



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

<b>ACTIVE INGREDIENT:</b>	
chlorpyrifos: O,O-diethyl O-(3,5,6-trichloro-2-pyridinyl) phosphorothioate	15%
<b>INERT INGREDIENTS</b>	85%
<b>TOTAL</b>	100%

## KEEP OUT OF REACH OF CHILDREN CAUTION

### PRECAUTIONARY STATEMENTS

**Hazard to Humans and Domestic Animals**

**Harmful If Swallowed • Causes Moderate Eye Irritation**  
**Avoid contact with eyes or clothing. 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. For more information, follow instructions in Supplement Three of PR Notice 93-7. If you want more options, follow the instructions for category *H* on an EPA chemical resistance category selections chart.

### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers.

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

**Container Reuse:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

**Refer to inside of label booklet for additional precautionary information including Directions for Use.**

**Notice:** Read the entire label. Use only according to label directions. **Before using this product, read Warranty Disclaimer and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.**

In case of emergency endangering health or the environment involving this product, call 1-800-424-9300.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

\*Trademark of Dow AgroSciences LLC

### Granular Insecticide

AD 083008

EPA Reg. No. 62719-34-5905  
EPA Est. 5905-IA-001

**NET WEIGHT: 50 LBS.**

CUT ALONG PERFORATION TO OPEN

Manufactured For

**HELENA CHEMICAL COMPANY**

**225 SCHILLING BOULEVARD, SUITE 300 • COLLIERVILLE, TENNESSEE 38017**



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

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**INERT INGREDIENTS** ..... 85%

**TOTAL** ..... 100%

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

**Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to the label booklet under "Agricultural Use Requirements" in the "Directions for Use" section for information about this standard.

**Refer to inside of label booklet for additional precautionary information including Directions for Use.**

**Notice:** Read the entire label. Use only according to label directions. **Before using this product, read Warranty Disclaimer and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.**

In case of emergency endangering health or the environment involving this product, call 1-800-424-9300.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

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## PRECAUTIONARY STATEMENTS

### Hazard to Humans and Domestic Animals

# CAUTION

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

#### Harmful If Swallowed • Causes Moderate Eye Irritation

**Avoid contact with eyes or clothing. 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. For more information, follow instructions in Supplement Three of PR Notice 93-7. If you want more options, follow the instructions for category *H* on an EPA chemical resistance category selections chart.

#### Loaders, applicators and all 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

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.

#### 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 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.

#### User Safety Recommendations

##### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/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.

#### FIRST AID

##### Organophosphate

**If swallowed:** Call a poison control center or doctor immediately for treatment advice. Have a 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 person.

**If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**Note to Physicians:** Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful). Atropine, only by injection, is the preferable antidote. Oximes, such as 2-PAM/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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 1-800-424-9300 for emergency medical treatment information.





### 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 may be hazardous to aquatic organisms in water adjacent to treated areas. 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.

### 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** carefully 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.

### 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 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. 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.

**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 direct supervision under certain circumstances may be exempt from the early reentry requirement pursuant to 40 CFR Part 170.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and 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 any waterproof material
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposures.

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. Open dumping is prohibited.

**Pesticide Storage:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers.

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

**Container Reuse:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

### PRODUCT INFORMATION

#### **Insect Resistance Management (IRM)**

**SAURUS™** contains a Group 1B insecticide. Insect/mite biotypes with acquired resistance to Group 1B may eventually dominate the insect/mite population if group 1B insecticides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Saurus or other Group 1B insecticides.



To delay development of insecticide resistance, the following practices are recommended:

- