

MAR 22 1990

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David A. Wustner, Ph.D.
Registration Specialist
E. I. du Pont de Nemours & Company, Inc.
Agricultural Products Department
Barley Mill Plaza
Walker's Mill 5-116
Wilmington, DE 19889-0038

Dear Dr. Wustner

Subject: Esfenvalerate Formulation to Reclaim Isomerized Product
- Amended Labeling
Du Pont Asana XL Insecticide 0.66 EC
EPA Registration Number 352-515
Your Amended Applications Dated August 16, 1989
and February 14, 1990

The basic and alternate confidential statement of formulation (CSF) dated January 2, 1990 referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. However, based on the current CSF dated February 8, 1990, your alternate CSF of the same date will not meet your product label claim for the active ingredient. Please revise your alternate CSF so that it agrees with the label claims. Based on our calculations, 14b of your alternate CSF is 11.44% at 75% purity. This calculates to be 8.58% & 2.86% esfenvalerate & related products respectively. Therefore, 14b should be revised accordingly.

A stamped copy of the accepted labeling is enclosed for your record.

Sincerely,

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George T. LaRocca
Product Manager (15)
Insecticide-Rodenticide Branch
Registration Division (H7505C)

AH

RESTRICTED USE PESTICIDE

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

REGISTRATION CODE 0280-001

PACKAGE SIZE
2 - 2 1/2 GALLON JUGS / CARTON
30 - GALLON DRUMS
MINI - BULK TANKS



ASANA® XL

Insecticide

0.66 Emulsible Concentrate

This product contains 0.66 lbs. Active Ingredient per gallon.

ACTIVE INGREDIENT	BY WEIGHT
(S)-cyano (3-phenoxyphenyl) methyl-(S)-4-chloro-alpha-(1-methylethyl)benzenecarboxylate	8.4%
INERT INGREDIENTS*	91.6%
TOTAL	100 %

*CONTAINS XYLENE RANGE AROMATIC SOLVENT

EPA Reg. No. 352-515

EPA EST No. 5905-AR-1

KEEP OUT OF REACH OF CHILDREN

WARNING

AVISO PRECAUCION AL USUARIO : Si usted no lee ingles, no use este producto hasta que la etiqueta haya sido explicada ampliamente.

STATEMENT OF PRACTICAL TREATMENT

If swallowed: Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. If vomiting has not occurred, emesis should be induced with supervision by a physician or professional staff. If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before emesis, gastric lavage should be considered following intubation with a cuffed endotracheal tube.

If in eyes: Flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention.

If on skin: Wash with soap and water immediately. After drying, apply vitamin E cream or oil if available. If not available, apply vegetable oil liberally over painful areas. The oil or cream may be used repeatedly until relief is achieved. Get medical help if irritation persists.

If inhaled: Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.

Remove and wash clothing before reuse.

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

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING ! May be fatal if swallowed. Harmful if inhaled. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield, protective clothing, and rubber gloves when handling. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

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

ENVIRONMENTAL HAZARDS

This pesticide is toxic to wildlife and extremely toxic to fish. Use with care when applying in areas adjacent to any body of water. Do not apply directly to water. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters. Apply this product only as specified on this label.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply ASANA-XL or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. Additional information may be obtained by consulting your Cooperative Extension Service.

WILDLIFE PROTECTION IS EVERYONE'S RESPONSIBILITY

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352-515

DIRECTIONS FOR USE

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

REENTRY STATEMENTS

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.

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

Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. (Indicate specific oral warnings which inform workers of areas or fields that may not be entered without specific protective clothing, period of time field must be vacated and appropriate actions to take in case of accidental exposure.) When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: "WARNING! Area treated with ASANA XL Insecticide on (date of application). Do not enter without appropriate protective clothing until sprays have dried. (Insert here action to take in case of accidental exposure. See front panel STATEMENT OF PRACTICAL TREATMENT for details.)"

GENERAL DIRECTIONS

ASANA XL Insecticide 0.66 Emulsible Concentrate contains 0.66 pounds of active ingredient per gallon. For the applications given below, mix the required amount of ASANA XL in sufficient diluent to provide uniform coverage (Refer to Use Tables). ASANA XL may be applied by ground or aerial application equipment. Do not enter treated areas before spray is dry.

Resistance: If treatment with ASANA XL Insecticide is not effective after recommended use, a resistant (tolerant) population of insects may be present. Poor insect control may result. Promptly consult your local State Agricultural Extension Service for advice on the use of alternative insecticides.

