

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Ms. Terre Allen Gowan Company P.O. Box 5569 Yuma, AZ 85366-5569

DEC 3 1 2002

Dear Ms. Allen:

Subject: Amendment- Update to match use patterns and limitations appearing on source material label, and Revise First Aid Per PR Notice 2001-1
Gowan Endosulfan 50 WSB
EPA Registration Number 10163-130
Your submission dated December 19, 2002

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(7)(a), is acceptable and a stamped copy of the label is enclosed for your records.

When preparing the finished label, please incorporate the following revisions:

- a. On the front panel, under "For Agricultural or Commercial Use Only", add "Not for use or storage in around residential sites see DIRECTIONS FOR USE /GENERAL INSTRUCTIONS for prohibited areas".
- b. In the First Aid section, relocate the If Swallowed advice to be the first route of exposure listed. In this entry, add "or convulsing" after "unconscious" in the fourth bullet item.
- c. The submitted NOTE TO PHYSICIAN is for an organophosphate insecticide. Endosulfan is not an organophosphate. Replace that section with the following:

#### NOTE TO PHYSICIAN

Endosulfan is a central nervous system stimulant absorbable by mouth, inhalation, or through contact with skin. It may cause convulsions. There is no specific antidote. Diazepam I.V. is the drug of choice. Barbituric acid derivatives such as Phenobarbital may be used additionally. A neuromuscular blocking agent may be used if convulsions persist. This type of drug may be used *only* if complete control of respiration can be maintained. Epinephine derivatives are absolutely contraindicated.

d. Please refer to PR Notice 98-9 for updated pesticide respirator recommendation text to appear in the PPE listing for applicators and other handlers.

- e. Under the heading GENERAL INSTRUCTIONS, replace "Not for use or storage in or around the home." with "Not for use or storage in or around residential sites, including homes, non-agricultural outbuildings, non-commercial greenhouses, recreational vehicles, preschools, day care centers, and applications to humans and pets."
- f. Under the heading ORNAMENTAL TREES AND SHRUBS (Commercially grown outdoors only), delete the entries for LEATHERLEAF FERN and for "ORNAMENTALS" (which pertains to succulent ornamentals). As we discussed by telephone, all of the other listed use patterns may remain under this heading.

Please submit 5 copies of labeling bearing the above revisions as soon is it becomes available. Thank you for your prompt cooperation in this regard.

Sincerely,

George T. LaRocca Product Manager 13 Insecticide Branch Registration Division (7505C)

## **GOWAN ENDOSULFAN 50 WSB**

## Insecticide For Agricultural or Commercial Use Only

ACTIVE INGREDIENT: Endosulfan

Hexachlorohexahydromethano-2,4,3-benzodioxathiepin 3-oxide

INERT INGREDIENTS

TOTAL 100.0%

# 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 the label, find someone to explain it to you in detail).

	FIRST AID
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
if in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
	HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-888-478-

NOTE TO PHYSICIAN

This product is an organophosphate insecticide. If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine.

#### FOR EMERGENCY RESPONSE AND HAZARD COMMUNICATION ONLY, CALL 1-(888)-478-0798

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

Fatal if swallowed or inhaled. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Do not breathe vapor or spray mist. Do not apply or allow to drift to areas occupied by unprotected humans or beneficial animals. Do not contaminate food or feed. Keep out of reach of domestic animals. Food utensils such as tablespoons or measuring cups must not be used for food purposes after use in measuring pesticides.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### Applicators and other handlers must wear:

Coveralls over long-sleeved shirt and long pants

0798 for emergency medical treatment information.

- Waterproof gloves
- Chemical-resistant footwear plus socks
- · Protective eyewear
- Chemical-resistant headgear for overhead exposure
- 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)
- Add a chemical-resistant apron when cleaning equipment, mixing or loading

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 datagreent and hot water. Keep and wash PPE separately from other laundry.

NET CONTENTS

with COMMENTS
[ESSA Letter Dated:

DEC 3 1 2002

Gowan Company P.O. Box 5569 Yuma, AZ 85366-5569

Gowan

EPA Reg. No. 10163-130 EPA Est. No. 67545-AZ-1 Under the Federal Insecticide, Prospicide, and Rodenticide Act, as markeded, for the pesticide reconserved under EPA Bes. No. 10(63-130 Engineering controls statement: 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 modified as specified in the WPS.

#### **USER SAFETY RECOMMENDATIONS**

#### Users should:

- · Wash hands before eating, drinking, chrwing gum, using tobacco, or using the toilet.
- · Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE 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, birds and other wildlife. Birds feeding on treated areas may be killed. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Due to the risk of runoff and drift, do not apply within a distance of 300 feet of lakes, ponds, streams and estuaries. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where fish, shrimp, crab and other aquatic life are important resources. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters. This product must not be used in areas where impact on threatened endangered species is likely. Contact your State Fish and Game Agency before applying this product. Apply this product only as specified on this label. This pesticide is toxic to bees exposed to direct application. Applications should be timed to coincide with periods of minimum bee activity, usually between late evening and early morning.

#### **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) of 24 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 over long-sleeved shirt and pants
- Waterproof gloves
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

#### **DIRECTION FOR USE OF WATER SOLUBLE BAGS**

Packets containing Gowan Endosulfan 50 WSB are water soluble. After opening outer bag, avoid exposing inner bags to moisture, and do not allow bags to become wet prior to adding to the spray tank. Do not handle inner bag with wet hands. Reseal outer bag in a manner that protects remaining packets from moisture. To prepare the spray mixture, drop the required number of unopened packets, as determined under GENERAL INSTRUCTIONS and the specific directions for the crop you are spraying, into the spray tank while filling with water to the desired level (whenever possible direct the fill water over the top of the packets to increase the rate of solubility). Where dosages of Gowan Endosulfan 50 WSB are expressed as fractions of pounds, prepare the tank mix load to the lower of the nearest whole pound. Operate the agitator while mixing. Depending on the water temperature and the degree of agitation, the packets should be completely dissolved within approximately three to five minutes from the time they were added to the spray tank. Once the packets have completely dissolved, add other chemicals following conventional mixing order practices. Tank-mix solutions containing boron, will affect the solubility of the water soluble film. When preparing tank-mixes containing boron, add the correct amount of Gowan Endosulfan 50 WSB to the spray tank first. Make sure that the water soluble packets are completely dissolved. Add boron containing solutions to the spray tank last.

For strainers: Do not use strainers finer than 50-mesh size.

For tank mixing: When mixing Gowan Endosulfan 50 WSB with other products, observe all precautions and limitations on the labels of each product.

#### **CHEMIGATION STATEMENT**

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

#### **GENERAL INSTRUCTIONS**

Not for use or storage in or around the home.

When applying this product in California, be sure to read and follow the required procedures for reducing risk of contamination of aquatic ecosystems in California that appear at the end of this label.

