



DANGER—POISON—PRECAUTIONS

CAN KILL YOU IF SWALLOWED

This product can kill you if swallowed even in small amounts: spray mist or dust may be fatal if swallowed.

CAN KILL YOU BY SKIN CONTACT

This product can kill you if touched by hands or spilled or splashed on skin, in eyes or on clothing (liquid goes through clothes).

CAN KILL YOU IF BREATHED

This product can kill you if vapors, spray mist or dust are breathed.

POISONOUS TO FISH AND WILDLIFE

This product is toxic to fish and wildlife. Birds and other wildlife in treated areas may be killed. Keep out of any body of water. Do not apply when weather conditions favor drift from treated areas. Do not apply where runoff is likely to occur.

EPA Reg. No. 524-132

USE ONLY WHEN WEARING THE FOLLOWING PROTECTIVE EQUIPMENT AND CLOTHING

- (1) Wear water-proof pants, coat, hat, rubber boots or rubber overshoes.
- (2) Wear safety goggles.
- (3) Wear mask or respirator approved by the U.S. Bureau of Mines for parathion protection.
- (4) Wear heavy duty, natural rubber gloves.

WORK SAFETY RULES

Keep all unprotected persons and children away from treated area or where there is danger of drift.

Do not rub eyes or mouth with hands. If you feel sick in any way, STOP work and get help right away. Call a doctor (physician), clinic or hospital—immediately. Explain that the victim has been exposed to parathion and describe his condition. After first aid is given (see First Aid Treatment Section) and if a doctor cannot come, take victim to clinic or hospital.

IMPORTANT! Before removing gloves, wash them with soap and water. Always wash hands, face and arms with soap and water before smoking, eating or drinking.

AFTER WORK, take off all work clothes and shoes. Shower, using soap and water. Wear only clean clothes when leaving job. Do not wear contaminated clothing. Wash protective clothing and protective equipment with soap and water after each use. Respirator should be cleaned and filter replaced according to instructions included with respirator.

STOP! READ THE LABEL

POISON
See side panel for symbols and precautions



CAN KILL YOU

DANGER
Keep out of reach of children

PARATHION INSECTICIDE

Niran E-4

BY **Monsanto**

NOT FOR HOME USE

ACTIVE INGREDIENT:

*Parathion: O,O-diethyl O-p-nitrophenyl phosphorothioate	45.1%
Aromatic petroleum derivative solvent	49.4%
INERT INGREDIENTS:	5.5%
	<u>100.0%</u>

*Equivalent to 4.0 lbs. of 100% parathion per gallon.

NET 55 U.S. GAL.

ABEL



OU

CIDE



BY **Monsanto**

E USE

DANGER
Keep out of reach
of children

☠ POISON SIGNS (Symptoms)

Parathion is a very dangerous poison. It rapidly enters the body on contact with all skin surfaces and eyes. Clothing wet with this material must be removed immediately. Exposed persons must receive prompt medical treatment or they may die.

Some of the signs and symptoms of poisoning are: Headache, nausea, vomiting, cramps, weakness, blurred vision, pin-point pupils, tightness in chest, labored breathing, nervousness, sweating, watering of eyes, drooling or frothing of mouth and nose, muscle spasms and coma.

✚ FIRST AID TREATMENT ✚

Call a doctor (physician), clinic or hospital immediately. Explain that the victim has been exposed to parathion and describe his condition.

If breathing has stopped, start artificial respiration immediately and maintain until doctor sees victim. If swallowed and victim is awake (conscious) make him vomit quickly. Induce vomiting by sticking finger down throat or by giving soapy or strong salty water to drink. Repeat until vomit is clear. Never give anything by mouth to an unconscious person. Have victim lie down and keep quiet. See doctor immediately.

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. See doctor immediately.

NOTE TO PHYSICIAN

Antidote—administer atropine sulfate in large doses, TWO TO FOUR mg. intravenously or intramuscularly as soon as cyanosis is overcome. Repeat at 5 to 10 minute intervals until signs of atropinization appear. 2-PAM chloride is also antidotal and may be administered in conjunction with atropine. DO NOT GIVE MORPHINE OR TRANQUILIZERS. Parathion is a strong cholinesterase inhibitor affecting the central and peripheral nervous systems and producing cardiac and respiratory depression. At first sign of pulmonary edema, the patient should be given supplemental oxygen and treated symptomatically. Continued absorption of the poison may occur and fatal relapses have been reported after initial improve-

POST TREATED AREA

Consult your State Agricultural Extension Service or Experiment Station regarding posting treated areas.

CONTAINER DISPOSAL

See attached booklet for proper disposal.

CROP USE DIRECTIONS

Use only according to attached label booklet instructions.

CONDITIONS OF SALE

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using.
If terms are not acceptable, return at once unopened!

IN CASE OF ANY EVIDENCE OF DAMAGED OR LEAKING CONTAINERS,
TELEPHONE COLLECT, (205) 236-6381 MONSANTO, ANNISTON, ALABAMA.

MONSANTO COMPANY

AGRICULTURAL DIVISION

ST. LOUIS, MISSOURI, 63166 U.S.A.

WARNING
KEEP AWAY from FEED or FOOD PRODUCTS
POISON
CAUTION-DO NOT DROP
IF LEAKING **DON'T** BREATHE FUMES
TOUCH CONTENTS SWALLOW

This is to certify that the contents of this package are properly described by name and are packed and marked and are in proper condition for transportation according to the Regulations prescribed by the Department of Transportation.

