# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

December 20, 2012

Gharda Chemicals, Ltd. c/o Dr. Frank E. Sobotka IPM Resources LLC 4032 Crockers Lake Blvd., Suite 818 Sarasota, FL 34238

Subject:

Amended labeling to implement required spray drift mitigation measures

Product Name: Pilot 15G Chlorpyrifos Agricultural Insecticide

EPA Registration Number: 33658-27

Submission dated August 28, 2012; resubmission dated December 18, 2012

Dear Dr. Sobotka:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable. A stamped copy of the label is enclosed for your records. Please submit one copy of your final printed labeling before you release the product for shipment. Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). If you have any questions, please contact Julie Chao by phone at 703-308-8735, or by email at chao.julie@epa.gov.

Regards,

Venus Eagle, Product Manager 01
Insecticide-Rodenticide Branch

Registration Division (7505P)

[501b Pilot 15G Bag Label]



# **Chlorpyrifos Agricultural Insecticide**

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

Group	16	Insecticide
		,
Active Ingredient:	•	
Chlorpyrifos: O,O-diethyl		•
O-(3,5,6-trichloro-2-pyridir	nyi)	
phosphorothioate		15.0%
Other Ingredients:		85.0%
Total:		

# KEEP OUT OF REACH OF CHILDREN CAUTION PRECAUCION

Si usted no entiende la etiqueta, busque a aiguien para que se la explique a usted en detaile. (If you do not understand the label, find someone to explain it to you in detail.)

#### Manufactured for:

Gharda Chemicals Limited 660 Newtown-Yardley Rd., Suite 106 1-(215)-968-9474

EPA Reg. No.: 33658-27 First Letters in Batch Code Indicate Producing Establishment: EPA Est. No.: 5905-GA-01=CG 5905-IA-01=DI

5905-IA-01=DI 44616-MO-1=SJ

Net Contents: 50 pounds

Pilot is a registered trademark of Gharda Chemicals Limited Newtown, PA 18940

ACCEPTED DEC 2 0 2012

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under:

EPA. Reg. No: 33658-27

	FIDOT AID
	FIRST AID
<u></u>	(Organophosphate Insecticide)
If	<ul> <li>Call poison control center or doctor</li> </ul>
swallowed:	immediately for treatment advice.
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>
	<ul> <li>Do not induce vomiting unless told to do so by</li> </ul>
	the poison control center or doctor.
	<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
If in ever:	Hold eye open and rinse slowly and gently
If in eyes:	with water for 15-20 minutes.
·	Remove contact lenses, if present, after the
	first 5 minutes, then continue rinsing eye.
,	<ul> <li>Call a poison control center or doctor for</li> </ul>
	treatment advice.
If on skin or	<ul> <li>Take off contaminated clothing.</li> </ul>
clothing:	<ul> <li>Rinse skin immediately with plenty of water for</li> </ul>
] [	15-20 minutes.
	<ul> <li>Call a poison control center or doctor for</li> </ul>
	treatment advice.
If inhaled:	<ul> <li>Remove person to fresh air.</li> </ul>
	<ul> <li>If person is not breathing, call 911 or an</li> </ul>
	ambulance, then give artificial respiration,
	preferably by mouth-to-mouth, if possible.
	<ul> <li>Call a poison control center or doctor for</li> </ul>
	further treatment advice.

# HOT LINE NUMBER

(Organophosphate Insecticide)

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical treatment information call: 1-(866)-359-5660

#### **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 moderate eye irritation. Avoid contact with eyes, skin or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling.

#### Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are barrier laminate or viton. If you want more instructions, follow the instructions for category H on an EPA chemical resistance category selections chart.

#### All mixers, loaders, other applicators and other handlers must wear:

- · coveralls over long-sleeved shirt and long pants;
- · chemical-resistant gloves;
- · chemical resistant footwear plus socks;
- a NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N.R.P or HE filter.

#### **User Safety Requirements**

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

# **User Safety Recommendations**

Users should:

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

#### **Engineering Controls**

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 equipment in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### **Environmental Hazards**

This pesticide is toxic to fish, aquatic invertebrates, small mammals and birds. 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 cleaning equipment or disposing of equipment washwaters or rinsate. 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.

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.

