

ACCEPTED

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CHLORPYRIFOS

15G

GRANULAR INSECTICIDE

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, you have potential
registered under
EPA Reg. No. 66222-18

For control of various insects infesting certain field and vegetable crops.

ACTIVE INGREDIENT(S):

Chlorpyrifos: 0,0-diethyl 0-(3,5,6-trichloro-2-pyridinyl)	15.0%
phosphorodithioate	85.0%
TOTAL	100.0%

KEEP OUT OF REACH OF CHILDREN

CAUTION PRECAUCION FIRST AID

STATEMENT OF PRACTICAL TREATMENT organophosphate

If Swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

If In Eyes: Flush with plenty of water for 5 minutes. Get medical attention if irritation persists.

If On Skin: Wash with plenty of soap and water. Get medical attention if irritation persists.

Note To Physicians: Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful).

Atropine, only by injection, is the preferable antidote. Oximes such as 2-PAM, rotopam, may be therapeutic if used early; however, use only in conjunction with atropine. In case of severe acute poisoning, use atropine immediately after establishing an open airway and respiration.

Manufactured by: MAKHTESIIM-AGAN OF NORTH AMERICA INC.
551 Fifth Avenue, Suite 1100
New York, N.Y. 10176

EPA Reg. No. 66222-18
EPA Establishment No.
Net Weight:



MAKHTESIIM-AGAN

PRECAUTIONARY STATEMENTS Hazards To Humans and Domestic Animals CAUTION

Harmful If Swallowed: Causes Eye Irritation. Avoid contact with eyes, skin and clothing. Avoid breathing dusts.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

1. Long-sleeved shirt and long pants
2. Waterproof gloves
3. Shoes plus socks

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to birds and wildlife, and extremely toxic to fish and aquatic organisms. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Cover or incorporate spills. Do not contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product 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. Read all Directions for Use carefully before applying.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard; 40 CFR 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 the label about personal protective equipment (PPE) and restricted entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water, is:

1. Coveralls
2. Waterproof gloves
3. Shoes plus socks

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STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

APPROVED USES:**CORN**

Field Corn, Sweet Corn (including corn grown for seed)

Amount of Chlorpyrifos
1SG in Ounces per 1,000 Feet of Row

Pest	At Plant Treatments			Postplant Treatment	Preplant Broadcast
	T-Band	Band	In-Furrow		
northern and western corn rootworm larvae	8	8	8 *	8	-
southern corn rootworm larvae	8	8	8	8	-
Cutworms*	8	8	8-16	-	6.75 - 13.5
Wireworms**	8-16	16	8-16	-	13.5
Billbugs	8-16	8-16	-	-	13.5
Seedcorn maggots	8	-	8	-	-
Grubs	16	-	8-16	-	13.5
Lesser cornstalk borer	8-16	8-16	-	-	-
Seedcorn beetle	8-16	-	8-16	-	-
Flea beetle larvae	-	-	-	-	13.5
Sympylans	8-12	8-12	-	-	-

Armyworms European and South-western corn borer***	-	-	-	6 - 8	-
Fire ants**	8	-	-	-	-
Chinch bug	8	-	8	-	-

* 8 oz. rate - suppression only for in-furrow treatments.

** 8 oz. rate - suppression only.

*** Use 5.0 to 6.5 lb of Chlorpyrifos 1SG per acre applied broadcast by air

At Plant Band Treatment:

In conventional, minimum and no-till corn, place granules in a 6 to 7 inch wide band over the row behind the planter shoe, in front of the press wheel, and incorporate into the top one inch of soil using tines or chains or other suitable equipment. For cutworm control under very dry soil conditions, best results will be obtained through proper incorporation. In soils over 10% organic matter, use the highest rate given. For suppression of nematodes in North Carolina, South Carolina and Virginia, apply Chlorpyrifos 1SG insecticide as a 7 to 10 inch wide band at the rate of 16 oz. per 1,000 feet of row. Incorporate with drag chains. Plant T-Band Treatment: In conventional minimum and no-till corn, for control of rootworm, cutworm, and Billbug, in addition to lesser cornstalk borer, Sympylans, wireworm, seed corn beetle, seed corn maggot and grubs, apply T-Band over an open seed furrow. In conventional and minimum-till corn incorporate into the top 1/2 to 1 inch of soil using suitable equipment. For suppression of nematodes in the Southeast, using Chlorpyrifos 1SG as a T-Band treatment at 16 oz. per 1,000 feet of row over an open seed furrow. Chlorpyrifos 1SG has demonstrated suppression of certain soilborne pathogens which may result in certain physiological and agronomic advantages to corn under environmental stress conditions when compared to corn not treated with Chlorpyrifos 1SG.