MONSANTO COMPANY
Shipper's name required hereon for ship.

Niran

E-4

INSECTICIDE BY **Monsanto.**

**Emulsifiable insecticide for
controlling certain insects
on the listed field, forage,
fruit and vegetable crops.**

NOT FOR HOME USE

Complete Directions for Use

EPA Reg. No. 524-132

Use only according to these label instructions.

READ "LIMIT OF WARRANTY AND LIABILITY" BEFORE BUYING OR USING. IF TERMS ARE NOT ACCEPTABLE RETURN AT ONCE UNOPENED.

RESEALABLE BAG



Pull flaps apart to open.

Press along ridge to close.



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LIMIT OF WARRANTY AND LIABILITY

Monsanto Company warrants that this material conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the directions for use. This product is sold subject to the understanding that the buyer assumes all risks of use or handling which may result in loss or damage which are beyond the control of the seller, such as for example incompatibility with other products, the manner of its use or application, or the presence of other products or materials in or on the soil or crop. **MONSANTO MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY.** The exclusive remedy of the user or buyer and the limit of the liability of Monsanto Company or any other seller for any and all losses, injuries or damages resulting from the use or handling of this product shall be the purchase price paid by the user or buyer for the quantity of this product involved. The buyer and all users are deemed to have accepted the terms of this notice which may not be varied by any verbal or written agreement.



STOP! READ THE LABEL

DANGER! POISON
 Keep Out of Reach of Children



CAN KILL YOU

ACTIVE INGREDIENTS:

*Parathion: O,O-diethyl O-p-nitrophenyl phosphorothioate	45.1%
Aromatic petroleum derivative solvent	49.4%

INERT INGREDIENTS:	5.5%
	100.0%

*Equivalent to 4.0 lbs. of 100% parathion per gallon

Combustible: Do not store or use near heat or open flame. In case of fire, use water spray, foam, dry chemical or CO₂

CAN KILL YOU BY SKIN CONTACT

This product can kill you if touched by hands or spilled or splashed on skin, in eyes or on clothing (liquid goes through clothes).



DO NOT TOUCH

CAN KILL YOU IF BREATHED

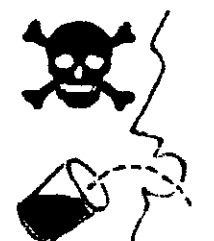
This product can kill you if vapors, spray mist or dust are breathed.



DO NOT BREATHE

CAN KILL YOU IF SWALLOWED

This product can kill you if swallowed even in small amounts. Spray mist or dust may be fatal if swallowed.



DO NOT SWALLOW

POISONOUS TO FISH AND WILDLIFE

This product is toxic to fish and wildlife. Birds and other wildlife in treated areas may be killed. Keep out of any body of water. Do not apply when weather conditions favor drift from treated areas. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning equipment or disposal of wastes.

DISPOSAL OF EMPTY CONTAINER—Do not re-use this container. Completely empty the contents and bury the unused chemical at least 18 inches deep in an isolated location away from water supplies. Rinse out the inside of the container with water to which has been added detergent and caustic soda. Carefully discard the rinse solution by burying at least 18 inches deep in an isolated area away from water supplies. Puncture and crush empty metal container and bury at least 18 inches deep in a supervised public or private dump.

USE ONLY WHEN WEARING THE FOLLOWING PROTECTIVE EQUIPMENT AND CLOTHING

(1) Wear water-proof pants, coat, hat, rubber boots or rubber overshoes. (2) Wear safety goggles. (3) Wear mask or respirator approved by the U.S. Bureau of Mines for parathion protection. (4) Wear heavy duty, natural rubber gloves.

WORK SAFETY RULES

Keep all unprotected persons and children away from treated area or where there is danger of drift.

Do not rub eyes or mouth with hands. If you feel sick in any way, STOP work and get help right away. Call a doctor (physician), clinic or hospital—immediately. Explain that the victim has been exposed to parathion and describe his condition. After first aid is given (see First Aid Treatment Section) and if a doctor cannot come, take victim to clinic or hospital.

IMPORTANT! Before removing gloves, wash them with soap and water. Always wash hands, face and arms with soap and water before smoking, eating or drinking.

AFTER WORK, take off all work clothes and shoes. Shower, using soap and water. Wear only clean clothes when leaving job. Do not wear contaminated clothing. Wash protective clothing and protective equipment with soap and water after each use. Respirator should be cleaned and filter replaced according to instructions included with respirator.

 POISON SIGNS (Symptoms)

Parathion is a very dangerous poison. It rapidly enters the body on contact with all skin surfaces and eyes. Clothing wet with this material must be removed immediately. Exposed persons must receive prompt medical treatment or they may die.

Some of the signs and symptoms of poisoning are: Headache, nausea, vomiting, cramps, weakness, blurred vision, pin-point pupils, tightness in chest, labored breathing, nervousness, sweating, watering of eyes, drooling or frothing of mouth and nose, muscle spasms and coma.

✚ FIRST AID TREATMENT ✚

Call a doctor (physician), clinic or hospital immediately. Explain that the victim has been exposed to parathion and describe his condition.

If **breathing has stopped**, start artificial respiration immediately and maintain until doctor sees victim.