#### **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. Read and follow all Spray Drift Mitigation Measures (See Spray Drift Mitigation Measures section). Only protected handlers may be in the area during application. Do not apply by aircraft at a rate greater than 6.5 pounds of formulated product (1 pound of active ingredient) per acre. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

# Spray Drift Mitigation Measures (SDMM)

The buffer distances specified in the below table are the distances in feet that must exist to separate sensitive sites from the targeted application site. Buffers are measured from the edge of the sensitive site to the edge of the application site. Sensitive sites are areas frequented by non-occupational bystanders (especially children). These include residential lawns, pedestrian sidewalks, outdoor recreational areas such as school grounds, athletic fields, parks and all property associated with buildings occupied by humans for residential or commercial purposes. Sensitive sites include homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, and hospitals. Non-residential agricultural buildings,

including barns, livestock facilities, sheds, and outhouses are not included in the prohibition.

Application	Required Setba	Required Setback (Buffer Zones)	
rate Lb ai/A	Aerial	Ground**	
>0.5 - 1	25	10	
>1 - 2	NA	10	
>2 - 3	Not Allowed	10	
>3 - 4	Not Allowed	10	
>4	Not Allowed	10	

\*\*The required buffer zones for ground applications apply to applications made via spreaders.

Only pesticide handlers are permitted in the setback area during application of this product. Do not apply this product if anyone other than a mixer, loader, or applicator, is in the setback area. Exception: Vehicles and persons riding bicycles that are passing through the setback area on public or private roadways are permitted.

#### Specific Spray Drift Mitigation Use Directions

Spray Drift Mitigation Measures apply to all Agricultural Uses for chlorpyrifos products including Nurseries. These measures do not apply to Non-Agricultural uses, such as, golf-course turf; greenhouses, wood products or in applications where chlorpyrifos is applied as an adult mosquitoside. Note: Spray Drift Mitigation Measures do not apply to Granular product applications made in-furrow, T-banded or banded post emergence. However, Spray Drift Mitigation Measures do apply to granular applications made by ground boom spreaders, or when chlorpyrifos granules are applied aerially.

#### Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 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 exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. 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 entry into treated areas during the restricted entry interval (REI). The REI for each crop is listed in the directions for use associated with each crop.

Also see specific Use Directions under **Approved Crops** Section of this label

**Exception:** If the product is soil-injected or soil-incorporated, the Worker Protection Standard, 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 under their supervision , under certain circumstances, may be exempt from the early reenter requirement pursuant to 40 CFR Part 170.

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:

- · coveralls over short-sleeved shirt and short pants;
- · chemical-resistant gloves made out of water proof material;
- · chemical-resistant footwear plus socks;
- · chemical-resistant headgear for overhead exposure.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

#### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage:** Store in original container in a secured dry storage area. Prevent cross contamination with other pesticides and fertilizers. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

In Case of Spill: Isolate the spill. Hold this package, other cargo and vehicles involved. For Emergency spill assistance Call CHEMTREC (24-hour service): 1-800-535-5053.

Pesticide Disposal: Open dumping is prohibited. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

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. Offer for recycling if available, or, 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

Alfalfa (Missouri only)

Worker Restricted Entry Interval: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

Apply Pilot 15E at planting as an in-furrow treatment for suppression of the target pests during establishment. Direct the granules into the planter shoe with the seed, 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 the open seed furrow and are covered with soil.

Pests Controlled	Pilot 15G lb/acre
cutworms	
grubs	6.6
wireworms.	

#### Specific Use Precautions:

 Read and follow all Spray Drift Mitigation Measures (See Spray Drift Mitigation Measures section).

#### Specific Use Restrictions:

- Preharvest Interval: Do not cut or graze treated alfalfa within 21 days after application.
- Do not make more than 1 application of Pilot 15G per year.
- Maximum single application rate is 1 lb ai chlorpyrifos per acre.
- · For use only in Missouri.

Asparagus (California only)

Worker Restricted Entry Interval: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

Apply Pilot 15G as a postharvest ground application for suppression of the target pest. Apply as a band over the entire crown area when the asparagus beds have been split (i.e., remove most of the soil from above the asparagus crowns). Cover the area with soil the day of application.

Note: Control may be reduced in soils with high organic matter content.

Pests Controlled	Pilot 15G Ib/acre
symphylans	10

#### **Specific Use Precautions:**

 Read and follow all Spray Drift Mitigation Measures (See Spray Drift Mitigation Measures section).

#### **Specific Use Restrictions:**

- Preharvest Interval: Do not apply within 180 days before harvest.
- Do not apply more than a total of 3 lb ai chlorpyrifos per acre between harvests.
- For use only in California.