Apply the listed amount per acre when insects first appear and repeat as required, unless otherwise noted, to maintain effective control. Use in sufficient water for thorough coverage of listed crops, unless otherwise noted. Coverage of upper and lower leaf surfaces is essential for good control. Mix as needed; do not store diluted material. For ground application, apply recommended amount of pesticide in a minimum of 10 gals, of water per acre on vegetables or row crops. Observe use limitations. If insect control is required beyond the following use patterns, supplement the control program with other suitable pesticides.

When applying this material by aircraft, mix the recommended amount with sufficient water to provide a minimum of 5 gallons of finished spray per acre on vegetable and field crops, unless otherwise noted, and a minimum of 20 gallons of finished spray per acre on fruit and nut trees and on vines. When applying 4 pounds or more, mix in a minimum of 20 gals, of water.

Do not plant root crops other than carrots, potatoes, sweet potatoes, and sugar beets as follow-up crops.

PREHARVEST INTERVAL
The required days between the last application and harvest are given in ( ) after each crop name.

CROP	PEST	LBS./ ACRE	COMMENTS			
APPLES (21) (Except California)	Do not feed cull fruits	5 rom treate to animal	(Or 1 lb. per 100 gals.) Applications made at pink and/or petal fall provide best control of tarnished plant bug and green fruitworm. For best control of first generation white apple leafhopper, apply when nymphs first appear on leaves. If necessary, prior to petal fall, use 1½ lbs. per 100 gals. to control apple aphids and rosy apple aphids. For control of tentiform leafminers, make first application as soon as moth flight begins. A second application should be made 10 days later.  ed apples to livestock.  s or allow livestock to graze in treated orchards.			
			cations during the fruiting period.			
	Do not make more that     Do not exceed a marie					
ADDI ES (30)	Do not exceed a maxi     Aphids (including Apple	5	lbs. active ingredient (i.e., 6 lbs.) per acre per year.  (Or 1 lb. per 100 gals.) For best control of first generation white apple			
APPLES (30) (California Only)	Aphid, Rosy Apple Aphid, Woolly Apple Aphid, Woolly Apple Aphid), Apple Rust Mite, White Apple Leafhopper (first generation)	5	leafhopper, apply when nymphs first appear on leaves. If necessary, prior to petal fall, use 1½ lbs. per 100 gals. to control apple aphids and rosy apple aphids.			
	Do not feed pomace from treated apples to livestock.					
	Do not feed cull fruits to animals or allow livestock to graze in treated orchards.					
	Do not make more that 2 applications during the fruiting period.					
	Do not make more that 3 applications per year.					
			lbs. active ingredient (i.e., 6 lbs.) per acre per year.			
APRICOTS (21), NECTARINES (21), PEACHES (21) (Except California)	Peachtree Borer, Lesser Peachtree Borer	1½ per 100 gals.	Use per 100 gals.; West Coast: use 1-1½ lbs. per 100 gals.; Southeastern States: Use 3-5 lbs. per 100 gals. Best control is obtained with a single application post harvest during the first week of September. Spray all bark areas from ground level to lower scaffold limbs.			
(Except Camorria)	Do not feed cull fruits		s or allow livestock to graze in treated orchards.			
	Do not make more than 2 applications per year.					
			lbs. active ingredient (i.e., 6 lbs.) per acre per year.			
APRICOTS (30), NECTARINES (30), PEACHES (30) (California Only)	Aphids (including Black Cherry Aphid, Black Peach Aphid, Green Peach Aphid, Rusty Plum Aphid), Catfacing Insects (Stink Bug type), Peach Silver Mite, Peach Twig Borer	4-5	(Or 1 lb. per 100 gals.) Make applications when insects appear or feeding is noticed.			
	Do not feed cull fruits to animals nor allow livestock to graze in treated orchards.					
	Do not make more that 2 applications per year.					
	1		lbs. active ingredient (i.e., 6 lbs.) per acre per year.			
BARLEY, OATS, RYE,	Army Cutworm	1	For aerial application, use a minimum of 5 gals, of water per acre.			
WHEAT (Except California)	Cereal Leaf Beetle (Illinois, Indiana, Michigan and Ohio Only)	1	Apply when small larvae are readily found in the field. For aerial application, use a minimum of 5 gals, of water per acre.			
	Aphids	1-11/2	Make application when insects appear or feeding is noticed.			
	Do not apply after hea     Do not feed treated for     Do not make more that	ids begin rage to liv	to form. estock.			

CROP	PEST	LBS./ ACRE	COMMENTS			
BEANS, SUCCULENT and DRY (Except Lima Beans) (3) and SOUTHERN FIELD PEAS (Succulent type,	Black Bean Aphid, Bean Leaf Skeletonizer, Cucumber Beetle, Flea Beetles, Green Stink Bug,	1-2	Make applications when insects appear or feeding is noticed.			
ncluding Black-eyed Peas, Crowder Peas and Southern	Mexican Bean Beetle Aphid, Western Bean	2				
Peas) (3)	Cutworm, Whitefly					
	<ul> <li>Do not feed treated threshings or allow livestock to graze in treated fields.</li> <li>Do not use on Lima Beans that are to be removed from the field for processing.</li> </ul>					
	Do not make more that     Do not exceed a maximum.					
BLUEBERRIES	Blueberry Bud Mite	3 per	bs. active ingredient (i.e., 6 lbs.) per acre per year.  Apply immediately after harvest and repeat 6-8 weeks later.			
Except California)		300 gals.				
	Do not apply after bud					
	Do not make more that     Do not exceed a maxir		ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.			
BROCCOLI (7), BRUSSELS SPROUTS	Cabbage Aphid, Cabbage Looper, Cross-striped	11/2-2	Make applications when insects appear or feeding is noticed.			
14), CABBAGE (7),	Cabbageworm, Diamondback Moth					
CAULIFLOWER (14) (California Only)	Larvae, Flea Beetle, Harlequin Bug, Imported	1				
(California Crity)	Cabbageworm, Stink Bug Armyworm, Cutworm,	2				
	Whitefly					
	Do not make more tha     Do not exceed a maxir	n 2 applica	ations per year. bs. active ingredient (i.e., 4 lbs.) per acre per year			
BROCCOLI (7),	Armyworm, Cabbage	2	Make applications when insects appear or feeding is noticed.			
BRUSSELS SPROUTS	Aphid, Cabbage Looper, Cross-striped					
(14), CABBAGE (7), CAULIFLOWER (14)	Cabbageworm, Cutworm,	ļ				
Except California)	Diamondback Moth					
	Larvae, Flea Beetle, Harlequin Bug, Imported					
	Cabbageworm, Stink Bug, Whitefly					
	Do not make more than 3 applications per year.					
CARROTE (7)	Do not exceed a maxir  Green Peach Aphid		bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.			
CARROTS (7) California Only)	Flea Beetle, Whitefly	1-2	Make applications when insects appear or leeding is noticed.			
,	Do not use tops for foc	od or feed.				
	Do not make more tha					
APPOTE (7)	Do not exceed a maxir Green Peach Aphid,	num of 1 l 1-2	b. active ingredient (i.e., 2 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.			
CARROTS (7) Except California)	Leafhopper	2	wake applications when insects appear of feeding is noticed.			
	Armyworm, Flea Beetle, Whitefly					
	Do not use tops for food or feed.					
	Do not exceed a maxim		ation per year. b. active ingredient (i.e., 2 lbs.) per acre per year.			
CELERY (4)	Green Peach Aphid,	1-2	Make applications when insects appear or feeding is noticed.			
California Ónly)	Cabbage Looper		,			
	Flea Beetle, Whitefly 2  • Do not make more than 1 application per year.					
			b. active ingredient (i.e., 2 lbs.) per acre per year.			
CELERY (4)	Green Peach Aphid,	1-2	Make applications when insects appear or feeding is noticed.			
Except California)	Cabbage Looper, Leafhopper					
	Armyworm, Flea Beetle,	2				
	Whitefly     Do not make more tha	n 1 applica	lation per year.			
			b. active ingredient (i.e., 2 lbs.) per acre per year.			
CELERY (7)	Green Peach Aphid  Do not make more tha	1	Make applications when insects appear or feeding is noticed.			

