

3125-193

7-22-1975

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FOR EASY OPENING,



CUT ALONG THIS LINE

Chemagro

®
GUTHION

**50% WETTABLE POWDER
CROP INSECTICIDE**

FOR EFFECTIVE ECONOMICAL INSECT CONTROL

NET WEIGHT 2.5 POUNDS

Store in a cool dry place.



POISON



DANGER

**KEEP OUT OF REACH
OF CHILDREN**

(See side panel for antidote and
danger statements.)

GUARANTEE

ACTIVE INGREDIENT:

O,O-Dimethyl S-[4-oxo
-1,2,3-benzotriazin-3(4H)-ylmethyl]
phosphorodithioate†50%

INERT INGREDIENTS:50%
100%

† Canadian Patent No. 552,660

EPA Reg. No. 3125-193-AA

"Chemicals for Agriculture"

MANUFACTURED BY

Chemagro

Division Of Baychem Corporation
Box 4913, Kansas City, Missouri 64120

Under the Federal Insecticide, Fungicide, and Rodenticide Act,
as amended, for the pesticide
EPA Reg. No. 3125-193
JUL 22 1975
TESTED

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DIRECTIONS FOR USE

IMPORTANT: Read these entire Directions and Conditions of Sale, including the Warranty and Limitation of Damages provision, before using GUTHION 50% Wettable Powder.

CONDITIONS OF SALE: These Directions for Use reflect the opinion of experts based on tests of effectiveness, toxicity to plants and laboratory animals and of residues on or in food and feed under normal conditions of use. However, because of the wide range of conditions under which this product may be used, even though label directions are followed, it is impossible to eliminate all risks associated with its use because of abnormal conditions beyond the control of the seller. Chemagro and the Seller offer, and the Buyer uses, this product subject to the understanding that the Buyer assumes all such risks.

MIXING: GUTHION 50% Wettable Powder insecticide mixes easily with water to form a suspension which is readily usable in all conventional ground spray equipment. Mix the required amount of GUTHION 50% Wettable Powder with a small quantity of water. Add this premix through the screen while filling the spray tank or fill the tank to the required level and add the premix. Operate the agitator while mixing.

DOSAGE: Use specified dosage of GUTHION 50% Wettable Powder in the amount of water necessary to give complete coverage of foliage. The type of equipment used will determine the concentration required.

SPRAYING: Work to windward. Protect sprayer operators from drift or mist. When low volumes of spray are applied complete coverage and thorough application are essential for most effective results. Schedule applications in accordance with local conditions. Consult your State Agricultural Experiment Station or Extension Service for specific use information in your area.

RESTRICTIONS

Do not use on other crops used for food or forage. Use only according to label directions. Application at rates above those shown may result in illegal crop residues. Do not graze livestock in treated orchards or groves for 21 days after treatment. Do not treat food crops grown in the greenhouse.

This product is toxic to fish, birds, and other wildlife. Keep out of lakes, streams, or ponds. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment, or disposal of wastes. Apply this product only as specified on this label.

CONTAINER DISPOSAL

DO NOT RE-USE THE CONTAINER—Completely empty the contents and bury the unused chemical at least 18 inches deep in an isolated location away from water supplies.

Burn the empty container completely. Exercise extreme caution and stay well away from the smoke.

Do not use container in any connection with feed, food, or drinking water.

DANGER

Poisonous if swallowed, inhaled, or absorbed through the skin. Do not get in eyes or on skin. Do not breathe dust or spray mist. Spray operator should work to windward to stay out of drift or mist.

When loading spray tank or handling the powder at any other time, wear protective clothing, natural rubber gloves and goggles. A mask or respirator recommended by the U.S. Bureau of Mines for protection against GUTHION should be worn when handling the powder.

Do not contaminate feed or foodstuffs. Keep out of reach of children and domestic animals. Keep all unprotected persons out of the operating area or vicinity where there may be danger of drift. Wash hands, arms, and face thoroughly with soap and warm water before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

SYMPTOMS OF POISONING: A sense of "tightness" in the chest. Sweating. Contracted pupils. Stomach pains. Vomiting and diarrhea.