If **swallowed** and victim is awake (conscious) make him vomit quickly. Induce vomiting by sticking finger down throat or by giving soapy or strong salty water to drink. Repeat until vomit is clear. **Never give anything by mouth to an unconscious person.** Have victim lie down and keep quiet. See doctor immediately.

In case of **contact**, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. See doctor immediately.

ATROPINE IS AN ANTIDOTE.

CONSULT PHYSICIAN FOR EMERGENCY SUPPLY.

If symptoms or signs of poisoning include blurred vision, abdominal cramps, and tightness in the chest, do not wait for a doctor but give two atropine tablets (each 1/100 grain or 0.65 milligrams) at once. (One tablet to children under five years of age.)

NOTE TO PHYSICIAN

Antidote—administer atropine sulfate in large doses. TWO to FOUR mg. intravenously or intramuscularly as soon as cyanosis is overcome. Repeat at 5 to 10 minute intervals until signs of atropinization appear. 2-PAM chloride is also antidotal and may be administered in conjunction with atropine. **DO NOT GIVE MORPHINE OR TRANQUILIZERS.** Parathion is a strong cholinesterase inhibitor affecting the central and peripheral nervous systems and producing cardiac and respiratory depression. At first sign of pulmonary edema, the patient should be given supplemental oxygen and treated symptomatically. Continued absorption of the poison may occur and fatal relapses have been reported after initial improvement. **VERY CLOSE SUPERVISION OF THE PATIENT IS INDICATED FOR AT LEAST 48 HOURS.**

POST TREATED AREA

Consult your State Agricultural Extension Service or Experiment Station regarding posting treated areas

TO PREVENT PERSONAL INJURY AND POSSIBLE FATALITIES:

Keep all persons and animals out of treated areas for 48 hours.

Vacated areas should not be re-entered until drifting insecticide and volatile residues have dissipated.

Do not use in any manner other than recommended on this label.

To avoid excessive residues of parathion on food or forage crops, always observe the statements found under "Directions for Use," limiting the time before harvest when parathion may be applied.

If handled indoors, provide mechanical exhaust ventilation.

Do not apply or allow drift to areas occupied by unprotected humans or beneficial animals.

Do not use or store in or around the home. Keep out of reach of children and domestic animals. Do not store near food or feed products. Bury spillage; clean up area with strong lye solution.

This product is highly toxic to bees exposed to direct treatment or residues on crops. Protective information may be obtained from your Cooperative Agricultural Extension Service.

DIRECTIONS FOR USE

Be sure to read the precautionary statements before using!

This product is designed for application after dilution with water and for use by trained operators using airplane or power ground equipment. The hazards and precautions for handling the product in this container are equally applicable to it after dilution with water for spray application. Add the concentrate to the spray tank while filling with water, and mix thoroughly either by means of a tank agitator or pump by-pass. For best results, thoroughly cover all surfaces to be treated with spray. Rates of application given below should not be exceeded. Never apply later than indicated to assure residue levels at harvest are below tolerances established by the Food and Drug Administration.

Consult the State Agricultural Extension Service or Experiment Station for specific recommendations regarding application, dosage and timing of sprays. For application by ground equipment, add the desired amount of concentrate to sufficient water to apply at least 3 gallons of water per acre. For application by aircraft, add the amount of concentrate desired per acre to 1/2 to 3 gallons of water consistent with crop growth and good coverage. Greater quantities of water may be required to give sufficient coverage of orchard trees.

FRUIT

DO NOT USE TREATED CITRUS PEEL FOR FOOD PURPOSES.

CITRUS (California)—Grapefruits, Kumquats, Lemons, Limes, Oranges, Tangeloes and Tangerines.

Scales—For purple, black, brown soft, California red, citricola, cottony-cushion and yellow scales, use $\frac{1}{2}$ to $\frac{3}{4}$ pint in 100 gallons of water applied at petal fall to prevent fruit scattering.

Other insects—Use 1 to 2 quarts in 100 gallons of water for control of the following additional insects infesting citrus: climbing cutworms, fruit tree leaf rollers, halyds, omnivorous leaf rollers, Fuller rose beetles, pink scavenger caterpillars, orange tortrix, orangeworms and Western tussock moths. Do not use more than 2½ gallons of this product per acre up to 30 days of harvest. Do not use more than 1 gallon of this product per acre from 30 days up to 15 days of harvest. Consult agricultural experimental authorities for specific recommendations in your area.

CITRUS (Areas other than California)—Grapefruits, Kumquats, Lemons, Limes, Oranges, Tangeloes and Tangerines.

Treat for mealybugs, chaff, cottony cushion, Glover's, purple, Florida red, yellow, snow scales, aphids, orange dog and plant bugs, using $\frac{1}{2}$ to $\frac{3}{4}$ pint in 100 gallons of water. For control of mites and whiteflies,

use $\frac{1}{2}$ to $\frac{3}{4}$ pint with 1 gallon of emulsive oil concentrate in 100 gallons of water. For controlling grasshoppers, use 1 pint per acre. Thorough coverage is essential for best results. Do not use more than 2½ gallons of this product per acre up to 30 days of harvest. Do not use more than 1 gallon of this product per acre from 30 days up to 15 days of harvest.

DO NOT APPLY TO CURRANTS AND FIGS WITHIN 30 DAYS OF HARVEST.

