

19713-521

10/18/2002

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CHLORPYRIFOS 15GR

Granular Insecticide

For control of various Insects infesting certain Field and Vegetable crops.

ACTIVE INGREDIENT:

Chlorpyrifos: 15.0%

OTHER INGREDIENTS: 85.0%

TOTAL: 100.0%

KEEP OUT OF REACH OF CHILDREN

CAUTION

See FIRST AID Below

EPA Reg. No. 19713-521

Net Contents:

EPA Est. No.

50 Pounds

FIRST AID

IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious or convulsing person.

IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 20 minutes.

IF INHALED:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.

Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

NOTE TO PHYSICIAN: 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/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. In case of severe, acute poisoning, use antidote immediately after establishing an open airway and respiration.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Harmful if swallowed. Causes eye irritation. Avoid contact with eyes, skin or clothing. Avoid breathing dust.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: Long-sleeved shirt and long pants waterproof gloves and shoes plus socks.

Follow 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 in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE) and restricted entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the WPS.

Do not enter or allow worker entry into treated areas during the REI of: REI for all crops is 24 hours except:

Sweet potatoes: 2 days

Fruit Trees: 4 days

PPE required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated such as plants, soil or water is: Coveralls, waterproof gloves and shoes plus socks.

Certified crop advisors or persons entering fields under their direct supervision under certain circumstances may be exempt from the early re-entry requirement pursuant to 40 CFR Part 170.

ACCEPTED

OCT 18 2002

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 19713-521

Manufactured By:

Drexel Chemical Company

P.O. BOX 13327, MEMPHIS, TN 38113-0327

SINCE 1972

APPROVED USES

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

Application Rates and Pests Controlled

Pests Controlled	Amount of This Product (Ounces per 1,000 Feet of Row)			Post-plant Treatment	Pre-plant Broadcast Application (Pounds per Acre)
	At Plant Treatments		In-Furrow		
	T-Band	Band			
Northern and Western Corn rootworm larvae	8	8	8	8	-
Southern Corn rootworm larvae	8	8	8	8	-
Cutworms*	8	8	8 to 16	-	6.75 to 13.5
Wireworms**	8 to 16	16	8 to 16	-	13.5
Billbugs	8 to 16	8 to 16	-	-	13.5
Seed corn maggots	8	-	8	-	-
Grubs	16	-	8 to 16	-	13.5
Lesser cornstalk borers	8 to 16	8 to 16	-	-	-
Seed corn beetles	8 to 16	-	8 to 16	-	-
Flea beetle larvae	-	-	-	-	13.5
Symphylans	8 to 12	8 to 12	-	-	-
Armyworms, European and Southwestern Corn Borers***	-	-	-	6 to 8	-
Fire ants**	8	-	-	-	-
Chinch bugs	8	-	8	-	-

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

**8 oz. rate of this product - suppression only.

***Use 5 to 6.5 lbs. of this product per acre, applied broadcast by air.

At Plant Band Treatment: In conventional, minimum and no-till Corn, place the granules in a 6- or 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 lines 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 NC, SC and VA, apply this product as a 7- to 10-inch wide band at the rate of 16 ounces of this product per 1,000 feet of row. Incorporate with drag chains.

At Plant T-Band Treatment: In conventional, minimum and no-till Corn, for control of Billbugs, Cutworms and Rootworms, in addition to Lesser cornstalk borers, Seed corn beetles, Grubs and Seed corn maggots, Symphylans and Wireworms, apply as a T-band over an open seed furrow. In conventional and minimum-till Corn, incorporate into the top one-half to 1 inch of soil using suitable equipment. For suppression of Nematodes in the Southeast, use this product as a T-Band treatment at 16 ounces of this product per 1,000 feet of row over an open seed furrow. This product has demonstrated suppression of certain soil-borne pathogens which may result in certain physiological and agronomic advantages to Corn under environmental stress conditions when compared to Corn not treated with this product.

At Plant In-Furrow Treatment: Apply this product 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 this product per acre for various row spacings are given in the accompanying table.

Post-plant Treatment: To control Corn rootworm larvae, apply this product 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 this product in a band over the row so that the granules are directed into the whorl or use a post-plant broadcast treatment. Consult your state agricultural experiment station or extension service specialist for the proper time to treat and for further information concerning soil insect control in your area.

Post-plant Broadcast Treatment: Use this product for control of European and Southwestern corn borers by uniformly broadcasting the granules over the Corn plants by aerial application or by 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.

Pre-plant 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 this product per 1,000 feet of row or 13.5 pounds

of this product per acre per crop season. For foliar insect control, do not exceed the equivalent of 16 ounces of this product per 1,000 feet of row or 13 pounds of this product 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 or 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.