TREATMENT. In case of poisoning call a physician immediately. Have patient lie down and keep quiet. If swallowed, induce vomiting by giving a tablespoonful of salt in a glass of warm water. Administer milk or water freely and again induce vomiting until vomit fluid is clear. If on skin, remove contaminated clothing and wash skin immediately with soap and warm water. If eyes are contaminated, wash with flowing water for at least 15 minutes.

TO PHYSICIAN: POISON

ANTIDOTE—Administer atropine sulfate in large therapeutic doses. Repeat as necessary to the point of tolerance. 2-PAM is also antidotal and may be administered in conjunction with atropine.

Compound inhibits cholinesterase resulting in stimulation of the central nervous system, the parasympathetic nervous system, and the somatic motor nerves. Do not give morphine. Watch for pulmonary edema, which may develop in serious cases of poisoning even after 12 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically.

WARRANTY AND LIMITATION OF DAMAGES

Chemagro 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 and Conditions of Sale; subject to the risks referred to therein. **CHEMAGRO MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY, and no agent of Chemagro is authorized to do so except in writing, with a specific reference to this warranty. Any damages arising from a breach of this warranty shall be limited to direct damages, and shall not include consequential commercial damages such as loss of profits or values, etc.**

GUTHION is a Reg. TM of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen.

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RECOMMENDED APPLICATIONS

CROPS	INSECT	Pounds GUTHION 50%	REMARKS
VEGETABLES (continued) Broccoli Brussels Sprouts Cabbage Cauliflower	Cabbage maggot (Direct seeded fields in California only)	1½	Apply specified dosage per acre in sufficient water for uniform distribution. Mix in upper 2 inches of soil prior to seeding or spray in the seed row at planting time. Usually 2 to 3 additional sprays are necessary during the growing season, depending on time of year and maggot population. Do not apply within 21 days of harvest.
	Cabbage maggot (Transplant fields in California only)	1½	Apply specified dosage in 300 to 400 gallons of water per acre as a soil drench in rows when damage first appears. Additional applications may be necessary. Do not apply within 21 days of harvest.
Celery	Aphids Leaf miners Leafhoppers Spittlebug Tarnished plant bug	1	Apply specified dosage in 100 gallons of water as a full coverage spray* using not more than 200 gallons of finished spray per acre. Repeat as necessary but not within 14 days of harvest.
Black-eyed peas (Southern peas, Crowder peas)	Corn earworm Cowpea curculio	1½ to 2	Apply specified dosage per acre in sufficient water for complete coverage. Do not apply more than 4 times per season nor within 7 days of harvest. Do not use vines for feed or forage nor pasture treated areas.
	Leaf miners Stink bugs	¾ to 1	
Cucumbers	Spotted cucumber beetle Striped cucumber beetle Western-striped cucumber beetle	1	Apply specified dosage per acre in sufficient water for complete coverage. Do not apply more than 3 times per season nor within 1 day of harvest.