Herbicide Tank Mixing: ASANA XL may be tank mixed with the herbicide products listed below when insect populations require control concurrent with the need for weed control. Follow all herbicide and ASANA XL label directions regarding proper usage. A "jar test" for physical compatibility should be conducted before field mixtures are made and applications initiated. For best results, use of spray equipment having continuous agitation is recommended.

ASANA XL may be used in combination with 2,4-D herbicides providing that the following mixing directions are followed: 1) Do not apply the combination in a volume of water less than 2 gallons per acre total spray. 2) Always mix the ASANA XL thoroughly in the total volume of spray water first, followed by the addition of the 2,4-D herbicide. Because of the availability of a great variety of 2,4-D herbicide products, a jar test for physical compatibility should be conducted before field mixtures of a particular combination are made.

Bladex 80WP (1)
Atrazine iL
Prevex (1)
Bicep 4 SL (2)
Lorox Plus (1)
Roundup (4)

Lasso 4EC (4)
Classic (1)
Gramoxone Super (5)
Velpar (1)
Dual BE (2)
Conquest 90DF (1)

Bladex 4 L (1)
Atrazine 80WP
Velpar L (1)
Barvel 4EC (3)
Extrazine 80DF (1)

Chemigation: Apply this product only through sprinkler including center pivot, lateral move, end row, side (wheel) row, traveler, big gun, solid set or hand move irrigation systems. Do not apply this product through any other type of irrigation system. ASANA XL may be premixed in a supply tank with water, oil, fertilizer, or other appropriate tank mixed agricultural chemicals. A pretest of physical compatibility for untied tank mixes is advised. Agitation may be necessary. Application should be in sufficient water and of sufficient duration to apply the recommended rate evenly to the entire treated area. No run-off can be permitted during chemigation. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water. Do not apply when wind speed favors drift beyond the area intended for treatment.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. 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.

Do not connect an irrigation system (including greenhouse systems) used for ASANA XL application to a public water system.

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 pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut-off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. Do not enter treated area before crop is dry.

Crop Rotation: Do not plant root crops other than those in this label within 12 months after last application. Root crops in this label and all other rotation crops may be planted immediately following last application.

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- [2] Registered trademark of Ciba-Geigy Corp.
- [3] Registered trademark of Sandoz Crop Protection Corp.
- [4] Registered trademark of Monsanto Agricultural Co.
- [5] Registered trademark of ICI Americas Inc.

COTTON

Crop	Insect	Dosage		Number of acres treated with one gallon of ASANA XL	Further Use Instructions	Days to Harvest
		Lb aI/ acre	Fl oz/ acre			
COTTON	Cotton Bollworm Tobacco Budworm Boll Weevil Beet Armyworm* Cabbage Looper Salmawh Caterpillar Cotton Leafworm Cutworms Lygus Bugs Plant Bugs Thrips (on seeding cotton) Leafhoppers Flea-hoppers Grasshoppers Whitefly**	0.03 - 0.05	5.8 - 9.8	22 - 13	May be applied in water or nonvolatile vegetable oils. When using oil, apply a total spray volume of 1 or more quarts/acre. When diluted with water, apply no less than one gallon per acre by air (min. of 3 gals in Arizona and 5 gallons per acre in California) or 4 gallons per acre by ground. Repeat as necessary throughout season to maintain control. For the control of Boll Weevil, a 3-5 day interval between sprays may be required. Apply no more than 0.5 lbs aI to a crop in a growing season. Do not graze livestock on treated fields or feed treated trash.	21
	NOTE: For light infestations of the above insects	0.02	3.9	33	*A.I.s in control **Aids in the suppression	
	Pink Bollworm	0.015 - 0.03	2.9 - 5.8	44 - 22		
	Cotton Leaf Perforator	0.03	5.8	22		

COTTON -- TANK MIX APPLICATIONS

READ AND FOLLOW ALL PRECAUTIONS AND RESTRICTIONS ON THE PRODUCT LABELING

Tank Mix Combination	Insect	Dosage	Further Use Instructions	Days to Harvest
LANNATE/NUDRIN 1.8 Methomyl Insecticide(1) Solution	Cotton Bollworm and Tobacco Budworm eggs	ASANA XL (from cotton table) with 1/2 pt/acre LANNATE L/NUDRIN 1.8		21
LANNATE/NUDRIN 80 Methomyl Insecticide(1) Water Soluble Powder with adjuvant	Cotton Bollworm and Tobacco Budworm eggs	ASANA XL (from cotton table) with 1.8 lb/acre LANNATE/NUDRIN 80	Add adjuvant (X-77, Bio-88, Unise, Triton B-1958 or equivalent) to spray tank, then ASANA XL, then LANNATE/NUDRIN 80, agitate until thoroughly mixed. *Compatibility of alternate should be determined before use	

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FIELD CROPS

Crop	Insect	Dosage		Number of acres treated with one gallon of ASANA XL	Further Use Instructions	Days to Harvest
		Lb a.i./acre	Fl oz/acre			
CORN FIELD CORN	Cutworms Grasshoppers	0.03 - 0.05	5.8 - 9.6	22-13	Apply as necessary to maintain control. Applications for cutworm control may be applied before, during, or after planting as required to protect emerging or emerged corn seedlings. Physical compatibility with herbicides and/or fertilizers should be determined prior to tank mixing ASANA XL with these products. Follow all herbicide/fertilizer recommendations and directions regarding proper usage.	31
	Western Bean Cutworm	0.015 - 0.03	2.9 - 5.8	44-22	Apply as necessary to maintain control. Application must be made before larvae enter the ear.	
	Corn Earworm	0.03 - 0.05	5.8 - 9.6	22-13	First application should be as or before silking. Subsequent applications should be made at 3-5 day intervals until silking is completed. Repeat applications may be applied if economically damaging populations exist.	
	Stalk Borer Plea Beetles	0.03 - 0.05	5.8 - 9.6	22-13	Application must be made early in migration from grassy areas to corn, before borers enter the plant. More than one application may be necessary.	
	Corn Rootworm (adult control)	0.03 - 0.05	5.8 - 9.6	22-13	Spray at first sign of silk feeding. Reinfestation may occur. Should reinfestation occur, repeat as necessary to maintain control.	
	Chinch Bugs	0.03 - 0.05	5.8 - 9.6	22-13	Over the top sprays, as used for control of ear and stalk infesting corn pests, are not adequate for chinch bug control. It is very important that the spray be directed at the base of the plant through the use of drop nozzles or some other mechanism. Repeat as necessary to control migrating chinch bugs.	
	European Corn Borer	0.04 - 0.05	7.8 - 9.6	16-13	First brood: spray while eggs are in the blackhead stage or before the larvae enter the whorl. Application by ground equipment is suggested. Good coverage of both upper and lower leaf surfaces is essential. This can be accomplished with drop nozzles over the row and on each side of the corn plant. Multiple applications may be required when egg laying is prolonged or where moderate to heavy populations are present. A higher rate is recommended for moderate to heavy populations. Proper coverage by ground equipment usually requires 20-30 gallons of carrier. Once larvae enter the whorl, foliar sprays will not provide adequate control. Second brood: make applications when sufficient egg masses are found. Spray when eggs are in the blackhead stage or starting to hatch. When egg laying is prolonged or a third generation is present, additional sprays may be required. A higher rate is recommended for moderate to heavy populations. Good coverage above, below and in the ear zone is essential. This usually requires 2-3 gallons of carrier by air. If ground equipment is used, drop nozzles on each side of the plant will provide best coverage.	
	Southeastern Corn Borer	0.03 - 0.05	5.8 - 9.6	22-13	Apply as necessary to maintain control. Two or more applications may be required. Higher rates (0.035-0.05 lb a.i.) are recommended for moderate to heavy populations.	
	Armyworm (True Armyworm)	0.03 - 0.05	5.8 - 9.6	22-13	Apply as necessary to maintain control.	