At Plant In-Furrow Treatment:

Apply Chlorpyrifos 1SG at planting time as an in-furrow treatment in conventional, minimum and no-till corn. Direct the granules into the planter shoe with the seed or place the applicator tube directly behind the planter shoe so that the granules drop into the seed furrow or place the granular band applicator behind the planter shoe so that the granules fall on the soil surface and into the seed furrow and are covered with soil. Equivalent rates of Chlorpyrifos 1SG per acre for various row spacings are given in the accompanying table.

Postplant Treatment:

To control corn rootworm larvae, apply Chlorpyrifos 1SG at cultivation time by placing the granules at the base of the plant on both sides of the row just ahead of the cultivation shovels and cover the soil. To control European and southwestern corn borer larvae, apply Chlorpyrifos 1SG in a band over the row so that the granules are directed into the whorl or use a pot plant broadcast treatment. Consult your state agricultural experiment station or extension service specialist for proper time to treat and for further information concerning soil insect control in your area.

Postplant Broadcast Treatment:

Use Chlorpyrifos 1SG for control of European and southwestern corn borers by uniformly broadcasting the granules over the corn plants by aerial application or applying the granules into the corn whorls by ground application. Consult your state agricultural experiment station or extension service specialist for local threshold information. Scouting for insect damage is strongly encouraged.

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Preplant Broadcast Treatment:

Use equipment that will evenly distribute the granules over the treated area. Incorporate the granules into the soil using an S-tine, C-tine, disc cultivator, or other suitable incorporation equipment set to cut to a depth of 4 to 6 inches. Plant the crop in the usual manner as soon as possible after treatment.

RESTRICTIONS:

For soil insect control, do not exceed the equivalent of 16 ounces of Chlorpyrifos 15G per 1,000 feet of row or 14.5 pounds of Chlorpyrifos 15G per acre per crop season. For foliar insect control, do not exceed the equivalent of 16 ounces of Chlorpyrifos 15G per 1,000 feet of row or 1.3 pounds of Chlorpyrifos 15G per acre per crop season. Do not apply within 35 days before harvest of grain. Do not allow livestock to graze in treated areas nor harvest treated corn silage as feed for meat and dairy animals within 14 days after last treatment. Do not feed treated corn fodder to meat or dairy animals within 35 days after last treatment.

CITRUS GROVE FLOORS

Pests Controlled: fire ants and other ants species
Application Rate: 6.7 lb/acre

Postplant Broadcast Treatment:

To control foraging ants and suppress mounds, apply Chlorpyrifos 15G with ground application equipment. Use a suitable granular applicator, such as a cyclone fertilizer spreader, that will uniformly broadcast the granules over the grove floor. Retreat as needed. Chlorpyrifos 15G may be custom blended with granular fertilizers provided that application of the blended Chlorpyrifos 15G/fertilizer mixture can be applied uniformly to the grove floor. Do not apply where growth or other obstructions would impede uniform coverage of the grove floor.

RESTRICTIONS

Do not apply more than 6.7 pounds of Chlorpyrifos 15G per acre per crop season. Do not apply last treatment within 28 days before harvest. Do not allow livestock to graze in treated areas.

SORGHUM/MILO

Application Rates and Pests Controlled

Pests Controlled	Banded Applications (Ounces per 1,000 Feet of Row)	
	At Plant Treatments	
	T-Band	Band
lesser cornstalk borer	4 to 12	4 to 12
corn rootworm and cutworms	8	..
fire ants*	8	..
chinch bug*	8	..

* 8 oz. rate - suppression only.

At Plant T-Band or Band Treatment:

Apply in a 6 to 8 inch band over the row and incorporate into the top 1-inch of soil using suitable equipment as indicated. Equivalent rates of Chlorpyrifos 15G per acre for various row spacings are given in Table 1. Use the lowest rate for lesser cornstalk borer control when protection is desired for 2 to 3 weeks and higher rates for longer residual activity. It is absolutely necessary to incorporate the granules, especially at lower rates.

RESTRICTIONS:

Do not make more than one application per crop season.

ONIONS (Dry Bulb)

Pests Controlled: onion maggot
Application rate: 3.7 ounces per 1,000 feet of row at an 18-inch row spacing.

