

19713-505

10/24/2003

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Luz G. Piwonka
 Drexel Chemical Company
 1700 Channel Avenue
 P.O. Box 13327
 Memphis TN 38113-0327

OCT 24 2003

Dear Ms. Piwonka:

Subject: Labeling Submitted in Response to the Chlorpyrifos IRED
 Drexel Chlorpyrifos 15G
 EPA Reg. No. 19713-505
 Your Submission Dated May 22, 2003

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable provided you make the following changes before you release the product for shipment bearing the amended labeling:

- 1) Within the list of Personal Protective Equipment (PPE), revise the respirator requirement so that it includes the requirement of being NIOSH-approved.
- 2) Add the statements "Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing" to the end of the User Safety Recommendations.
- 3) The restriction beginning "This product is not registered in California and Arizona..." should be relocated from within the Environmental Hazards section so that it appears in the vicinity of the Directions for Use heading.
- 4) Within the directions for use on corn, all application rates must be revised so that they do not exceed a maximum of 6.7 pounds of formulated product (1 pound of active ingredient) per acre per application. All application rates given in terms of ounces per 1,000 feet of row must likewise be revised so that they would not result in more than 1 pound of active ingredient per acre per application.

DK: 305-7546: IRB/PM01

CONCURRENCES

SYMBOL	7505C							
SURNAME	D. Kenny							
DATE	10/24/2004							

- 5) Within the directions for use on onions, revise the restriction regarding the maximum number of applications per season to 1 application per season.
- 6) Within the directions for use on peanuts, the subsection regarding Broadcast Rescue Treatment references aerial broadcast application. This reference must be deleted, since aerial application to peanuts is prohibited.
- 7) Revise the restricted entry interval (REI) for sweet potatoes listed in the Agricultural Use Requirements box so that it specifies a 24-hour REI.

Approval of this labeling amendment does not constitute approval of your application for reregistration of this product. Product reregistration is currently pending and future labeling amendments and/or additional data may be necessary.

Submit two copies of your final printed labeling before you release the product for shipment. A stamped copy is enclosed for your records. If you have any questions, please contact me at (703) 308-6249 or hebert.john@epa.gov.

Sincerely yours,



John Hebert
Product Manager (07)
Insecticide/Rodenticide Branch
Registration Division (7505C)

cc: Tom Myers, SRRD
Jane Mitchell, SRRD

Enclosure

ACCEPTED
with COMMENTS
In EPA Letter Dated:

OCT 24 2003
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
19713-505



CHLORPYRIFOS 15G

Agricultural Insecticide

LOW ODOR FORMULA

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. 19713-505
EPA Est. No.

Net Contents:
50 Pounds

FIRST AID ORGANOPHOSPHATE
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. For information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.
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 (Con't)

PERSONAL PROTECTIVE EQUIPMENT (PPE)
Some materials that are chemical-resistant to this product are Barrier Laminate and Viton. For more information, following instructions in Supplement Three of PR Notice 93-7. If you want more options, follow the instructions for category G on an EPA chemical-resistance category selection chart.

Loaders, applicators and all other handlers must wear: Coveralls over long-sleeved shirt and long pants, waterproof chemical-resistant gloves, and ~~shoes~~ chemical-resistant footwear plus socks and an air purifying respirator equipped with an R or P series filter.

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

Engineering Control Statements

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

When applicators use closed cab motorized ground equipment in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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. 3) Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish, aquatic invertebrates, small mammals and birds, and wildlife and extremely toxic to fish and aquatic organisms. 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 area may be hazardous to aquatic organisms in water adjacent aquatic sites to treated areas. Cover or incorporate spills. Do not contaminate water when disposing of equipment washwater or rinsate.

This product is not registered in California and Arizona. California and Arizona law prohibits sale, distribution and use within the State of any products not registered by the State.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read all "DIRECTIONS FOR USE" before applying.

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.

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.
Continued



Manufactured By:
Drexel Chemical Company

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

SINCE 1972

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), notification to worker 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 24 hours except:

- Sweet Potatoes: 2 days
- Cauliflower: 3 days
- Fruit Trees: 4 days
- Citrus Trees: 5 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 over short-sleeved shirt and short pants, chemical-resistant footwear shoes plus socks and waterproof gloves, chemical-resistant gloves made of any waterproof material and chemical-resistant headgear for overhead exposure. If the product is soil-injected or soil-incorporated, the WPS, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. 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. Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

AERIAL APPLICATION RESTRICTIONS

Aerial application to peanuts is prohibited.

Do not apply by aircraft at a rate greater than 6.7 lbs. of this product per acre (1 lb. a.i./A).

SPRAY DRIFT RESTRICTIONS:

Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

For ground boom applications, do not apply within 25 feet of rivers, natural ponds, lakes, streams reservoirs, marshes, estuaries and commercial fish ponds. Apply with nozzle height no more than 4 feet above the ground or crop canopy and when wind speed is 10 mph or less at the application site as measured by an anemometer. Use fine or medium or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles.

For orchard/vineyard airblast applications, do not apply within 50 feet of rivers, natural ponds, lakes, streams, reservoirs, marshes, estuaries and commercial fish ponds. Direct spray above trees/vines and turn off outward pointing nozzles at row ends and outer rows. Apply only when wind speed is 3-10 mph at the application site as measured by an anemometer outside of the orchard/vineyard on the upwind side.

For aerial applications, do not apply within 150 feet of rivers, natural ponds, lakes, streams, reservoirs, marshes, estuaries and commercial fish ponds. The boom width must not exceed 75% of the wingspan or 90% of the rotary blade. Use upwind swath displacement and apply only when wind speed is 3-10 mph as measured by an anemometer. Use fine or medium or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or the crop canopy.

For overhead chemigation, do not apply within 25 feet of rivers, natural ponds, lakes, streams, reservoirs, marshes, estuaries and commercial fish ponds. Apply only when wind speed is 10 mph or less.

The applicator also must use all other measures necessary to control drift.

APPROVED USES

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

Application Rates and Pests Controlled

Pests Controlled	Banded Applications (Ounces per 1,000 Feet of Row)			Post-plant Treatment	Pre-plant Broadcast Application (Pounds per Acre)	Aerial 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	8-16	-	6.75 to 13.3	-
Wireworms***	8	8	8-16	-	13.3	-
Billbugs	8-16	8-16	-	-	13.3	-
Seed corn maggots	8	-	8	-	-	-
Grubs	16	-	8-16	-	13.3	-
Lesser cornstalk borers	8-16	8-16	-	-	-	-
Seed corn beetles	8-16	-	8-16	-	-	-
Flea beetle larvae	-	-	-	-	13.3	-
Symphylans	8-12	8-12	-	-	-	-
Armyworms	-	-	-	6 to 8	-	-
European and Southwestern Corn Borers	-	-	-	6 to 8	-	5 to 6.5
Fire ants***	8	-	-	-	-	-
Chinch bugs	8	-	8	-	-	-

*This product is compatible with all ALS inhibitor herbicides, including Accent®, Beacon® and Broadstrike herbicides, applied in accordance with label recommendations. Refer to the product labels for additional precautions and directions for use.
 **8 ozs. rate of this product - suppression only for in-furrow treatments.
 ***8 ozs. rate of this product - suppression only

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 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 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, Seed corn Grubs and Maggots, Symphylans and Wireworms, apply as a T-band over an open seed furrow. In conventional and minimum-till Corn, incorporate into the top 0.5 to 1 inch of soil using suitable equipment. For severe Grub and Wireworm infestations, use 12 ounces per 1,000 feet of row. 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 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 into the open seed furrow and are covered with soil. Equivalent rates of this product per acre for various row spacing are given in accompanying tables.

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. Use application rates of 3.5 to 4 ounces of this product per 1,000 feet of row for low to moderate first generation infestations before larvae have entered Corn stalks. Use application rates of 8 to 8 ounces of this product per 1,000 feet of row for severe first generation infestations and all second generation infestations before larvae have entered Corn stalks.

Consult your State Agricultural Experiment Station or Extension Service Specialist for the proper time to treat and local threshold information. Scouting for insect damage is strongly encouraged.

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: Maximum number of applications per season is two. For soil insect control, do not exceed the equivalent of 16 ounces of this product per 1,000 feet of row or 13.3 pounds of this product per acre (2 lbs. a.i./A) 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. REI is 24 hours.

ONIONS (Dry Bulb)

Pest Controlled: Onion maggots

Application Rate: 0.23 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 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 two applications of this product per year. PHI is 7 days. REI is 24 hours.

CITRUS GROVE FLOORS

Pests Controlled: Fire ants and other Ant species.

Application Rate: 6.7 pounds of this product per acre. Minimum retreatment interval is 10 days.

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. Re-treat 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 20 pounds of this product (3 lbs. a.i.) per acre per crop season. Do not apply last treatment within 28 days of harvest. Do not allow livestock to graze in treated areas. Maximum number of applications per season is three. REI is 5 days.

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 Treatments: 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 season. REI is 24 hours.

