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Please read instructions on reverse before completin	a form.	Fo	m Approved	. OMB No. 20	7 <u>0-0060</u>	Approval expires 2-28-95
Uni	ted States			Registrati	on	OPP Identifier Number
Environmental I	Protection Age	псу		Amendm	ent	220021
Washing	X	Other		229831		
	polication for I	Postiaida				
	pplication for I	Y		•		
1. Company/Product Number 264 - 379		2. EPA Produ	-		3. Pro	posed Classification
	······································	Edwards	<u> </u>		$+\square$	None Restricted
4.Company/Product(Name) LARVIN brand 3.2		PM#				
5. Name and Address of Applicant <i>linclude ZIP Code</i>		6 Expedite	d Review	In accordance	a with	FIFRA Section 3(c)(3)
Rhone-Poulenc Ag Company						nposition and labeling
P. O. 12014 2 T. W. Alexande	er Drive	to:				•
Research Triangle Park, NC 2		EPA Reg.	No			
Check if this is a new address						_
		Product N	ame			
	Sec	tion - II				
Amendment - Explain below.			•	ls in response t	0	
Resubmission in response to Agency letter d	ated		ncy letter dat Too" Applic			
Notification - Explain below.		Oth	er - Explain b	elow.		
Explanation: Use additional page(s) if necessary.	(For section Land Se	ction II.)				
On the present Larvin 3.2			halatio	n precau	tion	ary statements
are printed under the Sta	tement of Pr	actical	Treatm	ent sect	ion,	as well as
under the Precautionary Star	tements sect	ion. W	e are d	eleting	the	precautionary
statements that are printed	under State	ement of	Practi	cal Trea	tmen	t as they are
unnecessary and are found u	nder Precaut	ionary	Stateme	nts.		
	Sec	tion - III				
1. Material This Product Will Be Packaged In:						
Child-Resistant Packaging Unit Packaging	Water	Soluble Packa	ging	2. Type of C	ontainer	
Yes" Yes		Yes			Metal	
No		No			Plastic Glass	
	No. per lt "Yes				Paper	
* Certification must Unit Packaging wgt.						ipecify)
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3. Location of Net Contents Information	4. Size(s) Retail Conta	iner		ocation of Labe	Directio	008
Label Container	·····			On Labelin	g accom	panying product
6. Manner in Which Label is Affixed to Product	Lithograph Paper glued		Other			
	Paper glued Stenciled					
	Sec	tion - IV				• • • • • • • • •
1. Contact Point <i>(Complete items directly below fo</i>	r identification of indi	vidual to be cor	ntacted, if ne	cessery, to pro-	cess this	application.)
Name J. A. Barron	Title	c. Regis	tration	Mar	etephon Q 1 Q	e No. (Include Area Code) 549.2318
	Certification					6. Data Application + *
I certify that the statements I have made on t						Received
Eacknowledge that any knowingly false or mi both under an Proable law.	sieaung statement m	ay be punishab	ne by tine of	imprisonment a	ſ	(Stamped)
2. Signature	3. Title	······································				1
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James a. Barnon				· •• 9 • •		
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-						
J. <u>A. Barron</u>	Aug	<u>ust 17,</u>	1995			
EPA Form 8570-1 (Rev. 8-94) Previous editions are	obsolete.		White	EPA File Copy	loriginal	Yellow - Applicant Copy

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# LARVIN<sup>®</sup> brand 3.2 Thiodicarb Insecticide/Ovicide

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# **Aqueous Flowable**

EPA Reg. No. 264-379	EPA Est. No. 264-MO-02
Contains 3.2 pounds active thiodicarb per U.S. gallon	·
INERT INGREDIENTS	
carbonyloxy]] bis [ethanimidothioate]	
THIODICARB: Dimethyl N, N' [thiobis [(methylimino)	
ACTIVE INGREDIENT	

# KEEP OUT OF REACH OF CHILDREN WARNING AVISO

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

For <u>MEDICAL</u> and <u>TRANSPORTATION</u> Emergenices <u>ONLY</u> Call 24 Hours A Day 1-800-334-7577 For <u>PRODUCT USE</u> Information Call 1-800-334-9745

# STATEMENT OF PRACTICAL TREATMENT

Thiodicarb is an N-methyl carbamate.

IF SWALLOWED: If patient is conscious and alert, give 2 to 3 glasses of water or milk to drink. If available, give one tablespoon of Syrup of Ipecac to induce vomiting. If vomiting does not occur within 20 minutes of the first dose, follow with a second and last dose of 1 teaspoon. Alternatively, induce vomiting by touching back of throat with finger. Do not make an unconscious person vomit. GET MEDICAL ATTENTION.

IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. GET MEDICAL ATTENTION.

IF ON SKIN: Immediately flush skin with plenty of water.

IF INHALED: Remove to fresh air. If not breathing, give artificial respiration. Administer oxygen if necessary. GET MEDICAL ATTENTION.

### GENERAL

Contact a physician immediately in all cases of suspected poisoning. If breathing stops, establish an airway, start artificial respiration, and provide oxygen. Make certain to remove all sources of continuing contamination. Remove clothing and wash skin and hair immediately with large amounts of water. Transport the patient to a physician or hospital immediately and SHOW A COPY OF THIS LABEL TO THE PHYSICIAN. If poisoning is suspected in animals, contact a veterinarian.

# NOTE TO PHYSICIAN

All treatments should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

This product contains an N-methyl carbamate insecticide, which is a cholinesterase inhibitor. Overexposure to this substance may cause toxic signs and symptoms due to stimulation of the cholinergic nervous system. These effects of overexposure are spontaneously and rapidly reversible. Gastric lavage may be used if this product has been swallowed. LARVIN<sup>®</sup> poisoning may occur rapidly after ingestion and prompt removal of stomach contents is indicated.

Specific treatment consists of parenteral atropine sulfate. Caution should be maintained to prevent over atropinization. Mild cases may be given 1 to 2 mg intramuscularly every 10 minutes until full atropinization has been achieved and repeated thereafter whenever symptoms reappear. Severe cases should be given 2 to 4 mg intravenously every 10 minutes until fully atropinized, then intramuscularly every 30 to 60 minutes as needed to maintain the effect for at least 12 hours. Dosages for children should be appropriately reduced. Complete recovery from overexposure is to be expected within 24 hours.

Narcotics and other sedatives should not be used. Further, drugs like 2-PAM (pyridine-2-aldoxime methiodide) are <u>HCT</u> recommended unless organophosphate intoxication is also suggested.

To aid in confirmation of a diagnosis, urine samples should be obtained within 24 hours of exposure and immediately frozen. Analyses will be arranged by Rhône-Poulenc Ag Company.

Consultation on therapy can be obtained at all hours by calling the Rhône-Poulenc emergency number : 1-800-33-5-7577.

PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS (AND DOMESTIC ANIMALS) WARNING

Illness may result rapidly following overexposure to this product. May be fatal if swallowed. Harmful if inhaled or absorbed through the skin. May be irritating to eyes and may cause mild skin sensitization. Do not take internally. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Keep away from domestic animals. Discontinue use if allergic reaction occurs. Do not eat or use tobacco while using this product.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

Salivation, Muscle tremors, Nausea, Watery eyes, Difficult breathing, Vomiting, Pinpoint eye pupils, Excessive sweating, Diarrhea, Blurred vision, Abdominal cramps, Weakness, Headache.

### IN SEVERE CASES, CONVULSIONS, UNCONSCIOUSNESS, AND RESPIRATORY FAILURE MAY OCCUR.

ANTIDOTE STATEMENT: ATROPINE SULFATE IS HIGHLY EFFECTIVE AS AN ANTIDOTE. See NOTE TO PHYSICIAN.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, shoes plus socks and chemicalresistant headgear for overhead exposure. Discard clothing and 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.

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 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.

# ENVIRONMENTAL HAZARDS

This product is toxic to fish, birds, invertebrates and other wildlife. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply when weather conditions favor drift from area treated. This product is toxic to bees exposed to direct treatment. Do not apply when bees are actively visiting the treatment area.

## GENERAL INFORMATION

LARVIN® brand 3.2 Thiodicarb Insecticide/Ovicide is an aqueous flowable formulation that readily disperses in water for spraying by ground or air equipment. Directions on this label are based on tests and field experience relating to effectiveness, impact on environment and residues remaining in food and feed. READ THE ENTIRE LABEL AND OBSERVE ALL LABEL DIRECTIONS AND PRECAUTIONS BEFORE USE.

# DIRECTIONS FOR USE

#### It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product.

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 regulations.

Do not use this product except as directed on this label or on other Rhône-Poulenc Ag Company supplemental labeling for this product. Applications at higher rates or at more frequent intervals than is stated on the label may result in illegal residues in crops, meat and milk.

# 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 enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 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 and chemical-resistant headgear for overhead exposure.