#### Citrus Orchard Floors

**Worker Restricted Entry Interval**: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 5 days unless PPE required for early entry is worn.

Pests Controlled	Application Rate Lb/acre
anta (d)	0.0
ants (1)	6.6

Numbers in parentheses (-) refer to Pest-Specific Use Directions

#### Pest-Specific Use Directions:

1. Excludes ants of significant public health importance such as fire ants, harvester ants, carpenter ants, and pharaoh ants.

Postplant Broadcast Treatment: To control foraging ants and suppress mounds, apply Pilot 15G with ground application equipment. Use a suitable granular applicator, such as a cyclone fertilizer spreader, that will uniformly broadcast the granulas over the grove floor. Pilot 15G may be custom blended with granular fertilizers provided that application of the blended Pilot 15G 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.

# Specific Use Precautions:

Read and follow all Spray Drift Mitigation Measures (See Spray Drift Mitigation Measures section).

#### Specific Use Restrictions:

- Preharvest Interval: Do not apply within 28 days before harvest.
- Do not make more than 3 applications of Pilot 15G or other products containing chlorpyrifos per year (does not include foliar applications to citrus trees).
- Do not apply more than 20 lbs. of Pilot 15G per year (3 lb. ai per acre per season).
- Do not allow livestock to graze in treated areas.
- Do not make a second application within 10 days of any application of chlorpyrifos to the orchard.
- Do not apply more than 1 lb. ai chlorpyrifos per application.

# Cole Crops (Brassica) Leafy Vegetables (Bok Choy, Broccoli, Broccoli Raab, Brussels Sprout, Cabbage, Cauliflower, Chinese Broccoli, Chinese Cabbage, Collards, Kale, Kohlrabi, and Turnip)

Worker Restricted Entry Interval: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 24 hours (3 days for cauliflower) unless PPE required for early entry is worn.

Pests Controlled	Application Rate Ounces per 1,000 feet of row
- root maggot	4.6 to 9.2

At Plant T-Band Treatment: For direct seeded and transplanted crops, apply Pilot 15G 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.

# **Specific Use Precautions:**

 Read and follow all Spray Drift Mitigation Measures (See Spray Drift Mitigation Measures section).

#### Specific Use Restrictions:

- Preharvest Interval: Do not apply to cauliflower within 21 days before harvest: to broccoli, Brussels sprout, cabbage, Chinese cabbage, collard, kale, kohlrabi and turnip within 30 days before harvest.
- The maximum single application rate is 1.4 oz ai chlorpyrifos per 1,000 ft. of row, except for cauliflower. For cauliflower, the maximum application rate is 1.2 oz ai/1,000 ft. of row.
- Do not make a foliar application of any other product containing chlorpyrifos within 10 days of an at-plant application of Pilot 15G.
- Do not apply more than 7 1/2 pounds of Pilot 15G per acre to crops planted in 40 inch rows or more than 15 pounds of Pilot 15G per acre to crops planted in 20 inch rows (or two rows per bed). Use proportional amounts for other row spacing not to exceed 15 pounds of Pilot 15G per acre.
- Do not make more than one application per season.

# Corn (Field Corn, Sweet Corn, and Corn Grown for Seed)\*

Worker Restricted Entry Interval: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

**Application Rates and Pests Controlled** 

<del></del>	Application	Rates and Pests Controll	<del></del>	·
·	· 	Banded/In furrow Applications Ounces per 1,000 Feet of Row)		Aerial
40-inch Row Spacing* Pests Controlled			Broadcast Application (lb/Acre)	
	At Pla	nt Applications	Postplant Treatment	
	T-Band	. In-Furrow		
ants (4)	8	8	-	-
armyworms	-	-	6 - 8	-
billbugs	8	-	-	
Chinch bug (1)	8	8	-	-
Cutworms (1)	8 .	. 8	-	-
European and southwestern corn borer(3) 1st Generation	· ·	· -	3.5 to 8	5.0 to 6.5
2nd Generation	-		6 to 8	6.5
grubs	8	. 8		<u>-</u>
lesser cornstalk borer	8		-	-
Northern, Western and Southern corn rootworm larvae	8	8	8	- -
seed corn beetle	8	8	-	-
seed corn maggots	8	8	-	<u>-</u>
Southern corn Rootworm larvae	8.	- 8	8	-
symphylans	8	-	-	
wireworms (2)	8	8	-	

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

**NOTE:** Pilot 15G insecticide is compatible with all ALS inhibitor herbicides, including Accent and Beacon herbicides, applied in accordance with label recommendations. Refer to product label for additional Precautionary Statements, Mixing and Application instructions.