Eggplant	Leaf miners	¾ to 1	Apply specified dosage per acre in sufficient water to give complete coverage. Repeat as necessary. Do not apply after fruit set.
	European corn borer Flea beetles	1	
Onions (Green & Dry)	Thrips	1 to 1½	Apply specified dosage per acre in sufficient water to give complete coverage. Do not apply more than 3 times per season nor within 28 days of harvest of dry onions or 7 days of harvest of green onions.
Peppers	Leaf miners	¾ to 1	Apply specified dosage per acre in sufficient water to give complete coverage. A maximum of 4 treatments may be made up to within 3 days of harvest. Where more than 4 applications are required, do not apply last spray within 14 days of harvest.
	European corn borer Flea beetles	1	
Potatoes	Colorado potato beetle	¾	Apply specified dosage per acre in sufficient water for complete coverage. Repeat as necessary. Do not apply within 7 days of harvest.
	Banded cucumber beetle Leaf miners	¾ to 1	
	European corn borer Flea beetle Leafhoppers Spittlebugs Tarnished plant bug	1 to 1½	
	Tuberworm	1½ to 1¾	
Spinach	Aphids Leaf miners Mites	¾ to 1	Apply specified dosage per acre in sufficient water for complete coverage. Repeat as necessary. Do not apply within 14 days of harvest.
Tomatoes	Colorado potato beetle	¾	Apply specified dosage per acre in sufficient water for complete coverage. Repeat as necessary. The high rates should be used where heavy infestations of late instar lepidopterous larvae (large worms) and pinworms are present. Rates of 1½ pounds per acre or less may be applied up to day of harvest. Rates above 1½ pounds per acre require an interval of 14 days between application and harvest.
	Banded cucumber beetle <i>Drosophila</i> Green stink bug Leaf miners Whitefly	¾ to 1	
	Aphids European corn borer Flea beetles Grasshoppers Leafhoppers Thrips	1 to 1½	
	Tuberworm	1½ to 1¾	
	Corn earworm Fruitworm Hornworm Pinworm Yellow-striped armyworm	1½ to 3	
MELONS Honeydew Melons Muskmelon (Cantaloupe) Watermelons Other melons	Leafhoppers Leaf miners	¾ to 1	Apply specified dosage per acre in sufficient water to give complete coverage. Repeat as necessary up to the day of harvest but not more than 4 times per season.
	Rindworms Spotted cucumber beetle Striped cucumber beetle Western-striped cucumber beetle	1	
ORNA- MENTALS Ornamentals, Nursery Plants, Forest & Shade Trees	Aphids Cecidomyia scale Euonymus scale Juniper scale Lace bugs Leafhoppers Mites Olive scale Oystershell scale <i>Pulvinaria</i> scale Thrips	¾ to 1	Apply specified dosage per 100 gallons of water (2 level teaspoonfuls per gallon). Spray all foliage surfaces including the underside of leaves for complete coverage. For control of black pine leaf, brown soft, European elm, and Putnam scales, use 4 level teaspoonfuls per gallon. Repeat as necessary.
	Brown soft scale Putnam scale	2	
	Black pine leaf scale European elm scale	1½ to 2	
	Cone midge Cone moth	4 to 8	
	European pine shoot moth Nantucket pine tip moth	¾ to 1½	
Slash pine	Cane worm Seedworm	3	Apply specified dosage per 100 gallons of water. Thorough coverage of cones is necessary for maximum control. Repeat as necessary.