See Precautionary Statement, Statement of Practical Treatment, and Note to Physician for information on accidental exposures.

# STORAGE AND DISPOSAL

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#### STORAGE

Do not store in or around the home. Store unused product in a cool, ventilated, dry, locked area. Do not allow prolonged storage in areas where temperatures frequently exceed 115°F (46°C). NEVER TRANSFER THIS PRODUCT TO ANOTHER CONTAINER FOR STORAGE.

If container is damaged, before clean-up, put on long-sleeved shirt and long pants, waterproof gloves, shoes plus socks and chemicalresistant headgear for overhead exposure.

### PESTICIDE DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Contamination with this product will render water, food or feed unfit for human or animal consumption. Wastes resulting from the use of this procluct may be disposed of on site or at an approved waste disposal facility.

## CONTAINER DISPOSAL

NEVER REUSE EMPTY CONTAINERS. Triple rinse or equivalent. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If container is burned, stay out of smoke.

## RETURNABLE -- REFILLABLE CONTAINERS

After use, return the container to the point of purchase or designated locations. This container must only be refilled with LARVIN<sup>®</sup> brand 3.2 Thiodicarb Insecticide/Ovicide. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Prior to refilling, inspect thoroughly for damage such as cracks, punctures, abrasions and damaged or worn out threads on closure devices. Do not refill or transport damaged or leaking containers. Check for leaks after refilling and before transportation. For information on the disposal of unused, unwanted product, contact Rhône-Poulenc at 1-800-334-9745. For information on cleanup of spills, contact Rhône-Poulenc at 1-800-334-9745.

# ACCIDENTS: In case of a major spill of LARVIN® brand 3.2 Thiodicarb Insecticide/Ovicide

#### TELEPHONE (24 HOURS & DAY) IN THE U.S.A. 1-800-334-7577.

In case of minor spills or leaks follow all precautions indicated above and cleanup immediately. Soak up with sand, earth or other suitable material and dispose of wastes and broken or empty containers in a landfill approved for pesticide use.

# GENERAL DIRECTIONS

SPRAY PREPARATION: TO ASSURE A UNIFORM PRODUCT, AGITATE OR SHAKE ALL CONTAINERS OF THIS PRODUCT PRIOR TO USE. Remove oil, rust, scale, pesticide residues and other foreign matter from sprayer and strainer. Flush with clean water. Use 50 mesh screens or equivalent slotted strainers in spray system. To prepare for spraying, fill tank to approximately 1/2 the needed volume of water. Add the required amount of this insecticide and mix thoroughly by mechanical or hydraulic agitation. Finish filling tank with water to desired volume and thoroughly mix. Do not store spray mixture for prolonged periods. If tank mixes are to be used, LARVIN® brand 3.2 Thiodicarb Insecticide/Ovicide must be fully dispersed in water first, followed by the addition of the intended tankmix material.

**COMPATIBILITY:** Thiodicarb Insecticide when diluted with an equal volume of water, is physically compatible with a wide range of commonly used spray products, but the full range of compatibilities under local conditions is not known. Therefore, it is essential that before using LARVIN® brand 3.2 Thiodicarb Insecticide/Ovicide in any tank mixture the compatibility of the mixture be established. Add a small amount of this product to an equal volume of water in a small container and then add the other pesticide or spray product and mix thoroughly.

DO NOT USE MIXTURES THAT CURDLE, PRECIPITATE, OR GREASE. THIS PRODUCT IS NOT COMPATIBLE WITH NON-EMULSIFIED VEGETABLE OR CROP OIL DILUENTS. FOR BEST RESULTS, SPRAY MIXTURES SHOULD BE USED IMMEDIATELY AFTER MIXING WITH ADEQUATE AGITATION.

NOTE: Thiodicarb Insecticide is hydrolytically sensitive to degradation of active ingredient by strong acids, strong bases, and certain heavy metal oxides and salts of certain fungicides. Degradation can cause reduced effectiveness, plant phytotoxicity and increased handling hazards. DO NOT USE THIS PRODUCT IN SPRAY MIXTURES WITH THE ABOVE TYPE OF PRODUCTS INCLUDING MIXTURES WITH Maneb, Mancozeb (except Manzate 200 and Dithane M-45 wettable powders where mixtures are used immediately after mixing), Copper Count N-8, and Bordeaux mixture. DO NOT ADD LARVIN®TO WATER WITH pH VALUES BELOW 3.0 OR ABOVE 8.5. If necessary, water should be buffered within this range before adding LARVIN®.