Crop	Insect	Dosage		Number of acres treated with one gallon of ASANA XL	Further Use Instructions	Days to Harvest
		Lb ai/acre	Fl oz/acre			
CORN FIELD CORN (cont'd)	Adult Corn Rootworm European Corn Borer	ASANA XL and Parathion from respective corn labels			ASANA XL insecticide may be tank-mixed with Parathion (methyl and/or ethyl) and applied on field corn (and seed corn) where supplemental control of Adult Corn Rootworm and/or European Corn Borer is desired in conjunction with insects controlled by ASANA XL when used alone. For supplemental control of second brood European Corn Borer, make applications when sufficient egg masses are found. Spray when eggs are in the blackhead stage or starting to hatch. When egg laying is prolonged or a third generation is present, additional sprays may be required. A higher rate is recommended for moderate to heavy populations. Good coverage above, below, and in the ear zone is essential. This usually requires 2-3 gallons of carrier by air. If ground equipment is used, drop nozzles on each side of the plant will provide best coverage. For supplemental control of Adult Corn Rootworm, spray at first sign of silk feeding. Reinfestation may occur. Should reinfestation occur, repeat as necessary to maintain control. Refer to the ASANA XL and Parathion (methyl or ethyl) labels for appropriate rates of the individual products for controlling the respective insects.	21
	Corn Leaf Aphid Oak Bird-Cherry Aphid	0.03 - 0.05	5.8 - 9.6	22-13	For optimum results, direct the spray at the aphid population so as to achieve maximum coverage of the exposed insects. Aphids not contacted by the spray, such as in whorls and leaf axils, may not be adequately controlled.	
	Do not exceed 0.25 lb a.i. per acre per season.					
SEED CORN	For specific insect control recommendations refer to Field Corn (above). Follow directions carefully.				Multiple applications and/or shortened intervals between sprays must be used to insure proper insect control. Do not exceed 0.25 lb a.i. per acre per season.	21
POP CORN	For specific insect control recommendations refer to Field Corn (above). Follow directions carefully.				Multiple applications and/or shortened intervals between sprays must be used to insure proper insect control. Do not exceed 0.5 lb a.i. per acre per season.	1
PEANUTS	Corn Earworm Red-necked Peanut Worm Potato Leafhopper Velvetbean Caterpillar	0.015 - 0.03	2.9 - 5.8	44-22	Repeat as necessary to maintain control. Do not feed or graze livestock on treated vines. Do not exceed 0.15 lb a.i. per acre per season. —Aids in control. —Aids in control. For heavy infestations use of LANNATE / NUDRIN insecticide is recommended. Please refer to the LANNATE / NUDRIN label for use instructions.	21
	Beet Armyworm Granulate Cutworm Grasshoppers Cutworms	0.03 - 0.05	5.8 - 9.6	22-13		
	Lesser Cornstalk Borer Fall Armyworm	0.05	9.6	13		

Crop	Insect	Dosage		Number of acres treated with one gallon of ASANA XL	Further Use Instructions	Days to Harvest
		Lb a.i./acre	Fl oz/acre			
SOYBEAN	Mexican Bean Beetle Green Cloveworm Velvetbean Caterpillar Potato Leafhopper Saltmarsh Caterpillar Woollybear Caterpillar	0.015 - 0.03	2.9 - 5.8	44-22	Repeat as necessary to maintain control. Do not feed or graze livestock on treated plants. Do not exceed 0.2 lb a.i. per acre per season. When applying in non-plate vegetable oils use a total spray volume of 1 or more quarts. *Aids in control	21
	Cabbage Looper Corn Earworm Southern Green Stinkbug Bean Leaf Beetle Cutworms Three-cornered Alfalfa Hopper Beet Armyworm Grasshoppers Japanese Beetle (adult)	0.03 - 0.05	5.8 - 9.6	22-13		
SUGARCANE	Sugarcane Borer	0.03-0.05	5.8-9.6	22-13	Repeat as necessary to maintain control. Do not exceed 0.2 lb a.i./acre per season.	21
SUNFLOWER	Sunflower Beetle	0.015-0.03	2.9-5.8	44-22	Repeat as necessary to maintain control. Do not exceed 0.2 lb a.i./acre per season. *Aids in control	28
	Grasshoppers Cutworms Heliothis (complex) Sunflower Moth Sunflower Seed Weevil Banded Sunflower Moth Beet Armyworm Sunflower Maggot Leafhoppers Sunflower Stem Weevil	0.03 - 0.05	5.8 - 9.6	22-13		

FRUITS AND NUTS

DILUTE SPRAY: Apply specified dosage per 100 gallons of water in a uniform spray applied to the point of drip with conventional ground equipment. Do not exceed maximum number of gallons per acre indicated.

NOTE: In order to apply the correct amount of ASANA XL insecticide to your orchard you must know the number of gallons of water needed to

spray one acre of your trees to the point of drip. If you do not already know this gallonage, you should conduct a test to determine it. If you do not know how to conduct such a test with your equipment, you should ask assistance from your equipment dealer or State Extension specialists.

CONCENTRATE SPRAY: Apply specified dosage per acre in no less than 30 gals. of water per acre by ground. When applying ASANA XL by air, consult your Cooperative Extension Service for application guidelines.

Crop	Insect	Dosage			Number of acres treated with one gallon of ASANA XL	Further Use Instructions	Days to Harvest
		Concentrate Spray		Dilute Spray			
		Lb a.i./acre	Fl oz/acre	Fl oz/100 gals			
APPLES	Oblique Banded Leafroller Coddling Moth Vannquered Leafroller White Apple Leafhopper Terrestrial Leaf Miner San Jose Scale (fruit infestations only) Apple Aphid Tufted Apple Budmoth Plum Curculio Oriental Fruit Moth Apple Maggot Red Banded Leafroller Lesser Appleworm Green Fruitworm Rosy Apple Aphid Plant Bugs/Tarnished Plant Bug Stink Bugs Periodical Cicada	0.025 - 0.075	4.8 - 14.5	2.0 - 5.8	26-9	Repeat as necessary to maintain control. Do not feed or graze livestock on treated orchard floors. Do not exceed 0.525 lb a.i. per acre per season. For dilute spray apply 200-800 gals per acre, but do not exceed 14.5 fl. oz. of ASANA XL per acre per treatment. <u>Plant Bug, Rosy Apple Aphid Control:</u> Time of application is critical in achieving control. Use prebloom and post-bloom spray timings recommended by State Extension Services.	21