*This GUTHION dosage is calculated for conventional hydraulic-type sprayers. When lower volume of spray are applied per acre with concentrate sprayers, increase the concentration of GUTHION in the spray mixture in order to apply amount of GUTHION per acre equivalent to a full coverage spray.

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RECOMMENDED APPLICATIONS

CROP	INSECT	Pounds GUTHION 50%	REMARKS	CROP	INSECT	Pounds GUTHION 50%	REMARKS
FIELD CROPS	Leafhoppers Mites	1/2 to 1	Apply specified dosage per acre using a minimum of 10 gallons of water per acre. It may be necessary to use 20 to 25 gallons of water per acre on heavy growth for control of alfalfa weevil or Egyptian alfalfa weevil with ground equipment. Do not apply within 14 days of harvest at the rate of 1/2 to 1 pounds per acre or within 15 days at the rate of 1 pound per acre. Do not apply rates above 1 pound per acre within 21 days of harvest. Do not apply more than once per cutting at any rate.	FRUIT (cont.)	Blueberries (Eastern and North Central States only)	1 to 1 1/2	Apply specified dosage per acre using approximately 200 gallons of water for good coverage. Repeat as necessary but not more than 4 times per season nor within 3 days of harvest. If multiple late season applications of GUTHION dust formulations are to be made for blueberry maggot control, then do not make more than two GUTHION spray applications per season with the last spray no later than June 15.
	Alfalfa weevil Egyptian alfalfa weevil	1/2 to 1 1/2					
Alfalfa Clover	Alfalfa plant bug Flea hopper Grasshoppers Lygus bugs Spittlebug	1 to 1 1/2		Cranberries	Cranberry fruitworm Sparganothis sulfureana Tipworm	1 to 2	Apply specified dosage per acre using approximately 200 gallons of water for good coverage. Repeat as necessary. Do not apply within 21 days of harvest.
Barley Oats Rye Wheat	Cereal leaf beetle	1/2 to 1	Apply specified dosage per acre in sufficient water for complete coverage. Do not apply more than once per season. Do not harvest for food, feed, forage or graze within 30 days of treatment.	Fireworms		2	
Soybeans	Aphids Bean leaf beetle Green cloverworm Leafhoppers Leaf miners Leaf rollers Stink bugs Velvet bean caterpillar	1/2 to 1	Apply specified dosage per acre in sufficient water to give complete coverage. Repeat as necessary. Do not apply within 21 days of harvest. Do not graze or feed treated vines to livestock.	Citrus Fruits	Aphids Black scale Brown soft scale Chaff scale Citricola scale Citrus mealybug Citrus rust mite Citrus thrips Citron-cushion scale European brown snail	1/2 to 1	Apply specified dosage in 100 gallons of water as a full coverage spray* using not more than 2000 gallons of finished spray per acre. A single application per year may be applied up to within 7 days of picking. Where 2 applications are required, the second spray should not be applied within 28 days of harvest. Do not apply more than twice per fruit year. Do not pick fruit or do other work involving contact with the tree, such as pruning, within 7 days of treatment.
	Mexican bean beetle	1 to 1 1/2			California red scale Texas citrus mite Yellow scale	1/2 to 1	
Tobacco	Aphids Grasshoppers Tobacco hornworm Tobacco flea beetle	1 to 1 1/2	Apply specified dosage per acre in sufficient water for complete coverage. Treat for hornworms as soon as egg masses or worms are first found. Repeat as necessary but not within 6 days of harvest. Prime before treating.	Grapes	Grape berry moth Grape cane gnawer Grape mealybug Leafhoppers Mites Red-banded leaf roller Thrips	1/2 to 1	Apply specified dosage in 100 gallons of water as a full coverage spray* using not more than 300 gallons of finished spray per acre. Repeat as necessary but not more than 3 times per season. Minimum dosage specified may be applied up to harvest. Higher rates up to 1/2 pound require a 10-day interval to harvest and above 1/2 pound a 28-day interval to harvest.
	Tobacco budworm	1 1/2					
FRUIT	Aphids Apple maggot Codling moth European apple sawfly Eye-spotted bud moth Forbes scale Fruit tree leaf roller Green fruitworm Leafhoppers	1/2 to 1	Apply specified dosage in 100 gallons of water as a full coverage spray* using not more than 1,000 gallons of finished spray per acre. Repeat as necessary. Do not apply more than 8 times per season nor within 15 days of harvest. An alternate spray schedule may be used by making 6 applications at rates of 1/4 to 1/2 pound followed by 2 applications at the 1/2 pound rate but not within 7 days of harvest. GUTHION 50% Wettable Powder is compatible with dormant and summer oils which may be added to apple and pear sprays in accordance with local recommendations. Do not use oils within 30 days of sulfur or lime-sulfur treatments.	Strawberries	Aphids Meadow spittlebug Oblique-banded leaf roller Obscure root weevil Omnivorous leaf tier Pea leaf weevil Small black (grass) weevil Strawberry leaf rollers Whitefly	1	Apply specified dosage in 200 gallons of water per acre as a full coverage spray*. Repeat as necessary. Do not apply within 5 days of harvest.