CURRANTS—For control of currant aphids, use $\frac{1}{2}$ to 1½ pints per acre. For control of two-spotted spider mites, use 1 to 1½ pints per acre. For currant borers, use 1½ pints per acre.

FIGS—For two-spotted and Pacific mites, use $\frac{1}{2}$ to 1 pint per 100 gallons of water. For fig scales, use 1 pint per 100 gallons of water. Do not use more than 2½ quarts of this product per acre.

DO NOT APPLY TO AVOCADO WITHIN 21 DAYS OF HARVEST.

AVOCADO—To control banded cucumber beetles, grasshoppers, citrus root weevils, red-banded thrips, avocado lace bugs, pyriform scales, webbing worms, blossom anomala, little fire ants, greenhouse thrips and tortrixids, use $\frac{1}{2}$ pint in 100 gallons of water. To

control whiteflies, use $\frac{1}{2}$ pint with 1 gallon of emulsive oil concentrate in 100 gallons of water. To control Florida red scales, Florida wax scales, dictyospermum scales and avocado leafhoppers, use $\frac{1}{2}$ pint in 100 gallons of water. To control pumpkin bugs and mealybugs, use $\frac{1}{2}$ to $\frac{3}{4}$ pint in 100 gallons of water. To control lalanis scales, use $\frac{3}{4}$ pint in 100 gallons of water. Do not use more than $2\frac{1}{2}$ quarts of this product per acre.

DO NOT APPLY TO THE FRUITS LISTED BELOW WITHIN 15 DAYS OF HARVEST.

CANEBERRIES (Raspberries, Loganberries, Boysenberries and Blackberries) — For control of two-spotted spider mites, use $\frac{3}{4}$ pint per acre. For control of obscure and woods weevils, use at 1 quart per acre as a post harvest application to the soil or ground cover over roots of plants. For crown borers, use at 1 quart per acre but apply to crown area and lower canes.

CRANBERRIES — For control of fireworms, fruitworms, tipworms and lecanium scales, use $1\frac{1}{2}$ pints per acre.

GOOSEBERRIES — For control of currant aphids, use $\frac{1}{2}$ to $1\frac{1}{2}$ pints per acre. For control of two-spotted spider mites, use 1 to $1\frac{1}{2}$ pints per acre. For currant borers, use $1\frac{1}{2}$ pints per acre.

DO NOT APPLY TO THE FRUITS LISTED BELOW WITHIN 14 DAYS OF HARVEST.

APPLES — For control of European sawflies, San Jose, Forbes or scurfy scales, mealybugs, European red and two-spotted mites, bagworms, Japanese beetles, shot-hole borers, orange tortrix and apple lace bugs, dilute $\frac{1}{2}$ pint in 100 gallons of water and spray to cover foliage thoroughly. For codling moths, use $\frac{1}{2}$ pint in 100 gallons of water. 3 to 4 applications, 10 to 14 days apart, starting 10 to 14 days after petal fall; for second and third broods, spray 1 to 3 times at 10 to 14 day intervals. For fruit tree leaf rollers, use $\frac{1}{2}$ pint per 100 gallons of water at petal fall and for red-banded leaf rollers, apply $\frac{1}{2}$ pint per 100 gallons of water at petal fall and at first, fifth and sixth cover spray. For plum curculio, apply at $\frac{1}{2}$ pint per 100 gallons of water at petal fall and 1 or 2 additional times each 7 to 10 days apart. For grasshoppers, use $\frac{3}{4}$ pint in 100 gallons. For the following insects, $\frac{3}{4}$ pint per 100 gallons of water is adequate: bud moths, clover, Pacific, Willamette or Schoenii mites, flea weevils, rosy, woolly and green apple aphids, leafhoppers, leaf miners, and red bugs. Certain insects, such as two-spotted and Willamette mites, may require repeat treatments at 7 to 10 day intervals during the summer months. Parathion sprays may injure the foliage and fruit of McIntosh apples and related varieties, such as Cortland, Kendall, Macoun, Melba, etc., and Golden De-

licious or Jonathan. Consult the State Agricultural Extension Service or Experiment Station for advice on possibility of injury and safening the spray by using activated carbon. Do not use more than 1½ gallons of this product per acre.

APRICOTS—To control aphids, mites, bud moths, peach tree borers, Japanese beetles and leaf rollers, use ¾ pint per 100 gallons of water. Control of codling moths, lesser peach tree borers, grasshoppers, and tortrix requires ½ to ¾ pint per 100 gallons. To control Oriental fruit moths, use ½ to ¾ pint per 100 gallons of water at shuck split, 10 to 12 days later and if needed 6 and 3 weeks before harvest. For peach tree borers and lesser peach tree borers, apply 2 or 3 sprays to trunk from ground to scaffold limbs timed with moth emergence. Use ¾ pint in 100 gallons of water for control of Pandemis moths. Avoid injury to bees by delaying spray till after full bloom. Do not use more than 3½ quarts of this product per acre.

BLUEBERRIES—For thrips, maggots, curculio and tree borers, use ½ pint in 100 gallons of water. For Lecanium scales, use 1 pint per 100 gallons of water. Use before fruit sets or after harvest. Use from 100 to 300 gallons of diluted spray per acre, but do not apply more than 1½ pints of this product to one acre of blueberries at any application.