Crop	Insect	Dosage			Number of acres treated with one gallon of ASANA XL	Further Use Instructions	Days to Harvest
		Concentrate Spray		Dilute Spray			
		Lb a.i./acre	Fl oz/acre	Fl oz/100 gals			
STONE FRUITS (including peaches, apricots, nectarines, plums, prune plums, cherries)	Peach Twig Borer Oriental Fruit Moth Peach Tree Borer Plum Curculio Lesser Peach Tree Borer Periodical Cicada Cherry-Fruit Fly Western Cherry Fruit Fly American Plum Borer Black Cherry Aphid Leafrollers Leafhoppers Green Fruit worm Peanut Bugs (damaged) Peanut Bug Sucking Bugs	0.025-0.075	4.6-14.5	20-58	26-9	Repeat as necessary to maintain control. Do not exceed 0.375 lb a.i. per acre per season with no more than 0.3 lb a.i. per acre per season between bloom and harvest. For dilute spray apply 200-400 gals per acre, but do not exceed 14.5 fl oz of ASANA XL per acre per treatment. Do not graze livestock on treated orchard floors. <u>Peach Tree Borer, American Plum Borer, Lesser Peach Tree Borer Control:</u> Apply as directed trunk and scaffold limb spray. Thorough coverage of trunk and scaffold limbs is required. <u>Peach Twig Borer, Plum Curculio, Oriental Fruit Moth, Cherry Fruit Fly, Western Cherry Fruit Fly, Leafrollers, Black Cherry Aphid, Periodical Cicada Control:</u> Apply by ground sprayer to achieve thorough coverage of all aerial portions of the tree. <u>Peanut Bug Control:</u> Time of application is critical in achieving control. Use prebloom and post bloom spray timings recommended by State Extension Services.	14
PEAR (DORMANT)	Pear Psylla	0.05-0.1	9.6-19.2	7.3-12.8	13.2-6.6	Apply during dormant to prebloom (white bud) stage only. Do not apply more than 0.2 lb a.i. per acre per season. Do not graze orchard floor. For dilute spray apply 150-250 gals per acre, but do not exceed 19.2 fl oz of ASANA XL per acre per treatment.	
PEAR	Pear Psylla Codling Moth Green Fruitworm Plum Curculio Leafrollers Pear Stag Periodical Cicada	0.025-0.075	4.6-14.5	20-58	26-9	Repeat as necessary to maintain control. Do not exceed 0.375 lb a.i. per acre per season, nor more than 0.225 lb a.i. per acre between bloom and harvest. Do not feed or graze livestock on treated orchard floors. For dilute spray apply 200-400 gals per acre, but do not exceed 14.5 fl oz of ASANA XL per acre per treatment.	28
ALMONDS	Naval Orangeworm Peach Twig Borer	0.05-0.1	9.6-19.2	7.3-12.8	13.2-6.6	Repeat as needed to maintain control but do not exceed 0.2 lb a.i. per acre per season. Do not graze livestock on treated orchard floors.	21
FILBERTS	Filbert Worm Oblique Banded Leafroller	0.05-0.1	9.6-19.2	7.3-12.8	13.2-6.6	Make first application after emergence of filbert worm moths in early summer. Do not apply a second treatment earlier than three weeks after the first. Do not apply more than 0.2 lb a.i. per acre per season. For dilute spray apply 200-400 gals per acre, but do not exceed 19.2 fl oz of ASANA XL per acre per treatment. Do not graze livestock in treated orchards.	21
PECANS	Pecan Weevil Hickory Shuckworm Pecan Nut Casebearer Pecan Aphid Pecan Spittlebug	0.025-0.075	4.6-14.5	20-58	26-9	Repeat as necessary to maintain control. Do not feed or graze livestock on treated orchard floors. Do not exceed 0.3 lb a.i. per acre per season. For dilute spray apply 200-400 gals per acre, but do not exceed 14.5 fl oz of ASANA XL per acre per treatment.	21

(continued on next page)

