



MONSANTO

DIRECTIONS FOR USE

FIELD AND FORAGE CROPS

25% PARATHION

Emulsifiable Concentrate

For controlling certain insects on small grains, vegetables and field crops.

ACTIVE INGREDIENTS: Parathion (O,O-diethyl O-(p-nitrophenyl) thiophosphate) Aromatic Petroleum Derivative Solvent
INERT INGREDIENTS:

CAUTION

DANGER! Poisonous If Swallowed, Inhaled, or Absorbed Through Skin. Do not get in eyes or on skin. Wear natural rubber gloves, protective contact, wash immediately with soap and water. Wear a mask if used in enclosed spaces. U. S. Department of Agriculture for parathion protection.

Keep all unprotected persons out of operating areas or vicinity. Vacated areas should not be re-entered until drifting insecticide has been removed. Do not contaminate feed and foodstuffs. Wash hands, arms and face before eating or smoking. Wash all contaminated clothing with soap and water.



POISON

Antidote and First Aid Treatment—Call a physician at once in all cases. IF SWALLOWED: Give a tablespoonful of salt in a glass of warm water. Have victim lie down and keep quiet.

IF ON SKIN: In case of skin contact, remove contaminated clothing and wash with soap and water.

MONSANTO CHEMICAL CO. • ORGANIC CHEMICALS

ACCEPTED WITH COMMENTS 7/12

THE FEDERAL BUREAU OF INVESTIGATION AND THE U.S. DEPARTMENT OF AGRICULTURE

Read the Caution statement before using. This product is designed for application after dilution with either water or oil. Add the concentrate to the spray tank while filling, and mix thoroughly. Thoroughly cover all surfaces to be treated. Rates of application given below should be considered as general. Consult competent local agricultural authorities for specific recommendations regarding application, dosages, and timing of sprays.

FRUIT

Do not apply Parathion to citrus within 30 days of harvest. Do not use treated citrus peel for food purposes.

CITRUS (California) Purple scale: 1 1/2 pints in 100 gallons. Yellow and California red scale: 2 1/2 pints per 100 gallons. Alternately, these three scales may be controlled by using 1/2 pint plus 1 1/2 to 1 3/4 gallons of light or medium emulsifiable oil per 100 gallons of water, applied as a full cover spray during any season. Citricola and cottony-cushion scale: 6 pints in 100 gallons of water per acre; or use a full cover spray made as follows: 1/4 pint per 100 gallons from August through November, 1/2 pint per 100 gallons from February through March, and 1 pint per 100 gallons during May and June. Black scale: 1 pint per 100 gallons, applied as a full cover spray from August through November. Citrus thrips: 6 pints per acre applied in 100 gallons of water. Or 1 pint per 100 gallons applied as a full cover spray during petal fall. Protect new growth later by repeating in late summer and early fall. Aphids: 1 1/2 to 2 1/2 pints per 100 gallons; or use 1/2 pint plus 1 1/2 to 1 3/4 gallons of light or medium emulsifiable oil per 100 gallons of water. In either case, apply a full cover spray.

CITRUS (Florida) Mealy bugs, cottony-cushion scale, purple scale, Florida red scale and snow scale: Treat from June to September using 1 to 1 1/4 pints in 100 gallons. Or use 3/4 pint per 100 gallons in two sprays. The first should be made in spring combined with a melanose scab treatment, and the second between June and September with sulfur. In either case, thorough coverage is essential.

Never apply Parathion to fruit listed below within 21 days of harvest.

APPLES—Codling moth; plum curculio; wooly apple aphid, European sawfly; San Jose, Forbes, or scurfy scale; mealy bug; the second and third brood of the red-banded leafroller; and orange tortrix: 1 pint in 100 gallons. Spray to cover foliage thoroughly. Clover, Pacific, Willamette, Schoenii, two-spotted, or European red mite; bud moth; fruit tree leafroller; first brood of red-banded leafroller; grasshoppers, rosy and green apple aphid; leafhopper; and red bug: 3/4 pint per 100 gallons. Certain insects, such as two-spotted or Willamette mites, may require repeat treatments at 7-10 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 Delicious or Jonathan. Consult competent local authorities for advice on possibility of injury and softening the spray by using activated carbon.