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)
*Preventative Treatments: 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
Burrowing bugs	-	-	13.33

***At Plant Preventative 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 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 Preventative 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 this product at 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. For control of Burrowing bugs, use this product when adults first appear, usually at mid to late pegging. Uniformly apply at a rate of 13.5 pounds per acre by aerial broadcast application. Care must be taken to ensure proper equipment calibration and delivery.

Restrictions: Aerial application is prohibited. Do not apply more than 15 ounces of this product per application per 1,000 feet of row or 13.5 pounds of this product per acre per application. Do not apply more than 30 ounces of this product per 1,000 feet of row or 26.7 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. REI is 24 hours.

SOYBEANS

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	Post-plant Treatment
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 per 1,000 feet of row. In the Southeast, apply 4 to 8 ounces 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 by placing in a 4- to 10-inch band over the row behind the planter shoe and 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 0.5 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.

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Restrictions: Do not make more than one application of this product per season. PHI is 7 days. REI is 24 hours.

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	
Sugar beet root maggots	-	6.5 to 9	6.5 to 9
Cutworms	-	6.5 to 9	-
Wireworms (suppression)	-	6.5 to 9	-

At-Plant Band Treatment: To control Cutworms and Sugar beet 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 0.5 to 1 inch of soil using suitable equipment.

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

Post-emergence Band Treatment: For post-emergence control of Sugar beet maggot larvae, place this product in a band 3 to 5 inches wide over the Beet row (up to 2 to 4 true leaf stage of plant growth). 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 per acre based on a 22-inch row spacing). Incorporate this product into the top 0.5 to 1 inch of soil using a suitable incorporation device.

Restrictions: Do not make more than one application of this product per year. PHI is 7 days. REI is 24 hours.

SUNFLOWERS

Pests 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 per season. PHI is 7 days. REI is 24 hours.

SWEET POTATOES

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

Application Rate: 13.3 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 8 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. REI (Re-entry interval is 2 days (48 hours)). PHI is 125 days. REI is 24 hours.

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. The application of this product will also suppress movement of imported Fire ants into treated field.

Restrictions: Do not make more than one application of this product per season. PHI is 7 days. REI is 24 hours.

BRASSICA (COLE) CROPS

(Bok Choy, Broccoli, Broccoli raab, Brussels sprouts, Cabbage, Cauliflower, Chinese broccoli, Chinese cabbage, Collards, Kale, Kohlrabi, Rutabagas, Turnips)

Pests Controlled: Root maggots.

Application Rate: 4.6 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 per season. Do not use Rutabaga tops for food or feed purposes.

PHI is 7 days for all crops except for Cauliflower. PHI for Cauliflower is 21-30 days. REI for all crops is 24 hours except Cauliflower. REI for Cauliflower is 3 days.

RADISHES

Pests Controlled: Root maggots.

Application Rate: 3.33 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 18.33 pounds of this product (2.75 lbs. a.i.) per acre or make more than one application per season. PHI is 7 days. REI is 24 hours.

Amount of This Product per 1,000 Feet of Row	Pounds of This Product per Acre Required per Acre from 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
4.5 Ounces	3.7	3.9	4.1	4.3	4.6	4.9	6.7	8.2
6.0 Ounces	4.9	5.2	5.4	5.8	6.1	6.5	8.9	10.9
6.5 Ounces	5.3	5.8	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	13.8
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
18.0 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	Speed (mph)									
	4		5		6		7		8	
	Application Rate, Ounces 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	$\frac{1}{30}$	$\frac{2}{17}$	$\frac{2}{5}$	$\frac{2}{22}$	$\frac{2}{9}$	$\frac{2}{27}$	$\frac{2}{13}$	$\frac{2}{31}$	$\frac{2}{16}$	$\frac{3}{16}$
Allis Chalmers ³ 70 Series	8	13	8	13	8	13	8	13	8	13
Allis Chalmers ⁴ 78 & 79 Series	$\frac{1}{9.0}$	$\frac{3}{3.0}$	$\frac{2}{3.3}$	$\frac{3}{9.5}$	$\frac{2}{6.0}$	$\frac{4}{3.0}$	$\frac{2}{9.0}$	$\frac{5}{4.0}$	$\frac{3}{2.5}$	$\frac{6}{0}$
Noble ^{5(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 ⁶	$\frac{1}{9.0}$	$\frac{3}{3.0}$	$\frac{2}{3.3}$	$\frac{3}{9.5}$	$\frac{2}{6.0}$	$\frac{4}{3.0}$	$\frac{2}{9.0}$	$\frac{5}{4.0}$	$\frac{3}{2.5}$	$\frac{6}{0}$
Buffalo All-Flex ³ (Fleischer Mfg.)	4.88	10	4.88	10	4.88	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.

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.