CROP	PEST	LBS./ ACRE	COMMENTS		
CHERRIES (21)	Black Cherry Aphid, Plum Rust (Nursery) Mite	4-5	(Or 1 lb. per 100 gals.) Make applications when insects appear or feeding is noticed.		
	Eyespotted Bud Moth, Fruittree Leafroller (Pacific NW Only)	4-5	(Or 1 lb. per 100 gals.) For bud moth control, apply at "popcorn" stage. For leafroller control, apply during pre-pink stage of growth.		
	Mineola Moth (Michigan Only)	2 per 100 gals.	Apply in the delayed dormant period.		
	Peachtree Borer, Lesser Peachtree Borer (Except California)	1½ per 100 gals.	West Coast (Except California): 1 - 1 ½ per 100 gals. Best control is obtained with a single application post harvest during the first week of September. Spray all bark areas from ground level to lower scaffold limbs.		
	All Uses:	to animals	or allow livestock to graze in treated orchards.		
	Do not exceed a maxir	num of 3	bs. active ingredient (i.e., 6 lbs.) per acre per year.		
CHERRY, PEACH, PLUM NURSERY STOCK DIP	Peachtree Borer	4 per 40	Mix thoroughly. Immerse trees so that the roots and crowns are covered well above the grafting bud scar. Plant immediately or dry before returning stock		
CITRUS (Non-bearing Trees	Citrus Aphid	gals. 5	to storage.  (Or ½ lb. per 100 gals.) Make applications when insects appear or feeding is		
and Nursery Stock)	Do not apply to bearing	trees or	noticed. trees that will bear fruit within twelve months.		
	Do not make more that	n 2 applic	ations per year.		
		num of 3 l	bs. active ingredient (i.e., 6 lbs.) per acre per year.		
COLLARDS (21) (California Only)	Aphid, Cabbage Looper, Diamondback Moth Larvae, Flea Beetle,	11/2	Make applications when insects appear or feeding is noticed.		
	Harlequin Bug, Imported Cabbageworm, Whitefly	- 4 11-			
	<ul> <li>Do not make more than 1 application per year.</li> <li>Do not exceed a maximum of % lb. active ingredient (i.e., 1½ lbs.) per acre per year.</li> </ul>				
COLLARDS (21) (Except California)	Aphid, Cabbage Looper, Diamondback Moth Larvae, Flea Beetle, Harlequin Bug, Imported Cabbageworm	11/2	Make applications when insects appear or feeding is noticed.		
	Whitefly	2			
	Do not make more that     Do not exceed a maxing		ation per year.  b. active ingredient (i.e., 2 lbs.) per acre per year.		
COTTON	Aphid	3/4-1/2	Make applications when insects appear or feeding is noticed. For control of		
(Except California)	Boll Weevil Bollworm, Cabbage Looper, Cotton	1-3 2-3	aphids, thorough coverage is important. Applications may be made using ground or aerial application equipment. The higher rate should be used under heavy pest pressure.		
	Leafperforator, Cotton Leafworm, Fleahopper, Lygus Bug, Stink Bug, Tobacco Budworm				
	Thrips	3			
	<ul> <li>Do not apply after boils</li> <li>Do not graze meat or of</li> </ul>	airy anima			
			bs. active ingredient (i.e., 6 lbs.) per acre per year.		
CUCUMBERS (2), MELONS (2), PUMPKINS (2), SUMMER and WINTER	Aphid, Cucumber Beetle, Melonworm, Pickleworm, Rindworm (on watermelons), Squash	1-2	Make applications when insects appear or feeding is noticed. For squash vine borer, apply weekly to flower buds, stem, and vines beginning when moths first appear.		
SQUASH (2) (California Only)	Beetle, Squash Bug, Squash Vine Borer, Striped Flea Beetle				
	Cabbage Looper, Omnivorous Leafroller, Whitefly	2			
	Do not make more that     Do not exceed a maxin	n 3 applica	ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.		