# Pest Specific Use Directions:

- 1. Cutworms and chinch bugs: The 8 oz rate provides suppression only for in-furrow treatments.
- 2. **Wireworms:** For best control, apply as an in-furrow treatment. Consider using a hopper box insecticidal seed treatment with T-band applications.
- 3. **European corn borer:** When using post plant banded applications, use rates of 3.5 to 4 oz of Pilot 15G per 1000 feet of row for low to moderate first generation infestations before larvae have entered corn stalks. Use application rates of 6 to 8 oz of Pilot 15G per 1000 feet of row for severe first generation infestations and all second generation infestations before larvae have entered corn stalks.
- Ants: Excludes ants of significant public health importance such as fire ants, harvester ants, carpenter ants, and pharaoh ants. The 8 oz rate provides suppression only for in-furrow treatments.

# **Specific Use Precautions:**

• Read and follow all Spray Drift Mitigation Measures (See Spray Drift Mitigation Measures section).

At Plant T-Band Application: Apply 8 oz of Pilot 15G per 1000 ft of row as a T-band over an open seed furrow over the row behind the planter shoe, in front of the press wheel. In conventional and minimum-till corn, incorporate into the top ½ to 1 inch of soil using suitable equipment. A soil applied T-band treatment may be followed by post-applied herbicides. Pilot 15G has demonstrated suppression of certain soil-borne pathogens that may result in physiological and agronomic advantages to corn under environmental stress conditions when compared to corn not treated with Pilot 15G.

At Plant In-Furrow Application: Apply 8 oz of Pilot 15G per 1000 ft of row at planting 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 open seed furrow and are covered with soil.

**Postplant Application:** To control corn rootworm larvae, apply 8 oz of Pilot 15G per 1000 ft of row at cultivation by placing the granules at the base of the plant on both sides of the row just ahead of the cultivation shovels and covering the granules with soil. To control European and southwestern corn borer larvae, apply Pilot 15G in a band over the row so that the granules are directed into the whorl or use a postplant broadcast treatment. Consult your state agricultural experiment station or extension service specialist for proper time to treat and local threshold information. Scouting for insect damage is strongly encouraged.

Postplant Broadcast Treatment: To control European and southwestern corn borers, apply Pilot 15G by uniformly broadcasting the granules over the corn plants by aerial application or by applying the granules into the corn whorls by ground application. For aerial applications, do not apply within 150 feet of rivers, natural ponds, lakes, streams, reservoirs, marshes, estuaries and commercial fishponds. Apply at a rate of 5 lb per acre for low to moderate first generation infestations or at 6.5 lb per acre for severe first generation infestations and all second-generation infestations. Apply before larvae have entered corn stalks. Consult your state agricultural experiment station or extension service specialist for local threshold information. Scouting for insect damage is strongly encouraged.

#### Specific Use Restrictions:

- Preharvest Interval: Do not apply within 21 days before harvest of grain or ears.
- Do not apply by aircraft at a rate greater than 1 lb ai per acre.
- Do not make more than 1 at-plant application and 1 foliar application of Pilot 15G per season at the 1 lb ai chlorpyrifos rate.
- Do not make more than 3 applications of any product containing chlorpyrifos per season, including the maximum allowed of 2 granular applications, at the 1 lb ai chlorpyrifos rate. Re-treatment with a second soil application of Pilot 15G is allowed under replant situations due to loss of crop during establishment only when initially applied at the rate of 1 lb.
- Do not apply more than a total of 3 lb ai chlorpyrifos per acre per season.
- Do not make a second application of Pilot 15G or other product containing chlorpyrifos within 10 days of the first application.
- Maximum single application rate for at-plant applications is 8 oz of Pilot 15G per 1000 ft of row (1.3 lb ai chlorpyrifos per acre).
- Maximum single application rate for postplant applications is 6.5 lb of Pilot 15G (1 lb ai chlorpyrifos) per acre.
- If more than 1 lb ai granular chlorpyrifos per acre is applied at-plant (for a maximum of 1.3 lb ai per acre per season), only 1 additional application of a liquid product containing chlorpyrifos at 1 lb ai per acre is allowed per season, for a total of 2.3 lb ai chlorpyrifos per acre per season.