PEST AVAILABLE

Crop	Insect	Dosage			Number of acres treated with one gallon of ASANA XL	Further Use Instructions	Days to Harvest
		Concentrate Spray		Dilute Spray			
		Lb ai/ 100 gals	Fl oz/ acre	Fl oz/ 100 gals			
PECANS (continued)	Pecan Stem Phylloxera Pecan Leaf Phylloxera	0.025 - 0.075	4.8 - 14.5	20 - 58	25-9	Repeat as necessary to maintain control. Do not feed or graze livestock on treated orchard floors. Do not exceed 0.3 lb a.i. per acre per season. For dilute spray apply 200-400 gals per acre, but do not exceed 14.5 fl oz of ASANA XL per acre per treatment. Correct timing of spray applications is critical in achieving optimum control of leaf and stem phylloxera. Consult local spray recommendations for correct times of application.	21
WALNUTS	Walnut Aphid Walnut Husk Fly Codling Moth Naval Orangeworm	0.05 - 0.01	9.6 - 19.2	40	13-8	Repeat as necessary to maintain control. Do not exceed 0.2 lb a.i. per acre per season. For dilute sprays, apply 200-400 gals per acre. Do not feed or graze livestock on treated crop floors. NOTE: Use of baits in Walnut Husk Fly sprays is recommended where endorsed by local Agricultural Extension Service. CONCENTRATE SPRAY: Apply specified dosage per acre in no less than 30 gals of water per acre by ground or 5 gals of water per acre by air.	21

VEGETABLE CROPS

Crop	Insect	Dosage		Number of acres treated with one gallon of ASANA XL	Further Use Instructions	Days to Harvest
		Lb ai/ acre	Fl oz/ acre			
ARTICHOKES	Artichoke Plume Moth	0.03 - 0.05	5.8 - 9.6	22-13	Repeat as necessary to maintain control, but not more often than each 14 days. Apply no more than 0.075 lb a.i./acre between bud formation and harvest of an individual fruit. Apply in a minimum of 10 gallons per acre by air and 50-200 gallons per acre by ground (use sufficient water to obtain coverage without excessive runoff).	7
BROCCOLI, CABBAGE, CAULIFLOWER, CHINESE CABBAGE (right headed varieties only)	Imported Cabbageworm	0.015 - 0.03	2.9 - 5.8	44-22	Repeat as necessary to maintain control. Do not exceed 0.4 lb a.i. per acre per season. *Aids in control	3
	Cabbage Looper Beet Armyworm African Looper Flax Beetle Grasshopper Cutworm	0.03 - 0.05	5.8 - 9.6	22-13		
CARROTS	Aster Leafhopper Cutworms Leafhoppers	0.03 - 0.05	5.8 - 9.6	22 - 13	Apply as needed for control, but do not exceed 0.5 lb a.i./acre per season. Use ground application only.	7
	Carrot Weevil	0.05	9.6	13	* Begin treatment when weevils become active	
COLLARDS	Imported Cabbageworm Cabbage Looper Beet Armyworm African Looper Flax Beetle Grasshopper Cutworm	0.03 - 0.05	5.8 - 9.6	22 - 13	Repeat as necessary to maintain control. Do not feed livestock on treated plant parts. Do not exceed 0.2 lb a.i. per acre per season. Use ground application, equipment only. *Aids in control	7