APRICOTS—Aphids, mites, bud moth, and fruit tree leafroller: 1 1/2 pints per 100 gallons. Codling moth, Oriental fruit moth, and tortrix: 1 to 1 1/4 pints per 100 gallons. Pandemis moth: 1 1/4 pints in 100 gallons. Avoid injury to bees by delaying spray till after full bloom.

BLUEBERRIES—Thrips or maggots: 1 pint in 100 gallons before fruit sets or after harvest.

CHERRIES—Aphids and mites: 3/4 pint in 100 gallons. Cherry fruit worm, plum curculio, Oriental fruit moth, bud moth, cankerworm, San Jose scale crawlers, fruit fly, and tortrix: 1 pint per 100 gallons. Repeat as necessary.

GRAPES—Apply only before fruit is the size of buckshot, or after harvest. Leaf folder and mealy bug: 1 pint per 100 gallons. Mites: 3/4 pint per 100 gallons, and repeat at 5 to 7 day intervals. Grape berry moth: 1 pint per 100 gallons, and repeat at 10 day intervals.

PEACHES—Green peach aphid, mites, cottony peach scale, fruit tree leafroller, and shot-hole borer: 3/4 pint in 100 gallons. Treat for shot-hole borer when adult beetles are most numerous and active. Oriental fruit moth, peach tree borer, red-banded leafroller, cat-facing insects, plum curculio, tarnished plant bug, and San Jose scale: 1 pint per 100 gallons, and repeat if re-infestation occurs. Lecanium scale: after all eggs hatch, use 1 1/4 pint in 100 gallons.

PEARS—Codling moth, wooly aphid, mealy bug, and certain mites: use dosage described under "Apples". Pear psylla: 3/4 pint per 100 gallons, applied as a pre-blossom spray. Pear blister mite: 1 pint per 100 gallons, as a pre-blossom or post-blossom spray. Injury may occur on Bosc pears under some conditions.

PLUMS AND PRUNES—Plum curculio, mites, aphids, leafhoppers, leafroller, bud moth, tortrix, mealy plum louse, and San Jose scale: 1 to 1 1/4 pints per 100 gallons. Apply scale treatment when crawlers emerge.

STRAWBERRIES—Red spider mite and leaf roller: 1 pint per 100 gallons. Repeat at 7 to 10 day intervals. Do not apply after fruit sets or before harvest.

Do not apply Parathion to Pineapples within 7 days of harvest.

PINEAPPLES—Crickets and mealy bugs: 1 pint per 100 gallons of water, and apply 300 to 400 gallons of spray per acre.

Do not use Parathion on the crops listed below within 15 days of harvest, cutting, or forage use.

ALFALFA, CLOVER, VETCH AND OTHER LEGUMES—Spotted alfalfa or yellow clover aphid: 3/4 to 1 pint per acre. Be certain to cover base of plant and underside of leaves thoroughly. Use the higher rate for aerial application. Treat seedling alfalfa when aphids are first detected. Treat older plants when honeydew is noticeable and insect population is increasing. Stubble may be treated with Parathion immediately after hay is removed. Repeat at weekly intervals if required. Alfalfa caterpillar, armyworm, grasshoppers, and other aphids: 1 pint per acre in sufficient water for good coverage. Repeat at 7 day intervals if necessary.

Do not spray legumes during bloom period to avoid injury to honey bees.

CORN—European corn borer: 1 1/4 pints 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. Armyworm: 1 pint per 100 gallons. Bud worm or fall armyworm: 1 1/4 pints per 100 gallons.

COTTON—Aphids, mites, cotton leaf worm, fleahopper, garden webworm, and thrips: 1 pint per acre, using enough water for complete coverage. Make first application when insects appear, and repeat at 7 day intervals if required. This formulation may be combined with other insecticides in a complete cotton spray program.

SMALL GRAINS (WHEAT OATS, RYE, BARLEY)—Aphids (green bug), armyworm, and grasshopper: 1 pint per acre. Use 2 to 3 gallons of water per acre for airplane spray, or use enough water for good coverage if using ground equipment. Repeat in 7 to 10 days if infestation persists.

SOYBEANS—For Velvetbean caterpillar, apply 1 pint per acre in sufficient water for good coverage.