# DIRECTIONS FOR AERIAL OR GROUND SPRAY APPLICATION

APPLICATION TIMING: Begin application when insect populations reach recognized economic threshold levels. Consult the Cooperative Extension Service, Professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.

APPLICATION INSTRUCTIONS: Apply a minimum finished spray volume of 2 gallons per acre by air or 5 gallons per acre by ground unless otherwise directed under crop specific directions. Under extreme pest populations and dense foliage, use a minimum spray volume of 5 gallons per acre by air and a minimum spray volume of 10 gallons per acre by ground. For best rocults, it is important to obtain thorough and uniform spray coverage of the plant. Repeat application as needed to maintain control. Use higher dosage rates for heavy infestations, large larvae, or dense foliage. The specific length of residual control depends on environmental factors, plant growth, dosage rate, and degree of insect infestation. Although LARVIN® has some contact activity, larvae not feeding on treated foliage will not be controlled. When banding, determine the amount of chemical to use per acre by dividing the band width by the row width and multiplying by the appropriate broadcast rate.

To clean the sprayer after use, drain and flush with water. Use rinsings on crop according to label instructions or dispose of in an approved manner (See STORAGE AND DISPOSAL).

# DIRECTIONS FOR USE THROUGH SPRINKLER IRRIGATION SYSTEMS

Apply this product only through sprinkler irrigation systems including center pivot and solid set. Do not apply this product through any other type of irrigation system.

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SPRAY PREPARATION: Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water.

APPLICATION INSTRUCTIONS: First prepare a suspension of LARVIN<sup>®</sup> brand 3.2 Thiodicarb Insecticide/Ovicide 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 LARVIN<sup>®</sup> 3.2, and then the remaining volume of water. (Suspension concentrations using the appropriate dosage per acre recommended on this label of LARVIN<sup>®</sup> 3.2 per 1 to 4 gallons of water are recommended). Then set sprinkler to deliver 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly inject the suspension of LARVIN<sup>®</sup> 3.2 into the irrigation water line so as to deliver the desired rate per acre. The suspension of LARVIN<sup>®</sup> 3.2 should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. If you should have any other questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

NOTE: When treatment with LARVIN® brand 3.2 Thiodicarb Insecticide/Ovicide has been completed, further field irrigation over the treated area should be avoided for 24 to 48 hours to prevent washing the chemical off the crop.

#### GENERAL PRECAUTIONS FOR APPLICATIONS THROUGH SPRINKLER IRRIGATION SYJTEMS

Maintain continuous agitation in mix tank during mixing and application to assure a uniform suspension. Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute solution per unit time. 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 shutdown. 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 apply when wind speed favors drift beyond the area intended for treatment.

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

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from non-uniform distribution of treated water.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. A person knowledgeable of the chemigation system and responsible for its operation shall shut the system down and make necessary adjustments should the need arise.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the label-prescribed safety devices for public water supplies are in place.

# **RECOMMENDED USES FOR BROCCOLI, CABBAGE AND CAULIFLOWER**

SPRAY VOLUME FOR BROCCOLI, CABBAGE AND CAULIFLOWER: Apply in a minimum finished spray volume of 5 gallons per acre by air or 20 gallons per acre by ground.

		DOSAGE	PER ACRE		
SITE	PEST	Pounds Active	Fluid Ounces	SPECIFIC DIRECTIONS	USE RESTRICTIONS
COLE CROPS (BROCCOLI, CABBAGE, CAULIFLOWER)	Alfalfa Looper Beet Armyworm Cabbage Flea Beetle Imported Cabbageworm	0.4 to 0.8	16.0 to 32.0	Spray as needed. As insect populations increase and/or new plant growth is rapid, the spray interval should be shorter. Use higher dosage rates for heavier infestations or large larvae. Use lower rates for light to moderate infestations.	ingredient (240 fluid ounces of LARVIN® brand 3.2) per acre per
	Cabbage looper Diamondback moth	0.6 to 1.0	24.0 to 40.0	NOTE: Regional differences have been noted in the susceptibility of certain strains of diamondback moth to thiodicarb. If local experience indicates inadequate control, use an alternate pesticide.	