CHERRIES—For aphids and mites, mix ¾ pint in 100 gallons of water. For sawflies, use ¾ to 1 pint in 100 gallons of water. Use ½ pint per 100 gallons for thrips, cherry fruitworms, pear slugs, Pandemis moths, bud moths, cankerworms, rose chafers, San Jose scale crawlers, fruit flies and tortrix. For fruit tree leaf rollers, use ½ pint per 100 gallons of water at petal fall or shuck split; for plum curculio, use ½ pint per 100 gallons of water, 2 or 3 applications, 8 to 10 days apart, beginning at petal fall or shuck split; for Oriental fruit moths, use ½ pint in 100 gallons of water at shuck split and 10 to 12 days later. For Japanese beetles, use ¾ to 1 pint per 100 gallons. Do not use more than 2½ quarts of this product per acre.

GRAPES—For mites, aphids, mealybugs and cherry moths, use ¾ pint per 100 gallons of water. For leaf rollers, Japanese beetles and leaf folders, use ½ pint per 100 gallons of water. For false chinch bugs, use 1 pint in 100 gallons of water per acre by ground equipment or in 10 gallons of water by aircraft. For consperse stink bugs, use 1½ quarts per acre. For grape leafhoppers, use 1½ to 2½ quarts per acre. For black vine weevils, use 2½ quarts per acre. Do not use more than 1½ quarts of this product per acre after the fruit is the size of buckshot. Use 300 to 400 gallons of water per acre depending on age of vineyard and stage of plant growth.

PEACHES AND NECTARINES—Areas other than California—For control of leaf miners, aphids, leaf rollers, grasshoppers, scales, mealybugs, and certain mites, use the dosage described for those insects on apples. For pear psylla, use ¼ pint per 100 gallons of water. For pear blister mites, pear slugs, green fruitworms and plant bugs, use ½ pint per 100 gallons of water. For codling moths, use ½ pint in 100 gallons of water in 2 to 4 cover sprays, beginning with the first cover. For plum curculio, apply ½ pint in 100 gallons of water at petal fall and 10 days later. Some injury may occur on Bosc peaches, under some conditions. Do not use more than 3¼ quarts of this product per acre.

PEACHES AND NECTARINES (California)—Use as shown for other areas except do not apply within 21 days of harvest. Do not apply more than once after bloom. Do not apply more than 2½ quarts of this product per acre at any application and do not use more than 5 quarts per acre between January 1 and harvest.

PEARS—For control of leaf miners, aphids, leaf rollers, grasshoppers, scales, mealybugs and certain mites, use the dosage described for those insects on apples. For pear psylla, use ¼ pint per 100 gallons of water. For pear blister mites, pear slugs, green fruitworms and plant bugs, use ½ pint per 100 gallons of water. For codling moths, use ½ pint in 100 gallons of water in 2 to 4 cover sprays, beginning with the first cover. For plum curculio, apply ½ pint in 100 gallons of water at petal fall and 10 days later. Some injury may occur on Bosc pears, under some conditions. Do not use more than 3¼ quarts of this product per acre.

PLUMS AND PRUNES—Apply ½ to ¾ pint per 100 gallons of water for control of these insects: pear thrips, flower thrips, mites, aphids, leafhoppers, leaf rollers, peach tree borers, shot-hole borers, bud moths, tortrix, mealy plum lice and scales. Apply scale treatment when crawlers emerge. For plum curculio make 3 to 4 applications, beginning at petal fall, at rate of ½ pint in 100 gallons of water. For codling moths, use ½ to 1 pint per 100 gallons of water at petal fall and a summer application timed with moth emergence. For peach twig borers, use 1 pint per 100 gallons of water. Do not use more than 4 quarts of this product per acre.

STRAWBERRIES—To control flower thrips, crickets, flea beetles, red spider mites, aphids, Lygus bugs, leafhoppers, whiteflies and leaf rollers, use $\frac{1}{2}$ to 1 pint in 100 to 150 gallons of water per acre. To control weevils, crown borers and strawberry leaf beetles, use $\frac{3}{4}$ pint in 100 to 150 gallons of water per acre. As a foliar treatment, do not use more than $1\frac{1}{2}$ pints of this product per acre. To control garden symphylans, use 5 quarts in 40 gallons of water per acre as a preplant soil treatment.

**DO NOT APPLY TO THE FRUITS LISTED
BELOW WITHIN 7 DAYS OF HARVEST**

PINEAPPLES—For control of crickets and mealybugs, use $\frac{1}{2}$ pint per 100 gallons of water, and apply 300 gallons of spray per acre.

**DO NOT USE PARATHION ON OLIVES AFTER
AUGUST 1.**

OLIVES—For black, oleander and parlatoria scales, use 1 pint in $1\frac{1}{2}$ gallons light-medium grade summer oil emulsion, or 1 gallon light-medium grade summer emulsive oil in 100 gallons of water, post-bloom

NUTS

**DO NOT APPLY AFTER HULLS OR HUSKS
BEGIN TO OPEN. DO NOT FEED TREATED
HULLS OR HUSKS TO LIVESTOCK.**

ALMONDS—To control fruit tree leaf rollers, tent caterpillars and peach twig borers, use 1 pint per 100 gallons of water. As a dormant spray for parlatoria and San Jose scales, use 1 pint with 3 gallons dormant oil emulsion or $2\frac{1}{2}$ gallons dormant emulsive oil in 100 gallons of water. Do not use more than 3 quarts of this product per acre.