At Plant In-Furrow Treatment:

Apply as an at planting in-furrow treatment. In Colorado, Idaho, Washington and Oregon, to control onion maggot in onions planted in double rows with rows spaced 2 to 4 inches apart, apply Chlorpyrifos 15G at the of 3.7 oz. per 1,000 feet of double row. Place the granules in a 4 to 7 inch wide band over both rows behind the planter shoe and in front of the press wheel to achieve shallow incorporation. Do not exceed 6.7 lb. per acre.

RESTRICTIONS:

Do not make more than one application appear year.

PEANUTS

Use Chlorpyrifos 15G to control cutworms, lesser cornstalk borer, southern corn rootworm larvae, suppress wireworms, and inhibit the growth and development of white mold (southern blight) disease caused by *Sclerotium rolfsii*. Chlorpyrifos 15G will control only those cutworms existing in the soil from the time of application up to 30 days following application.

Application Rates and Pests Controlled			
Banded Applications (Ounces 1,000 Feet of Row)			
Pests Controlled	At Plant Treatment	PostPlant Treatment	Aerial Broadcast (1 lb/acre)
*Preventive treatments: cutworms, lesser cornstalk borer, southern corn rootworm larvae, wireworms, white mold (southern blight)	7.5 to 15	7.5 to 15	
**Rescue treatments: lesser cornstalk borer		7.5 to 15	10 to 13

*At Plant Preventive Treatment:

Apply Chlorpyrifos 15G in a 6 to 12 inch band over the row behind the planter shoe and in front of the press wheel. Incorporate granules to a depth of 1-inch with tires or chains or other suitable equipment. If the 7.5 oz. rate is used at planting time, then another application of 7.5 oz. per 1,000 feet of row should be made postplant to extend control.

*Postplant Preventive Treatment:

Apply Chlorpyrifos 15G to peanuts at early flowering to pegging stage of growth in a 6 to 8 inch band over the row. For extended insect control and continued suppression of white mold (southern blight), a second application of Chlorpyrifos 15G may be made. Best suppression of white mold (southern blight) is obtained by applying the maximum rate of 15 oz. per 1,000 feet of row for each postplant treatment. (Irrigation or rain following application is needed to enhance treatment effectiveness for suppression of white mold. Under conditions of heavy white mold pressure, a suitable fungicide may also be required and must be applied separately.)

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* Band Reserve Treatment:

Use Chlorpyrifos 1SG for the control of lesser cornstalk borer when the insect first appears, usually just prior to or pegging. Apply in a 10 to 18 inch band over the fruiting zone.

* Broadcast Rescue Treatment:

Use Chlorpyrifos 1SG for the control of lesser cornstalk borer when the insect first appears, usually just prior to or at pegging. Uniformly apply at a rate of 10 to 13 pounds per acre by aerial broadcast application. Care must be taken to ensure proper equipment calibration and delivery.

RESTRICTIONS:

Do not apply more than 15 ounces of Chlorpyrifos 1SG per application per 1,000 feet of row or 13.3 pounds of Chlorpyrifos 1SG per acre per application. Do not apply more than 30 oz. per 1,000 feet of row or 26.6 pounds per acre per crop season. Do not harvest within 21 days after treatment. Do not feed peanut forage or hay to meat or dairy animals. The combined total of preplant and postplant applications of Chlorpyrifos 1SG must not exceed 4 pounds of active ingredient per acre per crop season.

SOYBEANS

Application Rates and Pests Controlled

Banded Applications (Ounces/ 1,000 Feet of Row)			
Pests Controlled	At Plant T-Band	Treatment Band	Postplant Treatment
Sugar beet root maggot		6.5 to 9	6.5 to 9
Cutworms	-	6.5 to 9	6.5 to 9

At Plant and Postplant Treatments:

Use Chlorpyrifos 1SG insecticide to control larvae of the lesser cornstalk borer and cutworms by application at planting time or postemergence as a band (row) treatment at the rate of 8 ounces per 1,000 feet of row. In the southeast, apply 4 to 8 oz. per 1,000 feet of row as an at-plant treatment. Equivalent rates of Chlorpyrifos 1SG per acre for various row spacing are given in the accompanying table. When applied at planting time, incorporate the granules into the top 1 inch of soil ahead of the press wheel. A drag chain can also be used for incorporation. For postemergence treatment when insects first appear, incorporate the granules in a 4 to 10 inch band to a depth of 1/2 to 1 inch using a suitable cultivator. Apply Chlorpyrifos 1SG with even furrow treatment that will provide uniform distribution of granules. Do not apply as an in-furrow treatment. For suppression of fire ants, use Chlorpyrifos 1SG at 8 oz. per 1,000 feet of row as an at-plant T-band treatment.

