shall Du Pont be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the buyer. **DU PONT MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

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