CROP	PEST	LBS./ ACRE	COMMENTS
CUCUMBERS (2), MELONS (2), PUMPKINS (2), SUMMER and WINTER SQUASH (2) (Except California)	Aphid, Cucumber Beetle, Melonworm, Pickleworm, Rindworm (on watermelons), Squash Beetle, Squash Bug, Squash Vine Borer, Striped Flea Beetle	1-2	Make applications when insects appear or feeding is noticed. For squash vine borer, apply weekly to flower buds, stem, and vines beginning when moths first appear.
	Cabbage Looper, Omnivorous Leafroller, Whitefly  Do not make more tha	2	
			bs. active ingredient (i.e., 6 lbs.) per acre per year.
EGGPLANT (1) (California Only)	Blister Beetle, Colorado Potato Beetle, Flea Beetle, Green Peach Aphid, Green Stink Bug, Whitefly	1	Make application when insects appear or feeding is noticed.
	Do not make more that		
FOOD INT (1)		<del></del>	lb. active ingredient (i.e., 1 lb.) per acre per year.
EGGPLANT (1) (Except California)	Blister Beetle, Colorado Potato Beetle, Flea Beetle, Green Peach Aphid, Green Stink Bug	1-2	Make applications when insects appear or feeding is noticed.
	Whitefly	2	
	Do not make more that     Do not exceed a maximum.		
FILBERTS (1)	Do not exceed a maxi.  Filbert Aphid, Filbert	3-4	b. active ingredient (i.e., 2 lbs.) per acre per year.  (Or 1 lb. per 100 gals.) Make application when insects appear or feeding is
FILDERIS (I)	Leafroller	3-4	noticed.
	Do not graze livestock	on orchar	d crops or grasses in treated areas.
	Do not make more that		
		mum of 3 l	bs. active ingredient (i.e., 6 lbs.) per acre per year.
GRAPES (7)	Grape Leafhopper, Grape Phylloxera (leaf form),	2-3	(Or 1 lb. per 100 gals.) Make applications when insects appear or feeding is noticed.
	Rose Chafer		Aleis Daile 1 7050 (Ohen adlan) Onibel 2075 (Ohen al) Onibel 20050 (Ohen
	Do not use on Baca N or Concord varieties a     Do not make more tha     Do not exceed a maximum.	s severe in an 3 applica- mum of 3 <u>i</u>	njury is likely to occur. ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year
<b>KALE</b> (21)	Do not use on Baca N or Concord varieties a     Do not make more tha     Do not exceed a maxis Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm	s severe in 3 application of 3 in 11/2	ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year. Make applications when insects appear or feeding is noticed.
KALE (21)	Do not use on Baca N or Concord varieties a     Do not make more tha     Do not exceed a maxis Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm     Do not make more tha	s severe in 3 application of 3 in 11/2	njury is likely to occur. ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year. Make applications when insects appear or feeding is noticed. ation per year.
	Do not use on Baca N or Concord varieties a     Do not make more tha     Do not exceed a maxis Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm     Do not make more tha     Do not exceed a maxis	s severe in a application of 3 in 1 application of 3/4	njury is likely to occur. ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year. Make applications when insects appear or feeding is noticed. ation per year. lb. active ingredient (i.e., 1½ lbs.) per acre per year.
KALE (21)  LETTUCE (14)  (California Only)	Do not use on Baca N or Concord varieties a     Do not make more tha     Do not exceed a maxis Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm     Do not make more tha	s severe in 3 application of 3 in 11/2	njury is likely to occur. ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year. Make applications when insects appear or feeding is noticed. ation per year.
LETTUCE (14)	Do not use on Baca Nor Concord varieties a     Do not make more tha     Do not exceed a maxis Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm     Do not make more tha     Do not exceed a maxis Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly	s severe in a application of 3 in 1 application of 3/4 in 1½-2	njury is likely to occur. ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  ation per year. lb. active ingredient (i.e., 1½ lbs.) per acre per year.  Make applications when insects appear of feeding is noticed.
LETTUCE (14)	Do not use on Baca Nor Concord varieties a     Do not make more tha     Do not exceed a maxis Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm     Do not make more tha     Do not exceed a maxis Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly     On Head Lettuce: Do non Leaf Lettuce: Do non teed crop refuse     Do not feed crop refuse	s severe in a application of 3 in 1 application of 3 in 1 application of 3 in 1 in 1 application of 3 in 1 in 1 application of 3 in 1 in	njury is likely to occur. ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  ation per year. lb. active ingredient (i.e., 1½ lbs.) per acre per year.  Make applications when insects appear of feeding is noticed.  d 3 applications after thinning. Remove wrapper leaves at harvest. more than 2 applications per year.
LETTUCE (14) (California Only)	Do not use on Baca N or Concord varieties a Do not make more tha Do not exceed a maxis Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm Do not make more tha Do not exceed a maxis Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly On Head Lettuce: Do not leaf Lettuce: Do not feed crop refus Do not exceed a maxis	s severe in a application of 3 land applicat	njury is likely to occur. ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  ation per year. lb. active ingredient (i.e., 1½ lbs.) per acre per year.  Make applications when insects appear of feeding is noticed.  d 3 applications after thinning. Remove wrapper leaves at harvest. hore than 2 applications per year.  bs. active ingredient (i.e., 6 lbs.) per acre per year.
LETTUCE (14) (California Only)  LETTUCE (14)	Do not use on Baca Nor Concord varieties a     Do not make more tha     Do not exceed a maxis Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm     Do not make more tha     Do not exceed a maxis Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly     On Head Lettuce: Do non Leaf Lettuce: Do non teed crop refuse     Do not feed crop refuse	s severe in a application of 3 in 1 application of 3 in 1 application of 3 in 1 in 1 application of 3 in 1 in 1 application of 3 in 1 in	njury is likely to occur. ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  ation per year. lb. active ingredient (i.e., 1½ lbs.) per acre per year.  Make applications when insects appear of feeding is noticed.  d 3 applications after thinning. Remove wrapper leaves at harvest. more than 2 applications per year.
LETTUCE (14)	Do not use on Baca Nor Concord varieties a Do not make more tha Do not exceed a maxis Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm  Do not make more tha Do not exceed a maxis Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly On Head Lettuce: Do On Leaf Lettuce: Do not feed crop refus Do not exceed a maxis Armyworm, Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm, Leafhoppers, Whitefly	s severe in a application of 3 line in 1 applica	ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  ation per year. lb. active ingredient (i.e., 1½ lbs.) per acre per year.  Make applications when insects appear of feeding is noticed.  d 3 applications after thinning. Remove wrapper leaves at harvest. nore than 2 applications per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.
LETTUCE (14) (California Only)  LETTUCE (14)	Do not use on Baca N or Concord varieties a Do not make more tha Do not exceed a maxis Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm  Do not make more tha Do not exceed a maxis Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly On Head Lettuce: Do On Leaf Lettuce: Do refus Do not exceed a maxis Armyworm, Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly On Head Lettuce: Do refus Do not exceed a maxis Armyworm, Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm, Leafhoppers, Whitefly On Head Lettuce: Do	s severe in a application of 3 line 1 application of 3	ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  ation per year. lb. active ingredient (i.e., 1½ lbs.) per acre per year.  Make applications when insects appear of feeding is noticed.  d 3 applications after thinning. Remove wrapper leaves at harvest. nore than 2 applications per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.
LETTUCE (14) (California Only)  LETTUCE (14)	Do not use on Baca Nor Concord varieties a Do not make more tha Do not exceed a maxis Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm  Do not make more tha Do not exceed a maxis Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly On Head Lettuce: Do not feed crop refus Do not exceed a maxis Armyworm, Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly On Head Lettuce: Do not exceed a maxis Armyworm, Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm, Leafhoppers, Whitefly On Head Lettuce: Do not Leaf Lettuce: Do not l	s severe in a application of 3 leads to the severe of make in the severe of the se	ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  ation per year. lb. active ingredient (i.e., 1½ lbs.) per acre per year.  Make applications when insects appear of feeding is noticed.  d 3 applications after thinning. Remove wrapper leaves at harvest. nore than 2 applications per year.  ock. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.
LETTUCE (14) (California Only)  LETTUCE (14)	Do not use on Baca Nor Concord varieties a Do not make more tha Do not exceed a maxis Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm  Do not make more tha Do not exceed a maxis Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly On Head Lettuce: Do On Leaf Lettuce: Do refus Do not exceed a maxis Armyworm, Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm, Leafhoppers, Whitefly On Head Lettuce: Do relabageworm, Leafhoppers, Whitefly On Head Lettuce: Do refus On Leaf Lettuce: Do refus On Leaf Lettuce: Do refus On Leaf Lettuce: Do refus	s severe in a application of 3 leads to live sto	ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  ation per year. lb. active ingredient (i.e., 1½ lbs.) per acre per year.  Make applications when insects appear of feeding is noticed.  d 3 applications after thinning. Remove wrapper leaves at harvest. nore than 2 applications per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  d 3 applications when insects appear or feeding is noticed.
LETTUCE (14) (California Only)  LETTUCE (14) (Except California)	Do not use on Baca Nor Concord varieties a Do not make more tha Do not exceed a maxis Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm  Do not make more tha Do not exceed a maxis Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly On Head Lettuce: Do On Leaf Lettuce: Do refus Do not exceed a maxis Armyworm, Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly On Head Lettuce: Do refus On Head Lettuce: Do reach Do not feed crop refus Do not exceed a maxis	s severe in a application of 3 leads to livestor make in the tollivestor mum of 3 leads to livestor make in the tollivestor ma	njury is likely to occur. ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  ation per year. lb. active ingredient (i.e., 1½ lbs.) per acre per year.  Make applications when insects appear of feeding is noticed.  d 3 applications after thinning. Remove wrapper leaves at harvest. nore than 2 applications per year. bck. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  d 3 applications when insects appear or feeding is noticed.
LETTUCE (14) (California Only)  LETTUCE (14) (Except California)	Do not use on Baca Nor Concord varieties a Do not make more tha Do not exceed a maxis Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm  Do not make more tha Do not exceed a maxis Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly On Head Lettuce: Do On Leaf Lettuce: Do refus Do not exceed a maxis Armyworm, Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm, Leafhoppers, Whitefly On Head Lettuce: Do On Leaf Lettuce: Do Do not exceed a maxis Aphid, Cabbage Looper,	s severe in a application of 3 leads to live sto	ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  ation per year. lb. active ingredient (i.e., 1½ lbs.) per acre per year.  Make applications when insects appear of feeding is noticed.  d 3 applications after thinning. Remove wrapper leaves at harvest. nore than 2 applications per year.  ock. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  d 3 applications when insects appear or feeding is noticed.
LETTUCE (14) (California Only)  LETTUCE (14) (Except California)	Do not use on Baca Nor Concord varieties a Do not make more tha Do not exceed a maxis Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm  Do not make more tha Do not exceed a maxis Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly On Head Lettuce: Do On Leaf Lettuce: Do refus Do not exceed a maxis Armyworm, Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly On Head Lettuce: Do refus On Head Lettuce: Do reach Do not feed crop refus Do not exceed a maxis	s severe in a application of 3 leads to livestor make in the tollivestor mum of 3 leads to livestor make in the tollivestor ma	njury is likely to occur. ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  ation per year. lb. active ingredient (i.e., 1½ lbs.) per acre per year.  Make applications when insects appear of feeding is noticed.  d 3 applications after thinning. Remove wrapper leaves at harvest. nore than 2 applications per year. bck. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  d 3 applications when insects appear or feeding is noticed.
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LETTUCE (14) (California Only)  LETTUCE (14) (Except California)	Do not use on Baca Nor Concord varieties a Do not make more tha Do not exceed a maxin Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm Do not exceed a maxin Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly On Head Lettuce: Do not exceed a maxin Armyworm, Cabbage Looper, Diamondback Moth Larvae, Green Do not exceed a maxin Armyworm, Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm, Leafhoppers, Whitefly On Head Lettuce: Do not feed crop refused Do not exceed a maxin Aphid, Cabbage Looper, Diamondback Moth Larvae, Flea Beetle, Harlequin Bug, Imported Cabbageworm Cabbageworm	s severe in a application of 3 leads to livestor make in the tollivestor mum of 3 leads to livestor make in the tollivestor ma	njury is likely to occur. ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  ation per year. lb. active ingredient (i.e., 1½ lbs.) per acre per year.  Make applications when insects appear of feeding is noticed.  d 3 applications after thinning. Remove wrapper leaves at harvest. nore than 2 applications per year. bck. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  d 3 applications when insects appear or feeding is noticed.
LETTUCE (14) (California Only)  LETTUCE (14) (Except California)	Do not use on Baca Nor Concord varieties a Do not make more tha Do not exceed a maxis Cabbage Flea Beetle, Harlequin Bug, imported Cabbageworm  Do not make more tha Do not exceed a maxis Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm Whitefly On Head Lettuce: Do not feed crop refus Do not exceed a maxis Armyworm, Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm, Leafhoppers, Whitefly On Head Lettuce: Do not feed crop refus Do not exceed a maxis Armyworm, Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm, Leafhoppers, Whitefly On Head Lettuce: Do not feed crop refus Do not exceed a maxis Aphid, Cabbage Looper, Diamondback Moth Larvae, Flea Beetle, Harlequin Bug, Imported	s severe in a application of 3 leads to livestor make in the tollivestor mum of 3 leads to livestor make in the tollivestor ma	njury is likely to occur. ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  ation per year. lb. active ingredient (i.e., 1½ lbs.) per acre per year.  Make applications when insects appear of feeding is noticed.  d 3 applications after thinning. Remove wrapper leaves at harvest. nore than 2 applications per year. bck. bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.  d 3 applications when insects appear or feeding is noticed.