RESTRICTIONS:

Do not make more than one application per crop season.

SUGAR BEETS

Granular insecticides, including Chlorpyrifos 1SG, may contribute to the stress of the sugar beet plant under certain environmental conditions. This stress may reduce plant stand or influence with normal plant development. Herbicides used as preplant incorporated may interact with insecticides and enhance this stress.

Application Rates and Pests Controlled

Banded Applications

Banded Applications (Ounces/ 1,000 Feet of Row)			
Pests Controlled	At Plant T-Band	Treatment Band	Postplant Treatment
Sugar beet root maggot		6.5 to 9	6.5 to 9
Cutworms	-	6.5 to 9	6.5 to 9

At Plant Band Treatment:

To control sugar beet root maggot larvae and cutworms at planting time, place Chlorpyrifos 1SG in a band 4½ inches wide behind the planter shoe, over the drill row, and in front of the press wheel. Do not apply granules in direct contact with seeds. Apply Chlorpyrifos 1SG at the rate of 6.5 to 9 ounces per 1,000 feet of row (equivalent to 10 to 13.5 lb. per acre based on a 22-inch row spacing). Incorporate Chlorpyrifos 1SG into the top 1/2 to 1 inch of soil using a suitable incorporation device.

RESTRICTIONS:

Do not make more than one application per year.

SUNFLOWERS

**Pest controlled:
Application Rate:
8 oz. per 1,000 feet of rows**

At Plant Band Treatment:

Place the granules in a 7-inch wide band over the row behind the planter shoe in front of the press wheel and incorporate into the top one inch of soil using suitable equipment.

RESTRICTIONS:

So not make more than one application per season.

SWEET POTATOES

**Pest(s) Controlled:
Application Rate:
13.5 lb./acre**

Preplant Broadcast Treatment:

Use Chlorpyrifos 1SG to reduce the feeding damage caused by populations of the listed pest. Evenly broadcast the granules over the soil surface and then incorporate the granules into the soil to a depth of 4 to 6 inches using a rotary hoe, disc cultivator, or other suitable equipment. Plant the crop in the usual manner no later than 4 days after treatment (any delay in planting will reduce the length of time that Chlorpyrifos 1SG will protect against feeding damage). Chlorpyrifos 1SG will not control false wireworms or whitefringed beetle and other grubs that attack sweet potatoes.

RESTRICTIONS:

Do not make more than one application per crop season. Do not harvest within 125 days of treatment.

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TOBACCO

Pest Controlled: cutworms, flea beetle larvae, root maggots, and wireworms
 Application Rate: 13.5 to 20 lb/acre

Preplant Broadcast Treatment:

Apply Chlorpyrifos 15G one week before transplanting, using equipment that will evenly distribute the granules over a treated area. Immediately following application, incorporate the granules into the soil to a depth of 2 to 4 inches using suitable equipment. The application of Chlorpyrifos 15G will also suppress movement of imported fire ant into a treated field.

RESTRICTIONS:

Do not make more than one application per season.

BRASSICA (COLE) CROPS

Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Chinese Cabbage, Collards, Kale, Kohlrabi, Rutabaga, and Turnips

Pest Controlled: root maggot

Application Rate: 3.6 to 9.2 ounces per 1,000 feet of row

At Plant T-Band Treatment:

For direct seeded and transplanted crops, apply Chlorpyrifos 15G per acre to crops planted in 4-inch wide band centered over the row. This application requires a spreader or splitter on the end of the applicator drop tube. Shallow incorporation is necessary. Placement behind the planter shoe and in front of the press wheel is recommended.

RESTRICTIONS:

Do not apply more than 7 1/2 pounds of Chlorpyrifos 15G per acre to crops planted in 40-inch rows or more than 15 pounds of Chlorpyrifos 15G per acre to crops planted in 20-inch rows (or two rows per bed). Use proportional amounts for other row spacings not to exceed 15 pounds of Chlorpyrifos 15G per acre. Do not make more than one application per crop season. Do not use rutabaga tops for food or feed purposes.