FILBERTS—For apple mealybugs, filbert aphids, bud moths and spider mites, use $\frac{1}{2}$ pint per 100 gallons of water. Do not use more than 3 quarts of this product per acre.

PECANS—For control of aphids, use $\frac{1}{2}$ to $\frac{3}{4}$ pint in 100 gallons of water. To control mites, pecan nut casebearers and pecan leaf casebearers, use $\frac{3}{4}$ pint in 100 gallons of water. To control black and yellow pecan aphids, fall webworms and twig girdlers, use 1 quart per 100 gallons of water. Do not use more than $5\frac{1}{2}$ quarts of this product per acre.

WALNUTS—To control aphids, pecanium scales and walnut husk flies, use $\frac{1}{2}$ pint in 100 gallons of water. Do not use more than $2\frac{1}{2}$ gallons of this product per acre.

VEGETABLES

DO NOT APPLY WITHIN 21 DAYS OF HARVEST ON THE FOLLOWING CROPS UNLESS OTHERWISE SPECIFIED.

CELERY—To control aphids, mites, celery worms and tarnished plant bugs, use 1 pint per acre. To control leaf miners, whiteflies and leafhoppers, use 1½ pints per acre, but do not use within 30 days of harvest.

ENDIVE—To control green peach aphids and alfalfa loopers, use 1 pint per acre.

LETTUCE (Leaf and Bibb)—For aphids, armyworms up to third instar, cabbage loopers, imported cabbageworms, banded cucumber beetles, and Lygus bugs, use ½ to 1 pint per acre. To control six-spotted leafhoppers, use ¾ pint per acre. For harlequin bugs and vegetable weevils, use 1 pint per acre. At the ½ pint rate, harvest can be made within 14 days of application.

OKRA—To control leaf miners and spider mites, use ¼ to 1 pint per acre. For aphids and stink bugs, use 1 pint per acre.

SWISS CHARD—To control aphids and serpentine leaf miners, use 1 pint per acre.

DO NOT APPLY WITHIN 15 DAYS OF HARVEST ON THE FOLLOWING CROPS UNLESS OTHERWISE SPECIFIED.

BEANS—For control of bean leaf beetles and two spotted mites, use ½ pint per acre. Use ½ to ¾ pint per acre to control thrips and lima pod borers. To control stink bugs, plant bugs, Mexican bean beetles, leaf rollers, leaf miners, leafhoppers, aphids, red spider mites and armyworms up to third instar, use 1 pint per acre.

BEETS—To control flea beetles and leaf miners, use ½ pint per acre. For aphids, blister beetles and webworms, use 1 pint per acre. If greens are used for food, do not use within 21 days of harvest.

BLACKEYED PEAS—To control aphids, leaf miners, bean leaf rollers and stink bugs, use 1 pint per acre.

CARROTS—To control leaf miners, use ½ to ¾ pint per acre. To control leafhoppers, use ¾ pint per acre. Use 1 pint per acre to control aphids, vegetable weevils, stink bugs and petrobia mites. To control rust fly maggots (first brood), mix 1 pint with 100 gallons per acre and dribble into furrow at planting time. To control rust fly maggots (second brood), use 1 pint per acre as a foliage spray. Do not feed tops.

CUCUMBERS—For squash vine borers, aphids, cucumber beetles, leaf miners, pickleworms, mites and thrips, use ½ to 1 pint per acre. For squash bugs, stink bugs, flea beetles and leafhoppers, use 1 pint per acre. Do not apply prior to vining.

EGGPLANT—To control thrips, leaf miners, blister beetles, and flea beetles, use $\frac{1}{2}$ to $\frac{3}{4}$ pint per acre. To control Colorado potato beetles, use $\frac{3}{4}$ pint per acre. To control spider mites and lace bugs, use $\frac{1}{2}$ to 1 pint per acre. To control aphids, whiteflies and stink bugs, use 1 pint per acre.

GARLIC—To control onion thrips, use $\frac{1}{2}$ pint per acre. To control leaf miners and petrobia mites, use 1 pint per acre.

ONIONS—To control onion thrips, use $\frac{1}{2}$ pint per acre. To control onion maggot flies, use $\frac{1}{2}$ pint per acre. To control aphids, stink bugs, leaf miners, and petrobia mites, use 1 pint per acre. To control brown wheat mites, use $1\frac{1}{2}$ pints per acre.

PEPPERS—To control thrips, use $\frac{7}{16}$ to $\frac{1}{2}$ pint per acre. To control aphids, leaf miners and western potato flea beetles, use 1 pint per acre.

RADISHES—To control aphids, false chinch bugs and harlequin bugs, use $\frac{1}{2}$ to 1 pint per acre. To control cabbage loopers and diamondback moths, use 1 pint per acre.

SPINACH—To control aphids, leaf miners, army worms up to third instar, cabbage loopers, vegetable weevils, harlequin bugs, seed corn maggots, crown mites and leafhoppers, use 1 pint per acre.

SQUASH—To control cucumber beetles, aphids, stink bugs, melonworms, pickleworms, climbing cutworm, serpentine leaf miners and squash vine borers, use $\frac{1}{2}$ to 1 pint per acre. To control squash bugs, flea beetles and leafhoppers, use 1 pint per acre.