CROP	PEST	LBS./ ACRE	COMMENTS
MUSTARD GREENS (21) (Except California)	Aphid, Cabbage Looper, Diamondback Moth Larvae, Fall Armyworm, Flea Beetle, Harlequin Bug, Imported Cabbageworm, Leafhopper Whitefly	11/2-2	Make application when insects appear or feeding is noticed.
	<ul> <li>Do not make more that</li> <li>Do not exceed a maxi</li> </ul>	an 1 applicati mum of 1 lb,	on per year. active ingredient (i.e., 2 lbs.) per acre per year.
PEARS (7) (California Only)	Pear Psylla	5	Apply in a minimum of 10 gals, of water for aerial application or in 300 gals, of water for dilute application. Apply when adults are first observed or nymphs are small and repeat to maintain control.
	Pear Rust Mite, Consperse Stink Bug (foliar treatment)	4-5	(Or 1 lb. per 100 gals.) Make applications when insects appear or feeding is noticed. Stink bugs must be wet by spray to obtain control.
	Consperse Stink Bug (soil treatment)	1 per 100 gals.	200-400 gals. per acre. Apply to orchard floor and around trees prior to bloom.
	Pear Leaf Blister Mite	1/2-1 per 100 gals.	Apply as a post harvest or dormant treatment.
	Do not make more that     Do not exceed a maxis	in 2 applicati mum of 3 lbs	allow livestock to graze in treated orchards, on per year, active ingredient (i.e., 6 lbs.) per acre per year, esult in satisfactory control and should only be employed if impossible to apply
PEARS (7) (Except California)	Green Fruitworm, Tarnished Plant Bug	4-5	(Or 1 lb. per 100 gals.) Make applications at white bud or petal fall when insects appear or feeding is noticed.
(Except Gamerina)	Pear Psylla	5	Apply in a minimum of 20 gals, of water for aerial application or in 300 gals, of water for dilute application. Apply when adults are first observed or nymphs are small and repeat to maintain control.
	Pear Rust Mite, Consperse Stink Bug (foliar treatment)	4-5	(Or 1 lb. per 100 gals.) Make applications when insects appear or feeding is noticed. Stink bugs must be wet by spray to obtain control.
	Consperse Stink Bug (soil treatment)	1 per 100 gals.	200-400 gals, per acre. Apply to orchard floor and around trees prior to bloom.
	Pear Leaf Blister Mite	1/₂-1 per 100 gals.	Apply as a post harvest dormant treatment.
	Do not make more that     Do not exceed a maximum.	n 2 application of 3 lbs.	allow livestock to graze in treated orchards. on per year active ingredient (i.e., 6 lbs.) per acre per year. sult in satisfactory control and should only be employed if impossible to apply
PECANS (California Only)	Black Pecan Aphid, Pecan Nut Casebearer, Spittlebug	1½ per 100 gals.	Make applications when insects appear or feeding is noticed. For casebearer, apply when eggs of first generation appear on the tips of the young nuts. Another application may be required after the second generation of eggs are deposited. For spittlebug, apply when first leaves are half grown and repeat as required.
	Do not make more that	on orchard c n 2 applicatio	rops or grasses in treated areas.