# RECOMMENDED USES FOR COTTON

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#### INTEGRATED PEST MANAGEMENT (IPM) USE OF THIS PRODUCT

LARVIN<sup>®</sup> Thiodicarb Insecticide/Ovicide has both contact and residual ovicidal activity which can be effectively utilized in IPM programs (See ovicide section). LARVIN<sup>®</sup> used as an ovicide or a larvicide has been shown to leave substantial populations of beneficial insects and spiders after use. The lower rates allow for maximum beneficial survival and faster rebound of beneficial populations. Larvicidal and ovicidal control coupled with retention of beneficial insects and spiders can offer significant benefits to those producers utilizing integrated pest control programs.

SPRAY VOLUME FOR COTTON: LARVIN<sup>®</sup> brand 3.2 Thiodicarb Insecticide/Ovicide should be applied in a minimum finished spray volume of 2 gallons per acre by aircraft and 5 gallons per acre by ground equipment. Under extreme pest populations or dense foliage, use a minimum spray volume of 5 gallons per acre by air and a minimum spray volume of 10 gallons per acre by ground.

		DOSAGE	PER ACRE		
SITE	PEST	Pounds Active	Fluid Ounces	SPECIFIC DIRECTIONS	USE RESTRICTIONS
COTTON	Ovicide: Cotton bollworm Tobacco budworm	0.125 to 0.25	5.0 to 10.0	Apply on a 3 to 5 day schedule when moth flights begin or sufficient eggs are present. Thorough spray coverage is necessary as eggs must be contacted by LARVIN® for activity to occur. Eggs laid on untreated foliage or not contacted by LARVIN® sprays will not be controlled. If significant number of larvae survive, use higher recommended LARVIN® rates or 0.125 to 0.25 lbs ai/A of LARVIN® in tank mixture combinations with organophosphates, pyrethroids or <i>Bacillus thuringiensis</i> such as DiPel* ES registered for use on cotton at their label recommended rates. Observe all restrictions and precautions which appear on the labels of all products to be tank mixed with LARVIN®.	Do not allow livestock to graze fields. Do not apply less than 28 days before harvest. In Arizona and California, apply before bolls begin to open and do not exceed 1.8 pounds active ingredient per acre per season.
	Larvicide: Cotton bollworm Tobacco budworm	0.6 to 0.9	24.0 to 36.0	In this rate range, LARVIN <sup>®</sup> is a direct contact and residual contact ovicide, as well as an effective larvicide. Although LARVIN <sup>®</sup> has some contact activity, larvae must feed on treated foliage to be controlled. Use the higher rate when insect larvae populations are heavier or when infestations are predominantly large larvae (>1/4 inch in size).	

# RECOMMENDED USES FOR COTTON (CONTINUED)

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SITE	PEST	DOSAGE   Pounds Active	PER ACRE Fluid Ounces	SPECIFIC DIRECTIONS	USE RESTRICTIONS
COTTON (cont)	Larvicide (Cont.): Armyworms (such as: Beet, Fall, etc.) Cabbage looper Cotton leaf perforator Cotton leafworm Soybean looper Fleahopper (Suppression) Pink bollworm (Suppression) Plant bugs (Suppression)	0.6 to 0.9	24.0 to 36.0	As pest pressure increases, reduce intervals between applications and/or increase dosage rate as indicated in specific directions below. A rate of 24 fluid ounces (0.60 ibs.active) should be used when: Fo: low to moderate insect populations and when maximum survival of beneficial insects and spiders is desired. Rates of 30 to 36 fluid ounces (0.75 to 0.90 lbs. active) should be used when: Insect populations are heavy or infestation is predominantly large larvae. Although LARVIN® has some contact activity, larvae must feed on treated foliage to be controlled. Applications for suppression of Pink bollworm should be timed for the presence of adult moths.	Do not allow livestock to graze fields. Do not apply less than 28 days before harvest. In Arizona and California, apply before bolls begin to open and do not exceed 1.8 pounds active ingredient per acre per season.
	Boll weevil (Suppression)	0.6 to 0.9	24.0 to 36.0	Light Boli Weevil Populations: When spraying LARVIN® on a 5 to 7 day worm control schedule, control of boll weevil will usually be adequate to maintain boll weevil populations below established economic thresholds. Moderate to Heavy Boll Weevil Populations: When spraying LARVIN® on a worm control schedule, application of a registered boll weevil control product and/or tank mix of LARVIN® plus a registered boll weevil product should be used. A 3 to 5 day interval between sprays may be required to maintain boll weevil control under heavy infestations.	
	Cutworms	0.6	24,0	See "SPECIAL DIRECTIONS ON "CUTWORMS"	

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# RECOMMENDED USES FOR LEAFY VEGETABLES

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SPRAY VOLUME FOR LEAFY VEGETABLES: Apply in a minimum finished spray volume of 5 gallons per acre by air or 20 gallons per acre by ground.