TOBACCO—Aphids in the seed bed, or cut fly and aphids in field tobacco: 3/4 pint per 100 gallons. Do not apply within 5 days of priming. Avoid getting wet with plant juices when cutting.

NOTICE TO BUYER

The Directions for Use given for this product are based upon use under normal and reasonable foreseeable conditions. However, the use of this product being under conditions beyond Seller's knowledge and control, it makes no warranty, express or implied, concerning the results of such use. Buyer assumes all risk of use or handling, whether or not in accordance with any suggestions, recommendations, or directions of Seller.

ACCEPTED WITH COMMENTS



# MONSANTO

NET VOLUME: 1 U.S. Gallon

# PARATHION

## Efficient Concentrate

Control insects on small grains, vegetables, cotton, legumes, forage, and field crops.

Parathion	25.4 %
(O,O-diethyl O-(p-nitrophenyl) thiophosphate)	
Aromatic Petroleum Derivative Solvent	69.6 %
	5.0 %
	<hr/>
	100.0 %

### CAUTION

Swallowed, inhaled, or absorbed through skin; rapidly absorbed through skin on skin. Wear natural rubber gloves, protective clothing and goggles. In case of injury, wash with soap and water. Wear a mask or respirator of a type passed by the agriculture for parathion protection.

Persons out of operating areas or vicinity where there may be danger of drift. Do not be re-entered until drifting insecticide and volatile residues have dissipated. Do not eat or drink, or use tobacco, or handle foodstuffs. Wash hands, arms and face thoroughly with soap and water after use. Wash all contaminated clothing with soap and hot water before re-use.



## POISON

**Treatment**—Call a physician at once in all cases of suspected parathion poisoning. Give one tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Keep person lying down and keep quiet.

In case of skin contact, remove contaminated clothing and immediately wash skin with soap and water.

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### VEGETABLES

*Do not apply Parathion on snap beans within 21 days of harvest, nor on other beans, beets, carrots, squash, melons, and peas within 15 days of harvest.*

**BEANS**—Mexican bean beetle, leafroller, leaf miner, leafhopper, aphids, red spider mite and armyworms:  $\frac{3}{4}$  pint in 100 gallons. If necessary, repeat every 7 to 10 days.

**BEETS**—Aphids:  $\frac{3}{4}$  pint per 100 gallons. Webworm: 1 pint per 100 gallons.

**CARROTS**—Aphids:  $\frac{3}{4}$  pint per 100 gallons. Apply about 300 gallons of spray per acre.

**SQUASH AND MELONS**—Cucumber beetle, aphids, stink bugs, melonworm, pickle worm, and serpentine leaf miner:  $\frac{3}{4}$  pint per 100 gallons. Do not apply before plants begin to vine. Do not treat cucurbits unless plants are dry.

**PEAS**—Aphids: 1 pint per acre in enough water to provide good coverage. Pea weevil:  $\frac{3}{4}$  pint per 100 gallons. Check with competent local agricultural authorities for proper timing of spray.

*Do not apply Parathion within 21 days of harvest on the vegetables below.*

**TOMATOES AND POTATOES**—Colorado potato beetle, flea beetle, leafhopper, aphids, serpentine leaf miner, whitefly, and grasshoppers:  $\frac{3}{4}$  pint per 100 gallons of water in the regular fungicide spray program. Armyworm: 1 pint per 100 gallons.

**CABBAGE AND COLE CROPS**—Aphids and thrips:  $\frac{3}{4}$  pint per 100 gallons. Diamondback moth, imported cabbage worm, and armyworm: 1 pint per 100 gallons.

**CELERY**—Aphids and celery worms:  $\frac{3}{4}$  pint per 100 gallons.

**CUCUMBERS**—To control insects listed above under "Squash and Melons", apply  $\frac{3}{4}$  pint per 100 gallons. Do not use before plants begin to vine. Do not spray unless cucumbers are dry.

### WARNING

Be sure to read and understand the Caution statement before using.

Do not prune trees, thin fruit, or work in dense orchards for two weeks after spraying to allow vapors to dissipate.

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.

Keep containers closed when not in use, and do not reuse for other purposes. Do not store near food or feed materials. Destroy container when empty.

Flammable. Do not store or use near heat or open flame. 6970