Crop	Insect	Dosage		Number of acres treated with one gallon of ASANA XL	Further Use Instructions	Days to Harvest
		Lb ai/ acre	Fl oz/ acre			
CUCUMBER, MELONS (Cantaloupe, Honeydew, Melons, Watermelon, Muskmelon), PUMPKIN, SQUASH (Summer, Winter)	Pickworm Aphidworm Leafhoppers Corn Earworm Cabbage Looper Squash Bug Cucumber (seedling spray) Cucumber Beetle (adults) Grasshoppers Plant Bugs (Lygus Bugs, Stink Bugs) Squash Vine Borer	0.03 - 0.05	5.8 - 9.8	22-13	Repeat as necessary to maintain control. Do not exceed 0.25 lb ai per acre per season.	3
BEANS, SNAP	Mexican Bean Beetle Saltmarsh Caterpillar	0.015 - 0.03	2.9 - 5.8	44-22	Repeat as needed to maintain control but do not exceed 0.2 lb ai per acre per season. Do not allow livestock to graze treated bean fields. Do not harvest treated bean vines for livestock forage, fodder, or hay. *Aids in control.	3
	Potato Leafhopper European Cornborer Corn Earworm Cucumber Beetle (adults) Flea Beetle Green Cloverworm Cucumber (seedling spray) Grasshopper Peanut Aphid Leafhopper Cabbage Looper Western Bean Cutworm Velvet Bean Caterpillar Beet Armyworm Cucumber Beetle Corn Rootworm (adults) Leguminer (Guam only)	0.03 - 0.05	5.8 - 9.8	22-13		
DRY BEANS, DRY PEAS, LENTILS	Mexican Bean Beetle Saltmarsh Caterpillar	0.015 - 0.03	2.9 - 5.8	44-22	Repeat as necessary to maintain control. Do not exceed 0.2 lb ai per acre per season. Do not feed or graze livestock on treated vines. *Aids in control.	21
	Corn Earworm Potato Leafhopper Peanut Aphid Grasshoppers Leafhoppers Cowpea Curculio Cutworms Cabbage Looper Western Bean Cutworm Velvetbean Caterpillar Beet Armyworm Cucumber Beetle Corn Rootworm (Adults) Painted Lady Butterfly (larvae) Green Cloverworm	0.03 - 0.05	5.8 - 9.8	22-13		
EGGPLANT	Colorado Potato Beetle Flea Beetles Corn Earworm Loopers European Corn Borer	0.03 - 0.05	5.8 - 9.8	22-13	Begin application when insects or their damage is observed and repeat at 7 to 10 day intervals to achieve control. Do not exceed 0.35 lb ai per acre per season.	7
GREEN PEAS	Peanut Aphid Green Cloverworm	0.015 - 0.03	2.9 - 5.8	44-22	Repeat as necessary to maintain control but do not exceed 0.1 lb ai per acre per season. Do not feed treated pea vines to livestock.	3
	Cabbage Looper Caterpillar Ailanthus Looper Cutworms Armyworm Corn Earworm Imported Cabbageworm Ailanthus Caterpillar	0.03 - 0.05	5.8 - 9.8	22-13		

Crop	Insect	Dosage		Number of acres treated with one gallon of ASANA XL	Further Use Instructions	Days to Harvest
		Lb a.i./acre	Fl oz/acre			
PEPPERS	European Corn Borer Beet Armyworm * Flea Beetles Corn Earworm Loopers Colorado Potato Beetle Pepper Weevil Cucumber Beetle (adults) Southern Armyworm	0.03 - 0.05	5.8 - 9.6	22-13	Begin application when insects or their damage is observed and repeat at 7 to 10 day intervals to achieve control. Do not exceed 0.35 lb a.i. per acre per season. * Aids in control.	7
POTATO	Potato Psyllid Potato Tubeworm	0.015 - 0.03	2.9 - 5.8	44-22	Repeat as necessary to maintain control. Do not graze livestock on treated vines. Do not exceed 0.35 lb a.i. per acre per season. * Aids in control.	7
	Flea beetles Tarnished Plant bug Cabbage Looper Potato Aphid Potato Leafhopper Cucumber Beetle (adult control) Grasshoppers European Corn Borer Beet Armyworm * Western Yellow striped Armyworm Buckhorn Aphid Cutworms	0.03 - 0.05	5.8 - 9.6	22-13		
	Colorado Potato Beetle	0.03 - 0.05	5.8 - 9.6	22-13		
	Colorado Potato Beetle - Long Island, NY	0.05	9.6	13		
RADISHES	Armyworms Beetles	0.03 - 0.05	5.8 - 9.6	22 - 13	Repeat as necessary to maintain control. Do not apply more than 0.1 lb a.i./acre per season.	7
SWEET CORN	Corn Earworm Southwestern Corn Borer European Corn Borer Beet Armyworm * Flea Beetles Sap Beetles (adults) Banded Cucumber Beetle Tarnished Plant Bug	0.03 - 0.05	5.8 - 9.6	22-13	Do not exceed 0.5 lb a.i. per acre per season. Begin applications either before or at time of silking and continue as necessary to maintain control. For protection against corn borers other than at silking time, treat when necessary to maintain control. For additional information consult directions for use under field corn. * Aids in control.	1
	Stalk Borer Cutworms Corn Rootworms (adults) Grasshoppers Chinch Bugs Armyworm	0.03 - 0.05	5.8 - 9.6	22-13	For additional information consult directions for use under field corn.	
	Western Bean Cutworm	0.015 - 0.03	2.9 - 5.8	44-22		
	Corn Leaf Aphid Oak Bird-Cherry Aphid	0.03 - 0.05	5.8 - 9.6	22-13	For optimum results, direct the spray at the aphid population so as to achieve maximum coverage of the exposed insects. Aphids not contacted by the spray, such as in whorls and leaf axils, may not be adequately controlled.	