SWEET POTATOES—To control aphids, spider mites, leafhoppers and stink bugs, use 1 pint per acre. To control serpentine leaf miners and morning glory leaf miners, use 1 to $1\frac{1}{2}$ pints per acre.

DO NOT APPLY WITHIN 12 DAYS OF HARVEST ON THE FOLLOWING CROPS.

SWEET CORN—To control corn earworms feeding in the bud, fall armyworms, aphids and silkflies, use $\frac{1}{2}$ pint per acre. To control sap beetles and spider mites, use 1 pint per acre. To control chinch bugs, use $1\frac{1}{2}$ pints per acre.

DO NOT APPLY WITHIN 10 DAYS OF HARVEST ON THE FOLLOWING CROPS UNLESS OTHERWISE SPECIFIED.

PEAS—To control aphids, pea weevils, spider mites, stink bugs, thrips, armyworms up to third instar, climbing cutworms, leaf miners, alfalfa loopers and celery loopers, use 1 pint per acre. If vines are to be used for forage, do not harvest for 15 days after treatment.

PUMPKINS—To control aphids, cucumber beetles, climbing cutworms, squash bugs and squash vine borers, use $\frac{1}{2}$ to 1 pint per acre.

COLLARDS, KALE AND MUSTARD GREENS—To control aphids, leaf miners, armyworms up to third instar, cabbage loopers, vegetable weevils, harlequin bugs, seed corn maggots, crown mites and leafhoppers, use 1 pint per acre. On fall and winter crops, do not use within 15 days of harvest.

TOMATOES—To control blister beetles, use $\frac{1}{2}$ pint per acre. To control hornworms, leafhoppers and psyllids, use $\frac{1}{2}$ pint per acre. For aphids, leaf miners, whiteflies, armyworms up to third instar, grasshoppers, mites, tomato russet mites, leaf-footed bugs, stink bugs, loopers and plant bugs, use 1 pint per acre.

TURNOIPS—To control aphids, cabbage webworms, climbing cutworms, vegetable weevils, false chinch bugs and harlequin bugs, use $\frac{1}{2}$ to 1 pint per acre. To control cabbage loopers, use 1 pint per acre. If greens are used for food, do not apply within 21 days of harvest.

DO NOT APPLY WITHIN 7 DAYS OF HARVEST ON THE FOLLOWING CROPS UNLESS OTHERWISE SPECIFIED.

ARTICHOKES—To control artichoke plume moths, use 1 quart per acre.

CABBAGE AND COLE CROPS (Broccoli, Brussels Sprouts, Cauliflower)—To control aphids, thrips, diamondback moth larvae, imported cabbageworms, cabbage loopers and armyworms up to third instar, use $\frac{1}{2}$ to 1 pint per acre. To control harlequin bugs, vegetable weevils, climbing cutworms and flea beetles, use 1 pint per acre. Rates above $\frac{1}{2}$ pint should not be applied to cabbage closer than 10 days until harvest.

KOHLRABI—To control aphids, use 1 pint per acre.

LETTUCE (Head)—To control aphids, cabbage loopers, imported cabbageworms, banded cucumber beetles, Lygus bugs, webworms and armyworms up to third instar, use $\frac{1}{2}$ to 1 pint per acre. To control six spotted leafhoppers, use $\frac{1}{4}$ pint per acre. For harlequin bugs, vegetable weevils and leaf miners, use 1 pint per acre. To control garden symphylans, broadcast $1\frac{1}{4}$ gallons per acre just prior to planting and thoroughly incorporate into upper 6 to 9 inches of soil.

MELONS—For squash vine borers, leaf miner and false chinch bugs, use $\frac{1}{2}$ pint per acre. For aphids, leafhoppers, cucumber beetles, pickleworms and mites, use $\frac{1}{2}$ to 1 pint per acre. To control thrips, squash bugs and stink bugs, use 1 pint per acre.

RUTABAGAS—To control aphids, cabbage loopers and climbing cutworms, use 1 pint per acre.

DO NOT APPLY WITHIN 5 DAYS OF HARVEST ON THE FOLLOWING CROP.

POTATOES—To control aphids, blister beetles, Colorado potato beetle, leaf miners, mites, plant bugs, potato psyllid, thrips, vegetable weevils and grasshoppers, use $\frac{1}{2}$ to 1 pint per acre. For army worms up to third instar, cabbage loopers, and climbing cutworms, use $\frac{1}{4}$ pint per acre. For leafhoppers, stink bugs and flea beetles, use 1 pint per acre.

FIELD AND FORAGE CROPS

DO NOT APPLY WITHIN 15 DAYS OF HARVEST CUTTING OR FORAGE USE ON THE FOLLOWING CROPS.

ALFALFA, CLOVER, VETCH AND GRASS—For sweet clover aphids, three cornered alfalfa hoppers, alfalfa caterpillars, and spittlebugs, use $\frac{1}{2}$ pint per acre. For aphids, alfalfa weevil larvae, and adult weevils, armyworms up to third instar, clover leaf weevils,

climbing cutworms, webworms, grasshoppers, crickets, spotted alfalfa aphids, leafhoppers, Lygus bugs, thrips, and tortricid moths, use $\frac{1}{2}$ to 1 pint per acre. For alfalfa seed chalcids control on alfalfa grown for seed, use $\frac{1}{2}$ to 1 pint per acre. California and Nevada regulations limit the use of this material to not more than $\frac{1}{4}$ pint per acre. For clover head weevils, spider mites, blister beetles, Asiatic garden beetles, sweet clover weevils, and green June beetles, use 1 pint per acre. For beet armyworms and corn earworms, use 1 to 1 $\frac{1}{2}$ pints per acre. Do not spray legumes during bloom period to avoid injury to honey bees.