		DOSAGE	PER ACRE		
SITE	PEST	Pounds Active	Fluid Ounces	SPECIFIC DIRECTIONS	USE RESTRICTIONS
LEAFY VEGETABLES (Amaranth, arrugula, celery, celtuce, chervil, corn salad, chrysanthemum (edible leaved, garland), cress (garden, upland), dandelion, dock, endive, Florence fennel, lettuce (head, leaf), orach, parsley, purslane (garden, winter), rhubarb, spinach (leaf, fine, new zealand), Swiss chard	Alfalfa looper Armyworms (Such as: Beet, Fall, Southern) <i>Heliothis zea</i> (Bollworm, Corn earworm, Tomato fruitworm)	0.4 to 0.75	16.0 to 30.0	Spray as needed. Use the higher dosage rates for heavier infestations of larger larvae. Use the lower rates for light to moderate infestations.	Do not exceed 1.5 pounds of active ingredient (60 fluid ounces of LARVIN® brand 3.2) per acre per season. Do not apply less than 14 days before harvest.
	Cabbage looper	0.6 to 0.75	24.0 to 30.0		

#### RECOMMENDED USES FOR SOYBEANS (STANDARD AND LOW SPRAY VOLUMES)

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STANDARD SPRAY VOLUME FOR SOYBEANS: Apply in a minimum finished spray volume of 2 gallons per acre by air or 5 gallons per acre by ground. Under extreme pest populations or dense foliage, use a minimum spray volume of 5 gallons per acre by air and a minimum of 10 gallons per acre by ground.

LOW SPRAY VOLUME FOR SOYBEANS: Apply in a minimum finished spray volume of 1 gallon per acre by aircraft. Only use the low volume aerial application (i. e., minimum of 1 GPA) where that spray volume will provide adequate coverage of the crop.

		DOSAGE	PER ACRE		
SITE	PEST	Pounds Active	Fluid Ounces	SPECIFIC DIRECTIONS	USE RESTRICTIONS
SOYBEAN (Standard Spray Volume Applications)	Podworms (Bollworm, Corn earworm, Tobacco budworm) Armyworms (Such as: Beet, Fall, Southern, Yellow-striped, etc.) Green cloverworm Velvetbean caterpillar Woollybear caterpillar	0.25 to 0.4	10.0 to 16.0	Use the lower rates for low to moderate populations and maximum protection of beneficials.	Do not feed forage, hay or straw to livestock. Do not apply less than 28 days before harvest.
	Soybean looper Cabbage looper Mexican bean beetle Bean leaf beetle Stinkbugs (Suppression) Three-cornered alfalfa hopper (Suppression)	0.45 to 0.75	18.0 to 30.0		
	Cutworms	See "SPECI/	AL DIRECTIO	NS ON CUTWORMS"	
SOYBEAN (Low Spray Volume Applications)	Podworms (Bollworm, Corn earworm, Tobacco budworm) Green Cloverworm Velvetbean caterpillar Armyworms (such as Fall, Beet, Southern, etc.) Woollybear caterpillar	0.25 to 0.40	10.0 to 16.0	For best results, use the lower rates for low to moderate populations and maximum protection of beneficials. Willen applying at 1 gallor, of spray volume per all e by air, use if quart of emulsified crop or vegetable oil (e.g., emulsified corn, soybean or cottonseed oil). Water alone may be used as a diluent for spray volumes of 2 gallons or higher per acre. TANK MIX DIRECTIONS FOR EMULSIFIED CROP OR VEGETABLE OILS: Fill spray tank with approxi-mately 3/4 of the water required for the spray mixture. Add the required amount of LARVIN <sup>®</sup> 3.2 to the spray tank with the agitator running. Then add the desired amount of emulsified crop or vegetable oil, Continue agita-tion while adding the remainder of water.	Do not feed forage, hay, or straw to livestock. Do not apply less than 28 days before harvest.

RECOMMENDED USES FOR SWEET CORN

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SPRAY VOLUMES FOR SWEET CORN: Please observe the spray volumes recommended for whorl feeders, silks and ears and foliage feeders under specific directions. For aerial applications, only water may be used as a diluent and total spray volume must be at least 2 gallons per acre.