RADISHES

Pest Controlled: root maggot

Application Rate: 3.3 ounces per 1,000 feet of row

At Plant In-Furrow Treatment:

Place the granule in the seed furrow with the seed at planting time.

RESTRICTIONS:

Do not apply more than 18.3 pounds of Chlorpyrifos 15G per acre or make more than one application per crop season.

TABLE 1

Chlorpyrifos 15G Insecticide-Application Rates per 1,000 ft. of row and equivalent per acre application rates at various row spacings.

Amount of Chlorpyrifos 15G Per 1,000 Feet of Row	Pounds of Chlorpyrifos 15G required Per Acre from Different Row Spacing							
	40"	38"	36"	34"	32"	30"	22"	18"
3.7 ounces	3.0	3.2	3.4	3.6	3.8	4.0	5.5	6.7
4 ounces	3.3	3.4	3.6	3.8	4.1	4.4	5.9	7.3
6 ounces	4.9	5.2	5.4	5.8	6.1	6.5	8.9	10.9
6.5 ounces	5.3	5.6	5.9	6.2	6.6	7.1	9.7	11.8
7.5 ounces	6.1	6.4	6.8	7.2	7.7	8.2	11.1	13.6
8 ounces	6.5	6.9	7.3	7.7	8.2	8.7	11.9	14.5
9 ounces	7.4	7.7	8.2	8.6	9.2	9.8	13.4	16.3
12 ounces	9.8	10.3	10.9	11.5	12.3	13.1	17.8	21.8
15 ounces	12.3	12.9	13.9	14.4	15.3	16.3	22.3	27.2
16 ounces	13.1	13.8	14.5	15.4	16.3	17.4	23.8	29.0

TABLE 2

Equipment Calibration and Calibration Settings for Different Types of Equipment

General Instructions for Equipment Calibration

Caution: The following chart lists suggested initial gauge settings for applications of Chlorpyrifos 15G Insecticide with one hopper opening per row. Be sure to check the actual application rate under your operating conditions.

1. Fill hopper.
2. Attach a plastic bag to tub opening.
3. Set your planter to the initial settings shown on chart.
4. Measure off 1,000 row feet and drive your planter the pre-measured distance at your desired speed.
5. Each bag should contain 6 to 8 ounces (wt) of granules depending on your desired rate.
6. If the result is over or under the desired rate adjust the settings and repeat the calibration.

CALIBRATION SETTING SPEED MPH										
	4	5	6	7	8					
APPLICATION RATE OZ. PER 1,000 Row FEET										
	8	16	8	16	8	16	8	16	8	16
PLANTER TYPE										
GAUGE SETTING										
Gandy ₁	21 4	30 2	23 7	32.4	26.0	36.0	27.7	39.0	30.2	41.0
John Deere ₁ Max-Emerge ₂	20	44	26	46	30	49	35	52	40	54
John Deere ₁ 7000 Max-Emerge (Odd Nos on Gate)	14	22	16	24	18	26	19	28	21	30
John Deere ₁ 7000 Max-Emergence (Even Nos. on Gate)	17	30	20	33	24	35	26	36	28	38
John Deere ₁ 71 Flexi- Planter and Older Planters	1 30	2 17	2 5	2 22	2 9	2 27	2 13	2 31	2 16	3 16
Allis Chalmers ₃ 70 Series	8	13	8	13	8	13	8	13	8	13
Allis Chalmers ₃ 78 & 79 Series	1 9.0	3 3.0	2 3.3	3 9.5	2 6.0	4 3.0	2 9.0	5 4.0	3 2.5	6 0
Noble ₁ (New)	11	19	14	22	16	25	17	28	19	31
White Planter	11	19	14	22	16	25	17	28	19	31
Inter- national harvester ₄	1 9.0	3 3.0	2 3.3	3 9.5	2 6.0	1 3.0	2 9.0	5 4.0	3 2.5	6 0
Buffalo All-Flex ₃ (Fleischer Mfg)	4 7/8	16 7/8	4 7/8	10 7/8	4 7/8	10 7/8	4 7/8	10 7/8	4 7/8	10 7/8

¹ Gauge setting.² Gauge setting with range 1 & 2 number is range notch.³ Gauge setting is constant regardless of speed.⁴ Gauge setting shown with stem gates & dial settings number shown is gate dial.⁵ Number of turns open on the adjustment nut.

WARRANTY STATEMENT

NOTICE: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product contrary to label instruction, or under abnormal conditions or under conditions not reasonably foreseeable to the seller and buyer assumes the risk of any such use.