Crop	Insect	Dosage		Number of acres treated with one gallon of ASANA XL	Further Use Instructions	Days to Harvest
		Lb ai/acre	Fl oz/acre			
TOMATO	Tomato Hornworm Tobacco Hornworm	0.015 - 0.03	2.5 - 5.0	44-22	Repeat as necessary to maintain control. Do not feed or graze livestock on treated vines. Do not exceed 0.5 lbs. a.i. per acre per season. * Aids in control ** Not recommended in Florida	1
	Tomato Pinworm Flea Beetle Tomato Fruitworm Colorado Potato Beetle Cutworms Cabbage Looper Southern Armyworm Beet Armyworm Western Yellow-Striped Armyworm Grasshopper Whitefly Potato Aphid	0.03 - 0.05	5.8 - 9.6	22-13		
	Vegetable Leafminer**	0.05	9.6	13		

SPECIALTY USES

Crop	Insect	Dosage		Number of acres treated with one gallon of ASANA XL	Further Use Instructions
		Lb ai/acre	Fl oz/acre		
NON-CROP LAND (excluding public land such as forests, parks, or recreational)	Grasshoppers Saltmarsh Caterpillar	0.015 - 0.03	2.5 - 5.0	44-22	Spray non-crop land adjacent to tilled areas to control migrating insects (Grasshoppers, Armyworms) which are a threat to crops. Repeat as necessary to maintain control but do not exceed 0.5 lbs. active ingredient per acre per year. Do not feed treated crop to livestock. Do not spray ditch banks or areas adjacent to water.
	Armyworms Army Cutworms Chinch Bugs	0.03 - 0.05	5.8 - 9.6	22-13	

SPECIALTY USES (continued)

Crop	Insect	Dosage			Further Use Instructions
		High Volume Sprays		Low Volume Sprays	
		Lb. a.i./ 100 gals.	Fl oz/ 100 gals.	(Mistblower) Lb. a.i./acre	
CHRISTMAS TREE PLANTINGS, CONIFER SEED ORCHARDS, FOREST TREE NURSERIES	Norfolk Pine Tip Moth Spitzbugs Pineal Chermid Redheaded Pine Sawfly Balsam Woolly Adefid Pine Chiter Red Pine Sawfly Pine Conifer Bug European Pine Sawfly Caneberry Garder (adult control) Pine Needle Midge Balsam Terg Aphid Spruce budworm	0.03 - 0.05	5.8 - 9.8	0.03 - 0.05	Apply as needed to maintain control. Spray sufficient galenage to obtain good coverage of entire tree
	Palm Weevil Northern Pine Weevil	0.03 - 0.05	5.8 - 9.8		Apply as needed to maintain control. Dilute formulation in kerosene, instead of water, and spray tree stumps to control developing larvae. Use sufficient spray volume to thoroughly cover stump.
	Coneworms Seedbugs Seed Chalcid	9.6 fl oz/100 gals water for high volume sprayers 52 fl oz/100 gals water for low volume sprayers 0.19 lb. a.i./acre application in not less than 10 gals of water for aerial applications			Apply first application within 1 week of female flower closure or peak pollen flight for Webbing Coneworm control. For other Coneworms and Seedbugs, apply first application within 30 days following female flower closure. Repeat application at intervals of 4 weeks but do not exceed 1.6 lbs. a.i. per acre per year. For Seed Chalcid control, apply when all cones are pendant, and repeat at 1-2 week intervals for 2 or more sprays, or as needed. Apply approximately 5-10 gals of the 9.6 fl oz/100 gal dilution per tree with high volume sprayers. With low volume sprayers apply 100 gals of the 52 fl oz/100 gal dilution per acre. Do not graze or harvest cover crop. Avoid contact with open water.

STORAGE AND DISPOSAL

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

STORAGE: Store in a secure, dry and temperate area. Store in original container. Keep container closed when not in use. Do not store near food or feed. Do not use or store around the home. Avoid contact with water. In case of spill or leak, soak up with sand, earth or synthetic absorbent (do not use alkaline absorbents) and dispose of wastes in compliance with local, State and Federal regulations.

PRODUCT DISPOSAL: Pesticide wastes are toxic. 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: Triple rinse (or equivalent), then offer for recycling or reconditioning if container reuse is permitted. If container reuse is prohibited, puncture metal containers and dispose of in a sanitary landfill, or by other approved State and local procedures. Dispose of plastic containers in a sanitary landfill, or by incineration if allowed by State and local authorities. If burned, stay out of smoke.

In case of a significant spill, call CHEMTREC (800) 424-9300

NOTICE OF WARRANTY

DU PONT MAKES NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PURPOSE, OR OTHERWISE, EXPRESS OR IMPLIED, concerning this product or its uses which extend beyond the use of the product under normal conditions in accord with the statements made on this label.

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