# Onions (Dry Bulb)

Worker Restricted Entry Interval: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

Pests Controlled	Application Rate Ounces per 1,000 feet of row (at 18-inch row spacing)
onion maggot	3.7

At Plant In-Furrow Treatment: Apply as an at-planting in-furrow treatment. In Colorado, Idaho, Washington, and Oregon, to control onion maggots in onions planted in double rows with rows spaced 2 to 4 inches apart, apply Pilot 15G at the rate of 3.7 oz per 1,000 feet of double row. Place the granules in a 5 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 6.6 lb Pilot 15G per acre (1 lb.ai chlorpyrifos).

# **Specific Use Precautions:**

 Read and follow all Spray Drift Mitigation Measures (See Spray Drift Mitigation Measures section).

# Specific Use Restrictions:

- Preharvest Interval: Do not apply last treatment within 7 days before harvest.
- Do not apply more than 1 lb. ai chlorpyrifos per crop per season.
- Do not make more than 1 application of any product containing chlorpyrifos per year.

#### **Peanuts**

Worker Restricted Entry Interval: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

Use Pilot 15G to control cutworms, lesser cornstalk borer, southern cornrootworm larvae, suppress wireworms, and inhibit the growth and development of white mold (southern blight) disease caused by *Sclerotium rolfsii*. Pilot 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
*Preventative		
Treatments:	•	
cutworms		
lesser cornstalk		-
borer	7.5 to 15	7.5 to 15
southern corn		,
rootworm larvae		
wireworms	•	
white mold		
(Southern blight) (1)		
potato leafhopper		15
**Rescue		
Treatments:		
lesser cornstalk	-	7.5 to 15
borer (2)		

\*At Plant Preventive Treatment: Apply Pilot 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 tines 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 Preventative Treatment: Apply Pilot 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 Pilot 15G may be made. Best suppression of white mold (southern blight) is obtained by applying the maximum rate of 15 oz per 1,000 ft 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.

\*\*Band Rescue Treatment: Use Pilot 15G for the control of lesser cornstalk borer when the insect first appears, usually just prior to or at pegging. Apply in a 10 to 18 inch band over the fruiting zone.

#### **Pest Specific Use Precautions**

- Suppression of white mold: Best suppression of white mold (southern blight) is obtained by applying the maximum rate of 15 oz per 1000 ft of row. 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.
- Lesser cornstock borer: Use Pilot 15G for the control of lesser corstock borer as a rescue treatment when the insect first appears, usually just prior to or at pegging.

# Specific Use Precautions:

 Read and follow all Spray Drift Mitigation Measures (See Spray Drift Mitigation Measures section).

#### **Specific Use Restrictions:**

- Preharvest Interval: Do not apply within 21 days before harvest.
- Do not make more than 2 applications of Pilot 15G per year.
- Do not make a second application of Pilot 15G or any other product containing chlorpyrifos within 10 days of the first application.
- Do not apply more than 15 oz of Pilot 15G per 1000 feet of row per crop season or apply more than 4 lb ai chlorpyrifos per acre.
- Do not feed peanut forage or hay to meat or diary animals.
- The combined total of preplant and postplant applications of Pilot 4E and Pilot 15G must not exceed 4 pounds of active ingredient per acre per crop season.
- Aerial application of Pilot 15G to peanuts is prohibited.

#### Radishes

Worker Restricted Entry Interval: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

Pests Controlled	Application Rate Ounces per 1,000 feet of row
root maggot	3.3

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

#### Specific Use Precautions:

 Read and follow all Spray Drift Mitigation Measures (See Spray Drift Mitigation Measures section).

# Specific Use Restrictions:

- Preharvest Interval: Do not apply within 7 days before harvest.
- The maximum single application rate is 0.5 oz ai chlorpyrifos per 1,000 ft. of row (2.75 lb ai chlorpyrifos per acre).
- Do not apply more than 18.3 pounds of Pilot 15G per acre or make more than one application per season.

# Rutabagas

Worker Restricted Entry Interval: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

Pests Controlled	Application Rate Ounces per 1,000 feet of row
root maggot	4.6 to 9.2

At Plant T-Band Treatment: For direct seeded and transplanted rutabaga, apply Pilot 15G 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.