	Mealybug Mites Orange tortrix Pear psylla Plum curculio Putnam scale Red-banded leaf roller San Jose scale Stink bug Tarnished plant bug	1/2 to 1					
Apples Crab apples Pears Quinces	Eye-spotted bud moth Forbes scale Fruit flies Fruit tree leaf roller Green fruitworm Leafhoppers	1/2 to 1		NUTS	Almonds	Peach twig borer	1/2 to 1
Cherries	Lesser peach tree borer Mites Plum curculio San Jose scale	1/2 to 1	Apply specified dosage in 100 gallons of water as a full coverage spray* using not more than 800 gallons of finished spray per acre. Repeat as necessary. Do not apply more than 8 times per season nor within 15 days of harvest.				
	Cherry leaf miner Minicula moth	1/2					
Apricots Nectarines Peaches	Aphids Codling peach scale European fruit lecanium scale Forbes scale Lesser peach tree borer Mites Peach tree borer	1/2 to 1	Apply specified dosage in 100 gallons of water as a full coverage spray* using not more than 800 gallons of finished spray per acre. Repeat as necessary. Do not apply more than 8 times per season, within 21 days of harvest for apricots, nectarines, and peaches, nor within 15 days of harvest for plums and prunes. Apply the 1/2-pound rate for oriental fruit moth and peach twig borer on apricots, nectarines and peaches only before mid-season. For control of peach tree borer, apply 2 or 3 sprays to trunk from ground to scaffold limbs, timed with moth flight. For scale control, apply when crawlers are present. GUTHION 50% Wettable Powder is compatible with dormant and summer oils which may be added to peach and prune sprays in accordance with local recommendations. Do not use oils within 30 days of sulfur or lime-sulfur treatments. NOTE: It is suggested that when treating nectarines during bloom period, beekeepers should be warned well in advance to remove hives a safe distance from orchards to be treated.	Pecans	Aphids Fall webworm Hickory shuckworm Leaf miners May beetles Mites Pecan casebearer Southern green stink bug Spittlebugs Twig gnawers Walnut caterpillars	1/2 to 1 1/2	
	Platynota flavedana leaf roller Plum curculio Red-banded leaf roller San Jose scale Stink bug Tarnished plant bug Tortoise scale White peach scale	1/2 to 1					
Nectarines	Oriental fruit moth Peach twig borer	1/2 to 3/4		Walnuts	Aphids Codling moth European red mite Filbertworm Naval orangeworm	1/2 to 1 1/2	Apply specified dosage in 100 gallons of water as a full coverage spray* using not more than 1100 gallons of finished spray per acre. Repeat as necessary. Do not apply after husks split. Do not graze livestock in treated groves for 21 days after treatment.
Plums Prunes	Thrips	1/2 to 3/4					
	Aphids Eye-spotted bud moth Forbes scale Fruit tree leaf roller Lesser peach tree borer Mites Orange tortrix Peach tree borer	1/2 to 1	Apply specified dosage in 100 gallons of water as a full coverage spray* using approximately 200 gallons of water for good coverage. Repeat as necessary but not within 14 days of harvest.	Beans (Dry & Snap)	Aphids Bean leaf beetle Green cloverworm	1/2 to 1	
	American plum borer	1					
Blackberries Boysenberries Loganberries Raspberries	Leafhoppers Leaf rollers Leaf miners	1/2	Apply specified dosage per acre to foliage using approximately 200 gallons of water for good coverage. Repeat as necessary but not within 14 days of harvest.	Mexican bean beetle Spotted cucumber beetle Striped cucumber beetle Tarnished plant bug Western-striped cucumber beetle	1		Apply specified dosage per acre in sufficient water for complete coverage. Repeat as necessary. Do not apply to snap beans within 7 days of harvest nor to dry beans within 30 days of harvest. Do not exceed 4 applications on dry beans. Do not feed or ensile treated forage.
	Aphids	1/2 to 1					
Broccoli Brussels Sprouts Cabbage Cauliflower	Obscure root weevil	1	For control of root weevils and borers prior to harvest apply specified dosage per acre to the soil beneath the plants using approximately 200 gallons of water. Do not apply more than twice per season. Do not make applications within 3 days of harvest at rates up to 2 pounds per acre. Rates above 2 pounds per acre should be applied only before fruit set or after crop is harvested.	Aphids Cabbage looper Diamondback moth Imported cabbageworm	1 to 1 1/2		Apply specified dosage per acre in sufficient water for complete coverage. Repeat as necessary. Do not apply within 7 days of harvest for Brussels sprouts. 15 days of harvest for broccoli and cauliflower, nor within 21 days of harvest for cabbage.
	Raspberry crown (root) borer	2 to 4					
Cabbage Cauliflower	Obscure root weevil	1		Cabbage maggot	1/2 to 1		Mix specified dosage in 50 gallons of water. Apply 4 to 6 ounces per plant at or immediately after transplanting.