	I	DOSAGE	PER ACRE		
SITE	PEST	Pounds Active	Fluid Ounces	SPECIFIC DIRECTIONS	USE RESTRICTIONS
SWEET CORN (Florida Fresh Market Only)	Corn earworm European corn borer Armyworms (Such as Fall, Beet, etc). Western bean cutworm	0.5 to 0.75	20 to 30	<ul> <li>Whori Feeders: Spray as needed. As insect populations increase and/or when new plant growth is rapid, the spray interval should be shorter. For best results, use spray volumes of 15 gallons or more per acre applied by ground equipment using solid or hollow cone nozzles directed into the plant whori.</li> <li>Insects Attacking Silks And Ears: Apply at 1 to 7 day intervals starting when silks first appear and continuing until harvest, if necessary. As insect populations increase and/or silk growth is rapid, the spray interval should be shorter. Use the higher dosage rate and apply at 1 to 2 day intervals following periods of heavy moth flights. Follow local recommendations for proper timing.</li> <li>Follage Feeders: Use at least 2 gallons finished spray volume per acre by air or 10 gallons per acre by ground. Spray as needed.</li> </ul>	not exceed 7.5 pounds of active ingredient (300 fluid ounces of this
	Cutworms	See "SPECI/	AL DIRECTIO	NS ON "CUTWORMS"	

# RECOMMENDED USES FOR CUTWORMS

# SPECIAL DIRECTIONS ON CUTWORMS

SPRAY VOLUME FOR CUTWORMS: Apply in a minimum finished spray volume of 3 gallons per acre by air or 15 gallons per acre by ground.

		DOSAGE	PER ACRE		
SITE	PEST	Pounds Active	Fluid Ounces	SPECIFIC DIRECTIONS	USE RESTRICTIONS
COTTON, SOYBEANS, SWEET CORN (Florida, Fresh Market Only)	Cutworms	0.5 to 0.75	20.0 to 30.0	Postemergence Rescue Treat- menta: For best results, apply as a broadcast spray when cutworms are actively feeding. If cutworms are feeding below the ground, control will be more difficult. Light cultivation with a rotary hoe before spraying may enhance control. If banding, use a minimum width of 10 inches over the row. When banding, determine the amount of chemical to use per acre, by dividing the band width by the row width and multiplying by the appropriate broadcast rate.	crop for use restrictions.

# RECOMMENDED USES FOR ORNAMENTALS AND TREES

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# For dilute-spray ground applications to ornamentals (such as: Trees, Shrubs, Herbaceous bedding plants, Herbaceous greenhouse plants and non-bearing fruits):

Apply the specified dosage per 100 gallons of water. For concentrate-spray ground applications, apply the specified dosage per acre in sufficient spray volume to provide thorough coverage. For aerial application to ornamenta, plants, shrubs and trees (except forests), apply the specified dosage per acre in a minumum total spray volume of 5 gallons to provide thorough coverage.

# BEFORE MAKING TREATMENTS REFER TO "PLANT TOLERANCE INFORMIATION" LISTED ON THIS LABEL.

		DOSAGE OF LARVIN <sup>®</sup> BRAND 3.2 THIODICARB INSECTICIDE			
		FLUID OUNCES PER 100 GALS SPRAY OR PER ACRE	PINTS PER 100 GALS SPRAY OR PER ACRE	SPECIFIC	USE
SITE	PEST			DIRECTIONS	RESTRICTIONS
ORNAMENTALS such as: Trees (except forests), Shrubs, Herbaceous bedding plants, Herbaceous greenhouse plants, Non-bearing fruit trees (Cltrus: Grapefruit, lemons, limes, oranges, tangelos, tangerines, citrus citron, kumquats and hybrids; Nut Crops: almonds, filberts, pecans, walnuts; Pome Fruits: apples, pears, loquats, crabapples, oriental pears, quince; Stone Fruits: peaches, apricots,	PEST Armyworms Bayworm Cankerworms (such as: spring, fall) Gypsy moth Leafroliers (such as: omnivorous, fruittree) Spruce budworms Webworms (such as: fall, mimosa) Tent caterpillars	20 to 30	1.25 to 1.9	DIRECTIONS See "PlantTolerance Information" and "Appli- cation" sections of this label. Apply when pests appear and thereafter as needed not to exceed 6 applications per site per season.	Do not use on fruit trees or vines that will bear edible fruit within one year.
nectarines, plums, prunes and cherries)					

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# RECOMMENDED USES FOR NON-CROP AREAS