#### **Specific Use Restrictions:**

- Preharvest Interval: Do not apply within 7 days before harvest.
- Application rate is 10.56 oz Pilot 15G per 1,000 ft. of row.
- The maximum single application rate is 1.6 oz ai chlorpyrifos per 1,000 ft of row (8.8 lb ai chlorpyrifos per acre).
- Do not make more than one application per crop season.
- Do not use rutabaga tops for food or feed purposes.

# Sorghum-Grain Sorghum (Milo)

Worker Restricted Entry Interval: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

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 8	4 to 8			
ants (2) corn rootworm and cutworms	8	8			
chinch bug (1)	8	-			

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

#### **Pest- Specific Use Directions:**

- 1. Chinch bugs: 8 oz. rate suppression only.
- Ants: Excludes ants of significant public health importance such as fire ants, harvester ants, carpenter ants, and pharaoh ants. 8 oz 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 Pilot 15G per acre for various row spacing is 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.

#### Specific Use Precautions:

 Read and follow all Spray Drift Mitigation Measures (See Spray Drift Mitigation Measures section).

#### Specific Use Restrictions:

- Preharvest Interval: Do not apply last treatment within 7 days before harvest.
- Do not make a foliar application of any other product containing chlorpyrifos within 10 days of an at-plant application of Chlorpyrifos 15G
- Do not make more than 1 application of Pilot 15G per season.
- The maximum single application rate is 8 oz per 1000 feet of row (1.3 lb ai chlorpyrifos in 30-inch row spacing). Use proportional amounts for other row spacings not to exceed 1.5 lb ai chlorpyrifos per acre.

#### Soybeans

Worker Restricted Entry Interval: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

Application Rates and Pests Controlled

		ions et of row)				
•	At Plant Treatments					
Pests Controlled	T-Band	Band	Postplant Treatment			
ants (1)	8	8	-			
lesser cornstalk borer cutworms	8	8	8			

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

#### Pest-Specific Use Directions:

Excludes ants of significant public health importance such as fire ants. harvester ants, carpenter ants, and pharaoh ants.

At Plant and Postplant Treatments: Use Pilot 15G 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 oz 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 Pilot 15G per acre for various row spacing are given in Table 1. 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 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 Pilot 15G with equipment that will provide uniform distribution of the granules. Do not apply as an in-furrow treatment. For suppression of fire ants, use Pilot 15G at 8 oz per 1,000 feet of row as an at-plant T-band treatment.

#### Specific Use Precautions:

- Read and follow all Spray Drift Mitigation Measures (See Spray Drift Mitigation Measures section).
- Do not apply as an in-furrow treatment.

#### Specific Use Restrictions:

- Preharvest Interval: Do not apply within 28 days before harvest.
- The maximum single application rate is 8 oz. of Pilot 15G (1.2 oz ai chlorpyrifos) per 1000 feet of row.
- The maximum single application rate is 2 lb ai chlorpyrifos per acre for preplant/at-plant incorporation and 1 lb ai chlorpyrifos per acre for foliar and postharvest application.
- Do not make more than 3 applications of any product containing chlorpyrifos per season with a maximum of 1 granular application and 2 liquid applications.
- Do not make a foliar application of any other product containing chlorpyrifos within 10 days of an at-plant application of Pilot 15G.

# Sugar Beets

Worker Restricted Entry Interval: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

Application Rates and	Pests Controlled						
	Banded Applications						
	(Ounces per 1,000 feet of row)						
Pests Controlled	At Plant Treatments						
		Postplant					
	T-Band	Band	Treatment				
Sugar beet root							
maggot (1)	-	4.5 to 9.0	6.5 to 9.0				
cutworms	-	6.6 to 9.0	-				
wireworms ·							
(suppression)	<u>-</u>	6.5 to 9.0	-				

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

#### Pest-Specific Use Directions:

1. When root maggot populations are expected to be low, apply Pilot 1G at a rate of 4.5 oz per 1000 feet of row (equivalent to 6.75 lb per acre based upon 22-inch row spacing). If initial adult fly activity indicates higher than anticipated populations, apply Pilot 15G at or near the time of peak adult emergence to augment control.

At Plant Band Treatment: To control sugar beet root maggot larvae and cutworms at planting time, place Pilot 15G 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 Pilot 15G at the rate of 4.5 to 9 ounces per 1.000 feet of row (equivalent to 6.7 to 13.5 lb per acre based on a 22 inch row spacing). When root maggot populations are expected to be low, apply Pilot 15G at a rate of 4.5 ounces per 1,000 feet of row (equivalent to 6.7 lb per acre based on 22 inch row spacing). If initial adult fly activity indicates higher than anticipated populations, apply Pilot 4E at or near the time of peak adult emergence to augment control. (Review label for Pilot 4E for recommended use rates, application timing, methods of application, and insecticide resistance management). Incorporate Pilot 15G into the top 1/2 to 1 inch of soil using suitable equipment.