CROP	PEST	LBS./ ACRE	COMMENTS				
PECANS (Except California)	Black Pecan Aphid, Pecan Nut Casebearer, Spittlebug	1½ per 100 gais	s. casebearer, apply when eggs of first generation appear on the tips of the young nuts. Another application may be required after the second				
	Pecan Leaf Phylloxera	1-1 ½ per 100 gals.	generation of eggs are deposited. For spittlebug, apply when first leaves at half grown and repeat as required.				
	Do not apply after shuck split.						
	_		d crops or grasses in treated areas.				
	Do not make more that						
DEDOCTOO (4)	Flea Beetle, Green Peach	num of 3 I	bs. active ingredient (i.e., 6 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.				
PEPPERS (1)	Aphid, Hornworm, Pepper Maggot						
	Do not make more that						
3537573 (1)			b. active ingredient (i.e., 2 lbs.) per acre per year.				
PEPPERS (4) (California Only)	Flea Beetle, Green Peach Aphid, Hornworm, Pepper Maggot	1-2	Make applications when insects appear or feeding is noticed.				
	Whitefly	2					
	Do not make more that     Do not exceed a maying						
PEPPERS (4)	Do not exceed a maxir     Armyworm, Flea Beetle,	num of 2 I 1-2	bs. active ingredient (i.e., 4 lbs.) per acre per year.  Make applications when insects appear or feeding is noticed.				
(Except California)	Green Peach Aphid, Hornworm, Leafhopper, Pepper Maggot	1-2	wake applications when insects appear of feeting is noticed.				
	Whitefly	2					
	Do not make more that		ations per year.				
			bs. active ingredient (i.e., 4 lbs.) per acre per year.				
PINEAPPLE (for Fresh	Pineapple Fruit Mite	3-4	Make applications when insects appear or feeding is noticed. Apply at				
Market Only) (7) Except California)			intervals of 7-10 days if necessary, particularly during the 40 day period of blooming.				
	Do not make more that	n 2 applica					
		num of 3 I	bs. active ingredient (i.e., 6 lbs.) per acre per year.				
PLUMS (7), PRUNES (7)	Fruittree Leafroller (Pacific Northwest Only)	4-5	(Or 1 lb. per 100 gals.) Apply during pre-pink stage of growth when insects appear or feeding is noticed.				
	Aphids (including Hop	4-5	(Or 1 lb. per 100 gals.) For control of aphids, apply when eggs hatch during				
	Aphid, Leafcurl Plum		prebloom or petal fall. Summer applications should be made before leaves				
	Aphid, Thistle Aphid), Plum Rust (Nursery) Mite		curl.				
	Peach Twig Borer	4-5	(Or 1 lb. per 100 gals.) Make applications when insects appear or feeding is				
	, sas. 1 mg 25.5.	4.0	noticed.				
	Lesser Peachtree Borer	4-5	(Or 1½ lbs. per 100 gals.) Best control is obtained with a single application				
			post-harvest in the first week of September. Spray all bark areas from ground				
	Peachtree Borer	4-5	level to lower scaffold limbs.  (Or 1½ lbs. per 100 gals.) West Coast: Use 1-1½ lbs. per 100 gals. or 4-5 lbs				
	reachtree Borei	4-5	per acre. Best control is obtained with a single application post-harvest in the first week of September. Spray all bark areas from ground level to lower scaffold limbs.				
	- Do not allow livesteels	o graze or	orchard crops or grasses in treated areas.				
	Do not allow livestock t		tions per year				
	Do not make more than						
	Do not make more than     Do not exceed a maxin		os. active ingredient (i.e., 6 lbs.) per acre per year.				
POTATOES (1)	Do not make more than						
POTATOES (1)	Do not make more than     Do not exceed a maxin     Aphids, Armyworm,     Colorado Potato Beetle,     Green Stink Bug,     Leaffootted Bug, Plant     Bug, Potato Flea Beetle,     Potato Leafhopper,	num of 3 lb	os. active ingredient (i.e., 6 lbs.) per acre per year.				
POTATOES (1)	Do not make more than     Do not exceed a maxin     Aphids, Armyworm,     Colorado Potato Beetle,     Green Stink Bug,     Leaffootted Bug, Plant     Bug, Potato Flea Beetle,     Potato Leafhopper,     Potato Tuberworm,	num of 3 lb	os. active ingredient (i.e., 6 lbs.) per acre per year.				
POTATOES (1)	Do not make more than     Do not exceed a maxin     Aphids, Armyworm,     Colorado Potato Beetle,     Green Stink Bug,     Leaffootted Bug, Plant     Bug, Potato Flea Beetle,     Potato Leafhopper,     Potato Tuberworm,     Threelined Potato Beetle	num of 3 lt	os. active ingredient (i.e., 6 lbs.) per acre per year.				
POTATOES (1)	Do not make more than     Do not exceed a maxin     Aphids, Armyworm,     Colorado Potato Beetle,     Green Stink Bug,     Leaffootted Bug, Plant     Bug, Potato Flea Beetle,     Potato Leafhopper,     Potato Tuberworm,     Threelined Potato Beetle     European Corn Borer,	num of 3 lb	os. active ingredient (i.e., 6 lbs.) per acre per year.				
POTATOES (1)	Do not make more than     Do not exceed a maxin     Aphids, Armyworm,     Colorado Potato Beetle,     Green Stink Bug,     Leaffootted Bug, Plant     Bug, Potato Flea Beetle,     Potato Leafhopper,     Potato Tuberworm,     Threelined Potato Beetle	num of 3 lt	os. active ingredient (i.e., 6 lbs.) per acre per year.				