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CITRUS GROVE FLOORS

Pests Controlled: Fire ants and other Ant species.

Application Rate: 6.7 pounds of this product per acre.

Post-plant Broadcast Treatment: To control foraging Ants and suppress mounds, apply this product 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. This product may be custom blended with granular fertilizers provided that application of the blended product plus fertilizer mixture can be applied uniformly to the grove floor. Do not apply where weed growth or other obstructions would impede uniform coverage of the grove floor.

Restrictions: Do not apply more than 67 pounds of this product per acre per crop season. Do not apply last treatment within 28 days of harvest. Do not allow livestock to graze in treated areas.

SORGHUM / MILO

Application Rates and Pests Controlled

Pests Controlled	Banded Applications (Ounces of This Product per 1,000 Feet of Row)	
	At Plant Treatments	
	T-Band	Band
Lesser cornstalk borers	4 to 12	4 to 12
Corn rootworms and cutworms	8	8
Fire ants*	8	-
Chinch bugs*	8	-

* 8 ounce 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. Equivalent rates of this product 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 of this product per crop season.

ONIONS (Dry Bulb)

Pest Controlled: Onion maggots

Application Rate: 3.7 ounces of this product 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 CO, ID, OR and WA, to control Onion maggots in Onions planted in double rows with rows spaced 2 to 4 inches apart, apply this product at the rate of 3.7 ounces 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 pounds of this product per acre.

Restrictions: Do not make more than one application of this product per year.

PEANUTS

Use this product to control Cutworms, Lesser cornstalk borers, Southern corn rootworm larvae, suppress Wireworms and inhibit the growth and development of White mold (Southern blight) disease caused by *Sclerotium rolfsii*. This product 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

Pests Controlled	Banded Applications (Ounces of This Product per 1,000 Feet of Row)		
	At Plant Treatment	Post-plant Treatment	Aerial Broadcast (Pounds Per Acre)
*Preventive Treat- ments: Cutworms, Lesser cornstalk borers, Southern corn rootworm larvae, Wireworms, White mold (Southern blight)	7.5 to 15	7.5 to 15	-
**Rescue Treatments: Lesser cornstalk borers	-	7.5 to 15	10 to 13

*At Plant Preventive Treatment: Apply this product 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 tines or chains or other suitable equipment. If the 7.5 ounce rate of this product is used at planting time, then another application of 7.5 ounces per 1,000 feet of row should be made post-plant to extend control.

***Post-plant Preventive Treatment:** Apply this product 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 this product may be made. Best suppression of White mold (Southern blight) is obtained by applying the maximum rate of 15 ounces per 1,000 feet of row for each post-plant 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.)

****Band Rescue Treatment:** Use this product for the control of Lesser cornstalk borers when the Insects first appear, usually just prior to or at pegging. Apply in a 10- to 18-inch band over the fruiting zone.

****Broadcast Rescue Treatment:** Use this product for the control of Lesser cornstalk borers when the Insects first appear, 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 this product per application per 1,000 feet of row or 13.3 pounds of this product per acre per application. Do not apply more than 30 ounces 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 pre-plant and post-plant applications of this product must not exceed 4 pounds of active ingredient per acre per crop season.

SOYBEANS

Application Rates and Pests Controlled

Pests Controlled	Banded Applications (Ounces of This Product per 1,000 Feet of Row)		
	At Plant Treatments		Post-plant Treatment
	T-Band	Band	
Lesser Cornstalk borers, Cutworms	8	8	8

At Plant and Post-plant Treatments: Use this product to control larvae of Cutworms and the Lesser cornstalk borers by application at planting time or post-emergence as a band (row) treatment at the rate of 8 ounces of this product per 1,000 feet of row. In the Southeast, apply 4 to 8 ounces of this product per 1,000 feet of row as an at-plant treatment. Equivalent rates of this product per acre for various row spacings 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 post-emergence treatment when Insects first appear, incorporate the granules in a 4- to 10-inch band to a depth of one-half to 1 inch using a suitable cultivator. Apply this product with equipment that will provide uniform distribution of the granules. Do not apply as an in-furrow treatment. For suppression of Fire ants, use this product at 8 ounces per 1,000 feet of row as an at plant T-band treatment.

Restrictions: Do not make more than one application of this product per season.

SUGAR BEETS

Granular insecticides, including this product, may contribute to the stress of the Sugar beet plant under certain environmental conditions. This stress may reduce plant stand or interfere with normal plant development. Herbicides used pre-plant incorporated may interact with insecticides and enhance this stress.