Postemergence Band Treatment: For postemergence control of sugar beet maggot larvae, place Pilot 15G in a band 3 to 5 inches wide over the beet row (up to 2 to 4 true leaf stage of plant growth). Apply Pilot 15G at the rate of 6.5 to 9 oz per 1,000 feet of row (equivalent to 9.7 to 13.4 lb per acre based on a 22 inch row spacing). Incorporate Pilot 15G into the top 1/2 to 1 inch of soil using a suitable incorporation device.

#### **Specific Use Precautions:**

- Read and follow all Spray Drift Mitigation Measures (See Spray Drift Mitigation Measures section).
- Granular insecticides, including Pilot 15G, 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 preplant incorporated may interact with insecticides and enhance this stress.

#### Specific Use Restrictions:

- Preharvest Interval: Do not apply within 30 days before harvest.
- Do not make more than one application of Pilot 15G per year, or apply more than 2 lb ai chlorpyrifos per acre per season.
- Do not apply more than a total of 3 lb. ai chlorpyrifos per acre per year, or make more than 3 applications of products containing chlorpyrifos per season
- The maximum single application rate is 1.35 oz ai chlorpyrifos per 1000 feet of row or 2 lb ai chlorpyrifos per acre based upon a 22-inch row spacing
- Do not make a foliar application of any other product containing chlorpyrifos within 10 days of an at-plant application of Pilot 15G

# Sunflowers

Worker Restricted Entry Interval: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

Pests Controlled	Application Rate Ounces per 1,000 feet of row
cutworms	8.0

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.

#### Specific Use Precautions:

Read and follow all Spray Drift Mitigation Measures (See Spray **Drift Mitigation Measures section).** 

#### Specific Use Restrictions:

Preharvest Interval: Do not apply within 42 days before harvest.

- Do not make more than 3 applications of any product containing chlorpyrifos per season with a maximum of 1 granular application and 2 liquid applications.
- The maximum single application rate is 1.25 oz ai chlorpyrifos per 1000 feet of row or 1.3 lb ai chlorpyrifos per acre based upon a 30-inch row spacing.
- The maximum single application rate is 2 lb ai chlorpyrifos per acre for preplant/at-plant incorporation and 1 lb ai chlorpyrifos per acre for foliar and postharvest application.
- Do not make a foliar application of any other product containing chlorpyrifos within 10 days of an at-plant application of Pilot 15G.

# **Sweet Potatoes**

Worker Restricted Entry Interval: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

Pests Controlled	Application Rate lb/acre			
Wireworms (conoderus) Flea beetles (Systena) Sweet potato flea beetle	13.5			

Preplant Broadcast Treatment: Use Pilot 15G 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 Pilot 15G will protect against feeding damage). Pilot 15G will not control false wireworm or whitefringed beetle and other grubs that attack sweet potatoes.

#### **Specific Use Precautions:**

 Read and follow all Spray Drift Mitigation Measures (See Spray Drift Mitigation Measures section).

#### Specific Use Restrictions:

- Preharvest Interval: Do not apply within 125 days before harvest.
- The maximum single application rate is 2 lb ai chlorpyrifos per acre.
- Do not make more than one application of Pilot 15G or other product containing chlorpyrifos per season.

# Tobacco

Worker Restricted Entry Interval: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

Pests Controlled	Application Rate Ib/acre				
cutworms flea beetles mole crickets root maggots wireworms	13.5				

**Preplant Broadcast Treatment:** Apply Pilot 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 Pilot 15G will also suppress movement of imported fire ant into treated field.

#### **Specific Use Precautions:**

 Read and follow all Spray Drift Mitigation Measures (See Spray Drift Mitigation Measures section).

# **Specific Use Restrictions:**

- Preharvest Interval: Do not apply within 7 days before harvest.
- Do not make more than one application of Pilot 15G or other product containing chlorpyrifos per season.
- The maximum single application rate is 2.025 lb. ai chlorpyrifos per acre.