CROP	PEST	LBS./ ACRE	COMMENTS			
SPINACH (21) (California Only)	Crown Mite, Flea Beetle, Green Peach Aphid, Whitefly	1½	Make application when insects appear or feeding is noticed.			
	Do not make more that	an 1 applica	tion per year.			
			p. active ingredient (i.e., 1½ lbs.) per acre per year.			
SPINACH (21) (Except California)	Armyworm, Crown Mite, Flea Beetle, Green Peach Aphid, Leafhoppers	11/2-2	Make application when insects appear or feeding is noticed.			
	Whitefly	2				
	<ul> <li>Do not make more that</li> </ul>					
		· · · · · · · · · · · · · · · · · · ·	active ingredient (i.e., 2 lbs.) per acre per year.			
STRÁWBERRIES (4)	Meadow Spittlebug, Strawberry Aphid, Tarnished Plant Bug, Whitefly	2	Make applications when insects appear or feeding is noticed.			
		15 days or r	nore than twice during a 35 day period when fruit is present.			
	Cyclamen Mite	4	Use per acre in 400 gals. Make applications when insects appear or feeding is noticed. Thoroughly wet the foliage, stem and crown of the plant. For multiple applications, do not apply at intervals less than 35 days when fruit is present.			
	<ul> <li>Do not make more that</li> </ul>					
			s, active ingredient (i.e., 6 lbs.) per acre per year.			
STRAWBERRIES (Northwest Use Only)	Garden Symphylan (aids in reducing damage)	2 per 100 gals.	Mix thoroughly. Dip entire plant. When immersing bundles of plants, make certain any trapped air is forced out to assure thorough wetting of entire plant. Drain and allow plants to dry before setting them out in the field.			
SWEET CORN (Fresh	Corn Leaf Aphid, Whitefly	2	Make applications when insects appear or feeding is noticed.			
Vegetable Use Only) (1) (Except California)	Corn Earworm	3	Apply when silks first appear and continue until they begin to dry. Allow 5 days between applications.			
	<ul> <li>Do not apply to sweet corn to be processed.</li> <li>Do not feed treated forage or ensilage to livestock or allow livestock to graze in treated fields.</li> <li>Do not make more than 3 applications per year.</li> </ul>					
			s. active ingredient (i.e., 6 lbs.) per acre per year.			
SWEET POTATOES (1) (California Only)	Sweet Potato Flea Beetle, Sweet Potato Weevil	1	Make applications when insects appear or feeding is noticed. For flea beetle control, begin applications shortly after transplanting or as soon as flea beetles appear. For sweet potato weevil control, apply in sufficient water for complete coverage. Applications may be made to transplants in the nursery and/or in the field. Repeat applications may be made as necessary.			
	Do not feed cull potatoes to livestock or allow livestock to graze in treated fields.					
	Do not make more that					
AMPER DATABLE AND			bs. active ingredient (i.e., 3 lbs.) per acre per year.			
SWEET POTATOES (1) (Except California)	Sweet Potato Flea Beetle, Sweet Potato Weevil	1	Make applications when insects appear or feeding is noticed. For flea beetle control, begin applications shortly after transplanting or as soon as flea beetles appear. For sweet potato weevil control, apply in sufficient water for complete coverage. Applications may be made to transplants in the nursery and/or in the field. Repeat applications may be made as necessary. For sweet potato weevil control in a clean up program, apply at a rate of 4 lbs. per acre to the soil under the sweet potato nursery beds and to the area immediately surrounding the nursery beds.			
		tubers direc	tiy on the ground treated with Endosulfan 50WSB.			
	Whitefly  Banded Cucumber Beetle Larvae (aids in control) (South Central States and Puerto Rico only)	2-4	Make applications when insects appear or feeding is noticed.  Use per acre broadcast or $\frac{2}{3}$ -1 $\frac{1}{3}$ lbs. per acre on a 16 inch band over the row (48 inch row spacing). Work into the soil to a depth of approximately 3 inches. Treatment should be made just prior to plant set.			
	<ul> <li>Do not feed cull potato</li> <li>Do not make more that</li> </ul>	n 3 applicat				
	<ul> <li>Do not exceed a maxir</li> </ul>	num of 3 lbs	s. active ingredient (i.e., 6 lbs.) per acre per year.			

CROP	PEST	LBS./ ACRE	COMMENTS		
TOBACCO (5) (Except California)	Aphids (including Green Peach Aphid, Tobacco Aphid), Budworm, Cabbage Looper, Flea Beetle, Hornworm	1 per 100 gals.	Seed Bed: Make applications when insects appear or feeding is noticed. Apply about 6 gals. of finished spray per 100 square yards.		
	Green June Bug Larvae	½ per 100 gals.	Plant Bed: Make applications when insects appear or feeding is noticed.  Drench at a rate of 1 gal. per square yard.		
	Aphids (including Green Peach Aphid, Tobacco Aphid), Budworm, Cabbage Looper, Flea Beetle, Green June Bug Larvae, Hornworm	1-2	Field: Make applications when insect activity or feeding is noticed.		
	Stink Bug	2-3 per 100 gals.			
	Do not make more tha     Do not exceed a maxing		ations per year. bs. active ingredient (i.e., 6 lbs.) per acre per year.		
TOMATOES (Field and Greenhouse) (2)	Aphid, Blister Beetle, Colorado Potato Beetle, Flea Beetle, Tomato Hornworm, Webworm (California Only) Cabbage Looper, Stink Bug	1-2	Make applications when insects appear or feeding is noticed.		
	Tomato Fruitworm, Tomato Russet Mite, Whitefly, Yellow Striped Armyworm	2	•		
	<ul> <li>Do not make more than 6 applications per year.</li> <li>Do not exceed a maximum of 3 lbs. active ingredient (i.e., 6 lbs.) per acre per year.</li> </ul>				
WALNUTS	Walnut Aphid     Do not apply after hush     Do not graze livestock     Do not make more tha	3-4 c spilt. on orchard n 2 applica	Make applications when insects appear or feeding is noticed.  d crops or grasses in treated areas.		

**ORNAMENTAL TREES AND SHRUBS** (Commercially Grown Outdoors Only)

	(Col	mmercian	y Grown Outdoors Only)		
CROP	PEST	LBS./	COMMENTS		
		100			
		GALS.			
LEATHERLEAF FERN	Leatherleaf Fern Borer	1	Begin treatment when first larval feeding is observed in the mid-vein area at		
(LEATHER HOLLY FERN)			the base of the leaflets. Repeat at intervals of 2-3 weeks as necessary.		
(Except California)	Do not exceed a maxis	mum of 3 I	bs. active ingredient (i.e., 6 lbs.) per acre per year.		
ORNAMENTALS	Aphid, Cyclamen Mite,	1	Make applications when insects appear or feeding is noticed. On		
	Rose Chafer, Whitefly	<u> </u>	chrysanthemums, best results will be obtained if applied before plants flower.		
	Do not apply to "Bonn;	afon Delux	e," "Fred Shoesmith," and "White Knight" chrysanthemums as injury may result.		
	Do not use on Birch tre				
	Do not exceed a maxir	mum of 3 li	bs. active ingredient (i.e., 6 lbs.) per acre per year.		
DOGWOOD, LILAC	Dogwood Borer, Lilac	1-2	Apply in early June and repeat in 10-14 days. Drench all bark areas down to		
(Except California)	Borer		the ground level.		
	Do not exceed a maxis	mum of 3 l	bs. active ingredient (i.e., 6 lbs.) per acre per year.		
DOUGLAS FIR (Grown for	Aphid, Cooley Spruce	1	Make applications when insects appear or feeding is noticed. For control of		
Ornamentals, Nursery Stock	Gall Adelgid, Douglas Fir		gall adelgid, apply when white cottony tufts appear. For control of needle		
or Christmas Trees)	Needle Midge		midge, apply in late April or early May just before buds open.		
(Pacific Northwest Only)	Do not exceed a maxir	mum of 3 I	bs. active ingredient (i.e., 6 lbs.) per acre per year.		
PINES (Austrian, Jack, Red,	Zimmerman Pine Moth	11/2	Apply in mid-April and again, if necessary in late fall. Thoroughly wet bark and		
Scotch, White)			main stem, especially where branches join main stem.		
(Except California)	Do not exceed a maximum of 3 lbs. active ingredient (i.e., 6 lbs.) per acre per year.				
SHADE TREES	Aphid	1	Make applications when insects appear or feeding is noticed.		
(Except Birch), SHRUBS	Do not exceed a maximum of 3 lbs. active ingredient (i.e., 6 lbs.) per acre per year.				
(Except California)					
SPRUCE	Spruce Gall Aphid	1	Apply in late April or early May when aphids are present but before galls are		
(New England Area Only)			formed.		
	Do not exceed a maximum of 3 lbs. active ingredient (i.e., 6 lbs.) per acre per year.				
TAXUS	Taxus Bud Mite	1	Make 3-5 applications beginning in mid-May. Thoroughly spray foliage, twigs,		
(Except California)		1 1	and bark.		
•	Black Vine Weevil	2	(Or 2 tablespoons per gal.) Spray thoroughly and drench soil under the plants.		
			Apply when the weevils first appear and repeat in 14 days.		
	Do not exceed a maxir	num of 3 II	bs. active ingredient (i.e., 6 lbs.) per acre per year.		