PEANUTS—To control fall armyworms and cut-necked peanutworms, use 1 pint per acre. To control lesser cornstalk borers, use 1 pint per acre, direct spray to soil surface and base of plants.

RICE (California)—To control rice leaf miners and tadpole shrimp, use $\frac{3}{16}$ pint per acre. Shrimp, crabs and crayfish may be killed. Do not apply where these are important resources.

SMALL GRAINS (Wheat, Oats, Barley)—To control armyworms up to third instar, aphids (greenbugs) and winter grain mites, use $\frac{1}{2}$ pint per acre. For thrips, use $\frac{1}{2}$ to $\frac{3}{4}$ pint per acre. For Say's plant bug, use $\frac{3}{4}$ pint per acre. For black grass bugs, stink bugs, white spider mites, leafhoppers, climbing cutworms, grasshoppers and brown wheat mites, use 1 pint per acre. For chinch bugs, false chinch bugs and bank grass mites, use 1 $\frac{1}{2}$ pints per acre.

SOYBEANS—To control webworms, use $\frac{1}{2}$ pint per acre. To control velvet bean caterpillars, green cloverworms, two-spotted mites and stink bugs, use 1 pint per acre. To control corn earworms and fall armyworms, use 1 to $1\frac{1}{4}$ pints per acre. To control white grubs and wireworms, broadcast 1 gallon per acre just prior to planting and thoroughly incorporate into upper 4 to 6 inches of soil.

SUGAR BEETS—For alfalfa loopers, aphids, armyworms up to third instar, leafhoppers, blister beetles, flea beetles, leaf miners, Lygus bugs, stink bugs, webworms, climbing cutworms and grasshoppers, use 1 pint per acre. For false celery leaf tiers, use $1\frac{1}{4}$ pints per acre. For beet crown borers, use $1\frac{1}{2}$ pints per acre, ground application over the row during seedling stage. To control white grubs and wireworms, broadcast 1 gallon per acre just prior to planting and thoroughly incorporate into upper 4 to 6 inches of soil.

SUGARCANE—To control wireworms, use 2 quarts in 10 to 12 inch band in the open furrow at time of planting.

DO NOT APPLY WITHIN 12 DAYS OF HARVEST, CUTTING OR FORAGE USE ON THE FOLLOWING CROPS.

CORN—For control of European corn borers, use 1 pint per acre. Apply the first spray when 75% of the corn plants show "shot-hole" feeding and follow with two additional sprays at 5 to 7 day intervals. Use sufficient water per acre to provide complete coverage and be certain whorls of plant are well treated. For corn leaf aphids, use $\frac{1}{2}$ pint per acre. For fall armyworms, corn earworms, corn rootworm adults, armyworms up to third instar, climbing cutworms, grasshoppers and Japanese beetles, use $\frac{3}{4}$ pint per acre. To control stink bugs and spider mites, use 1 pint per acre. To control chinch bugs, use $1\frac{1}{2}$ pints per acre.

SORGHUM—To control sorghum midge, apply at rate of 1 pint to 1 quart per acre, 2 applications 3 to 5 days apart when approximately 90% of the heads have completely emerged from the boot or not later than start of blooming. For corn leaf aphids and mites, use $\frac{1}{2}$ pint per acre. For sorghum webworms, fall armyworms, armyworms up to third instar and corn earworms, use $\frac{3}{4}$ to 1 pint per acre. To control chinch bugs, use $1\frac{1}{2}$ pints per acre. Leaf injury may occur on some hybrid varieties of sorghum. Spray a few rows a week or so before booting to test effects on plants.

DO NOT APPLY WITHIN 5 DAYS OF HARVEST ON THE FOLLOWING CROPS.

COTTON—To control aphids, mites, cotton leaf-worms, cotton fleahoppers, garden webworms and thrips, use $\frac{1}{2}$ pint per acre. For some spider mites, use $\frac{1}{4}$ to $\frac{1}{2}$ pint per acre. For cabbage loopers, use $\frac{3}{4}$ to 1 pint per acre. For boll weevils and stink bugs, use 1 to $1\frac{1}{2}$ pints per acre. For salt-marsh caterpillars, use 1 to 2 pints per acre. For hollworms, cotton leaf perforators, Lygus bugs, false chinch bugs, serpentine leaf miners and southern garden leafhoppers, use 1 quart per acre. Use enough water for complete coverage. Make first application when insects appear and repeat at 7 day intervals if required. If desired, this formulation may be combined with other insecticides in a complete cotton spray program.

TOBACCO—For control of aphids, stink bugs and tobacco suckflies, use $\frac{1}{2}$ pint per acre. Do not apply within 5 days of priming or 15 days of cutting. Avoid plant juices coming in contact with the skin or other parts of the body of those who are engaged in cutting the crop.

MISCELLANEOUS

CABBAGE—For application to cabbage grown for seed only to control cabbage seed pod weevils, use 1 quart per acre.

CHRISTMAS TREES—To control aphids and mites, use $\frac{1}{2}$ pint per 100 gallons of water.