Table 1 Application Rates Table-Application Rates/1,000 Ft. of Row and Equivalent/Acre at Different Row Spacing

Amount of Pilot 15G Per 1,000 Feet of Row	Pounds of Pilot 15G 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	5.6	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 Calibration of Equipment**

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

- Fill hopper.
   Attach a plastic bag to tube opening.
   Set your planter to the initial settings shown on chart.
- Measure off 1,000 row feet and drive your planter the pre- measured distance at your desired speed.
   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
Application Rate, 8 oz. Per 1,000 ft row

	Speed (mph)									
		4		5		6		7	,	8
				Арр	lication Rate, oz per 1,000 ft row					
	8	16	8	16	8	16	. 8	16	8	16
Planter Type		•			Ga	uge Settir	1g ,			
Gandy <sup>1</sup>	21.4	30.2	23.7	32.4	26.0	36.0	27.7	39.0	30.2	41.0
John Deere <sup>1</sup> Max-Emerge <sup>2</sup>	20	44	26	46	30	49	35	52	40	54
John Deere <sup>1</sup> 7000 Max-Emerge (Odd Nos. on Gate)	14	22	16	24	18	26	19	28	21 .	30
John Deere <sup>1</sup> 7000 Max-Emerge (Even Nos. on Gate)	17	. 30	20	33	24	35	26	36	28	38
John Deere <sup>2</sup> 71 Flexi-Planter and Older Planters	<u>1</u> 30	<u>2</u> 17	<u>2</u> 5	<u>2</u> 22	<u>2</u> 9	<u>2</u> 27	<u>2</u> 13	<u>2</u> 31	<u>2</u> 16	<u>3</u> 16
John Deer <sup>3</sup> MaxEmerg Plus	18	-	23	-	29	-	33	_	39	-
Allis Chalmers <sup>3</sup> 70 Series	8	13	8	13	8	13	8	13	8	13
Allis Chalmers⁴ 78 & 79 Series	<u>1</u> 9.0	<u>3</u> 3.0	<u>2</u> 33	<u>3</u> 9.5	<u>2</u>	<u>4</u> 3.0	<u>2</u> 9	<u>5</u> 4.0	<u>3</u> 2.5	<u>6</u> ·
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 <sup>4</sup>	9.0	<u>3</u> 3.0	<u>2</u> 3.3	<u>3</u> 9.5	<u>2</u> 6.0	<u>4</u> 3.0	<u>2</u> 9.0	<u>5</u> 4.0	<u>3</u> 2.5	<u>6</u> 0
Buffalo All-Flex <sup>5</sup> (Fleischer Mfg.)	4 7/8	10	4 7/8	-10	4 7/8	10	-		_	_

<sup>&</sup>lt;sup>1</sup> Gauge setting

gate

# **Notice of Warranty and Disclaimer**

Selier warrants that at the time of delivery the product in this container conforms to its chemical description contained hereon and is reasonably fit for its intended purpose under normal conditions of use. This is the only warranty made on this product. Seller expressly disclaims any implied warranties of merchantability or fitness for any particular purpose and, except as set forth above, any other express or implied warranties. Any damages arising from breach of warranty or negligence shall be limited to direct damages not exceeding the purchase price paid for this product by Buyer, and shall not include incidental or consequential damages such as, but not limited to, loss of profits or values. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of the Seller. To the fullest extent permitted by law, in no event shall Seller be liable for the consequential, special or indirect damages resulting from the use or handling of this product. To the fullest extent permitted by law all such risks shall be assumed by the Buyer. Buyer acknowledges the use of its own independent skill and expertise in the selection and use of the product and does not rely on any oral or written statements or representations.

EPA Accepted: 05/27/2005

Amended: 12/31/2007 (Amended per RED)
Amended: (Drift Mitigation Measures)

Pilot® is a registered trademark of Gharda Chemicals Limited

Accent Registered Trademark of E.I. du Pont de Nemours and Company. Beacon Registered Trademark of Syngenta Crop Protection.

range

<sup>&</sup>lt;sup>2</sup> Gauge setting with range 1 & 2 - number is notch.

<sup>&</sup>lt;sup>3</sup> An application rate of 16 oz per 1000 ft of row is not attainable with this equipment

<sup>&</sup>lt;sup>4</sup> Gauge setting is constant regardless of speed.

<sup>&</sup>lt;sup>5</sup> Gauge setting shown with stem gates & dial settings - number shown is dial.

<sup>&</sup>lt;sup>6</sup> Number of turns open on the adjustment nut.