Application Rates and Pests Controlled

Pests Controlled	Banded Applications (Ounces of This Product per 1,000 Feet of Row)		
	At Plant Treatments		Post-plant Treatment
	T-Band	Band	
Cutworms	-	6.5 to 9	-
Sugar beet root maggots	-	6.5 to 9	6.5 to 9

At Plant Band Treatment: To control Cutworms and Sugar beet root maggot larvae at planting time, place this product in a band 4 to 5 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 this product at the rate of 6.5 to 9 ounces per 1,000 feet of row (equivalent to 10 to 13.5 pounds of this product per acre based on a 22-inch row spacing). Incorporate this product into the top one-half to 1 inch of soil using a suitable incorporation device.

Restrictions: Do not make more than one application of this product per year.

SUNFLOWERS

Pest Controlled: Cutworms.

Application Rate: 8 ounces of this product per 1,000 feet of row.

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 1 inch of soil using suitable equipment.

Restrictions: Do not make more than one application of this product per season.

SWEET POTATOES

Pests Controlled: Flea beetles (*Systema*), Sweet potato beetles and Wireworms (*Conoderus*).

Application Rate: 13.5 pounds of this product per acre.

Pre-plant Broadcast Treatment: Use this product to reduce the feeding damage caused by populations of the listed pests. 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 14 days after treatment (any delay in planting will reduce the length of time that this product will protect against feeding damage). This product will not control False wireworms, White-fringed beetles and other Grubs that attack Sweet potatoes.

Restrictions: Do not make more than one application of this product per season. Do not harvest within 125 days of treatment.

TOBACCO

Pests Controlled: Cutworms, Flea beetle larvae, Root maggots and Wireworms.

Application Rate: 13.5 to 20 pounds of this product per acre.

Pre-plant Broadcast Treatment: Apply this product one week before transplanting, using equipment that will evenly distribute the granules over a treated area. Immediately following application, incorporate the granules into soil to a depth of 2 to 4 inches using suitable equipment. Application of this product will also suppress movement of imported Fire ants into treated fields.

Restrictions: Do not make more than one application of this product per season.

BRASSICA (COLE) CROPS

(Broccoli, Brussels sprouts, Cabbage, Cauliflower, Chinese cabbage, Collards, Kale, Kohlrabi, Rutabagas, Turnips)

Pest Controlled: Root maggots.

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

At Plant T-Band Treatment: For direct-seeded and transplanted crops, apply this product as a 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 7.5 pounds of this product per acre to crops planted in 40-inch rows or more than 15 pounds of this product 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 this product per acre. Do not make more than one application of this product per crop season. Do not use Rutabaga tops for food or feed purposes.

RADISHES

Pest Controlled: Root maggots.

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

At Plant In-Furrow Treatment: Place the granules in the seed furrow with the seed at planting time.

Restrictions: Do not apply more than 18.3 pounds of this product per acre or make more than one application per season.

Amount of This Product per 1,000 Feet of Row	Pounds of This Product per Acre Required per Acre Application Rates at Various 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
4.0 Ounces	3.3	3.4	3.6	3.8	4.1	4.4	5.9	7.3
6.0 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
8.0 Ounces	6.5	6.9	7.3	7.7	8.2	8.7	11.9	14.5
9.0 Ounces	7.4	7.7	8.2	8.6	9.2	9.8	13.4	16.3
12.0 Ounces	9.8	10.3	10.9	11.5	12.3	13.1	17.8	21.8
15.0 Ounces	12.3	12.9	13.9	14.4	15.3	16.3	22.3	27.2
16.0 Ounces	13.1	13.8	14.5	15.4	16.3	17.4	23.8	29.0

GENERAL INSTRUCTIONS FOR EQUIPMENT CALIBRATION

Caution: The following chart lists suggested initial gauge settings for application of this product 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 tube opening.

3. Set your planter to the initial setting 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.

TABLE 2
Equipment Calibration and Calibration Settings
for Different Types of Equipment

Planter Type	Calibration Setting									
	Speed (mph)									
	4		5		6		7		8	
	Application Rate (Ounces of This product per 1,000 Row Feet)									
	8	16	8	16	8	16	8	16	8	16
	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-Emerge (Even Nos. on Gate)	17	30	20	33	24	35	26	36	28	38
John Deere ² 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 ⁴ 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 ^{NEW}	11	19	14	22	16	25	17	28	19	31
White Planter	11	19	14	22	16	25	17	28	19	31
International Harvester ⁴	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
Buff-Lo All-Flex ⁵ (Fleischer Mfg.)	4%	10	4%	10	4%	10	-	-	-	-

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

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, dry place.

PESTICIDE DISPOSAL: Wastes resulting from 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.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL INFOTRAC AT (800) 535-5053.

WARRANTY—CONDITIONS OF SALE

OUR RECOMMENDATIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the Seller. Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

In no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

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