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		DOSA	GE PER	CRE		
SITE	PEST	Pounds Active		Pints	SPECIFIC DIRECTIONS	USE RESTRICTIONS
NON-CROP AREAS (Wastelands, Roadsides, Rights-of-Way, Grassways, Shelter beits, and Fencerows)	Armyworms Bagworm Budworms Cankerworms (such as: spring, fall) Cutworms Gypsy moth Heliothis spp. (such as: corn earworm) Leafrollers (such as: omnivorous, fruittree) Loopers Oakworms Sawflies Skipper3 Tent caterpillars Webworms (such as: fall, mimosa)	0.40 to 0.76	16.0 to 30.0	1.0 to 1.9	Treat non-crop areas where pests congregate to reduce infestation levels or to prevent movement into crop- lands. Apply when pests appear and every two weeks thereafter as needed, not to exceed 6 applications per site per season.	graze treated areas. Do not use treated plants as food or feed.

# ORNAMENTAL PLANT TOLERANCE INFORMATION

LARVIN® brand 3.2 Thiodicarb Insecticide has been tested on many species of ornamental plants. Results indicate plants listed below are tolerant to the higher rates of this product. Horticultural varieties of many plants differ significantly in sensitivity to pesticides. Before making applications to plants not listed, it is recommended that a small portion of the crop be treated to determine its tolerance to this product. Plants stressed from heat, moisture or other factors are usually more sensitive to sprays. Phytotoxic reactions can be minimized by spraying when stress is minimal such as early mornings or late evenings.

## ORNAMENTAL PLANTS TOLERANT TO THIODICARB INSECTICIDE

TREES	SHRUBS	HERBACEOUS	HERBACEOUS BEDDING PLANTS	
Apple, (Crab) Birch, (Weeping, White) Honeylocust, (Sunburst) Maple, (Sugar) Pine, (Scotch) Spruce, (Norway)	Arborvitae Aucuba Azalea Boxwood Camellia Elaeagnus Euonymus Fatsia, (Japanese) Gardenia Hawthorn Holly, (Japanese) Holly, (Japanese) Holl	Acalypha hisoida Acalypha wi kesiana Aechmea lu ddemanniana Alternanthe a versicolor Aluminum '-lant Begonia semperflorens Cactus Ceropegia woodii Chamaedorea elegans Chlorophytum comosum Dietfenbachia Dracaena sanderana Echeveria Fern Ficus diversitolia Gloxinia Gynura sarmentosa Hechtia tellandsioides Hoya Iboza riparia Ivy, (Swedish)	Ixora Jade Plant Kalanchoe daigremontiana Maranta leuconeura erythroneura Nephrolepis exaltata Peperomia magnoliifolia Peperomia obtusifolia Philodendron oxycardium Piggyback Plant Pilea grandis Poinsettia Pseuderanthemum Rhoeo spathacea Sansevieria trifasciata Scindapsus aureus Senecio Spathyiphyllum wallisii Syngonium podophyllum Torenia Zebrina pendula Zygocactus truncata	Calendula Canna Chrysanthemum Coleus Geranium Hosta Impatiens Lantana Periwinkle Petunia Salvia Snapdragon Verbena Violet

DOSAGE PER ACRE	ACRES TREATED PER VOLUME OF LARVIN <sup>®</sup> brand 3.2			
Pounds Active	Fluid Ounces	1 gallon	2.5 gallons	5 gallons
0.125	5.0	25.6	64.0	128.0
0.25	10.0	12.8	32.0	64.0
0.33	13.2	9.7	24.2	48.5
0.40	16.0	8.0	20.0	40.0
0.45	18.0	7.1	17.7	35.5
0.50	20.0	6.4	16.0	32.0
0.55	22.0	5.9	14.5	29.0
0.60	24.0	5.3	13.2	26.5
0.65	26.0	4.9	12.3	24.6
0.70	28.0	4.6	11.4	22.8
0.75	30.0	4.2	10.5	21.4
0.80	32.0	4.0	10.0	20.0
0.90	36.0	3.6	8.9	17.8

#### FIELD USE CONVERSION TABLE

1 U.S. Gallon Equals 128 Fluid Ounces

# LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions; and (c) that the directions, warnings and other statements on this label are based upon responsible experts' evaluation of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants, and of residues on fuod crops, and upon reports of field experiences. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE, ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FiguRESS FOR A PARTICULAR PURPOSE.

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LARVIN® brand 3.2 Thiodicarb Insecticide/Ovicide Aqueous Flowable (MASTER) Notification 8/17/95.

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