### STORAGE AND DISPOSAL

PESTICIDE STORAGE: Do not store in or around the home. Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal. In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills.

To confine spills: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

PESTICIDE 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: When all water soluble bags are used, the outer package should be clean and may be disposed of in a sanitary landfill, by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke. If the outer container contacts formulated product in any way, it must be triple rinsed with clean water. Add rinsate to the spray tank and dispose of the outer package as described above.

> FOR 24 HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL CHEMTREC® (800) 424-9300. For other product information, contact Gowan Company or see Material Safety Data Sheet.

#### NOTICE ON CONDITIONS OF SALE

Our recommendations for use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility including injury or damage, resulting from its misuse as such or in combination with other materials.

#### CALIFORNIA SUPPLEMENTAL LABEL

#### PROCEDURES FOR REDUCING RISK OF CONTAMINATION OF AQUATIC ECOSYSTEMS

FOR CROP USES LISTED ON THE PRODUCT LABEL: Endosulfan may be a source of contamination in aquatic ecosystems as a result of run-off from agricultural land due to discharge of irrigation water or during periods of heavy rainfall.

To minimize the chance of aquatic impact, the following conditions must be met to allow endosulfan applications:

DIRECTIONS FOR USE IN CALIFORNIA (General): IN ADDITION TO SPECIFIC INSTRUCTIONS UNDER DIRECTIONS FOR USE ON THE PRINCIPAL LABELS, THE FOLLOWING CONDITIONS MUST ALSO BE FOLLOWED FOR USE IN CALIFORNIA

- 1. Do not apply this product to fields during irrigation or irrigate for 72 hours following application.
- 2. Do not apply this product through any type of irrigation system.
- 3. Do not apply more than 1.5 lbs. per acre per application or more than 3.0 lbs. a.i. per acre per season. (Orchard crops and strawberries exempted on rate/acre/application restriction).
- 4. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.
- 5. Do not apply by ground or air within a distance of 300 feet to natural bodies of water including lakes, ponds, streams and estuaries.

#### FOR DRIFT CONTROL

- 1. All application equipment should be properly maintained and calibrated using appropriate carriers.
- 2. Do not make aerial or ground applications during temperature inversions.
- 3. Make aerial or ground applications when the wind velocity favors on-target product deposition (approximately 3-10 mph). Do not apply when wind velocity exceeds 10 mph. Do not discharge at a height of more than 10 feet above the crop or target.
- 4. For aerial application a positive shutoff system shall be in place to control flow of liquid to spray nozzles as follows: Each individual nozzle shall be equipped with a check valve and the flow controlled by a suckback device or a boom pressure release device; or each nozzle shall be equipped with a positive action valve.
- 5. For aerial applications, the spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip or rotor vortices. The working boom length must not exceed 75% of wing span or rotor diameter.
- 6. Aircraft boom pressure shall not exceed 40 pounds per square inch.
- 7. Aircraft nozzles shall be equipped with orifices directed backward parallel to the horizontal axis of the aircraft in flight.
- 8. Aircraft nozzies shall not be equipped with any device or mechanism which would cause a sheet, cone, fan or similar type dispersion of the discharged material except as otherwise provided.
- 9. Fixed wing aircraft and helicopters operating in excess of 60 mph shall be equipped with jet nozzles having an orifice not less than 1/16 inch in diameter (D-4 or larger).
- Helicopters operating at 60 mph or less shall be equipped with nozzles having an orifice not less than 1/16 inch in diameter. A number 46 or equivalent whirtplate may be used.
- 11. For ground applications, equipment other than handguns shall be equipped with nozzles having an orifice not less than 1/16 inch in diameter or larger. Boom nozzles shall be operated at a boom pressure not to exceed 30 lbs. per square inch.

#### ACCEPTABLE SITES FOR ENDOSULFAN APPLICATION

- FIELDS, WITH NO DRAINS, HAVING CONTAINMENT THROUGH BERMS (able to hold irrigation water and normal rainwater), LEVEES AND NON-DRAINING CIRCULATION SYSTEMS.
- FIELDS WITH DRAINS, BUT DRAINAGE FLOWS TO SUMP, FARM POND, EVAPORATION POND OR RECIRCULATION SYSTEM WITHOUT DRAINAGE (uncontrollable overflow acceptable, e.g., 10 or 100 year flood). Only grower maintained recirculation systems without drainage are acceptable.
- FIELDS WITH SURFACE DRAINS THAT NATURALLY FLOW ONTO PASTURELAND OR FALLOW FIELDS THAT HAVE NO CHANNELED DRAINAGE AND ARE AT LEAST 300 FEET LONG.

#### **UNACCEPTABLE SITES FOR ENDOSULFAN APPLICATION**

- FIELDS DRAINING DIRECTLY INTO SURFACE WATERS SUCH AS STREAMS, RIVERS, LAKES, PONDS, MARSHES, BAYS, ESTUARIES
  OR THE OCEAN.
- FIELDS DRAINING INTO SURFACE DRAINAGE DITCHES OR CANALS THAT FLOW DIRECTLY INTO SURFACE WATERS SUCH AS STREAMS, RIVERS, LAKES, PONDS, MARSHES, BAYS, ESTUARIES OR THE OCEAN.
- 3. ANY AND ALL FIELDS WITH SURFACE DRAINAGE PATTERNS IN THE MOSS LANDING DRAINAGE SYSTEM HAVING MAIN ARTERIES THAT DRAIN INTO THE ELKHORN SLOUGH (northern portion of Monterey Country).
- 4. ANY AND ALL FIELDS WITH DRAINAGE PATTERNS IN THE SAN DIEGO CREEK DRAINAGE SYSTEM HAVING MAIN ARTERIES THAT DRAIN INTO NEWPORT BAY.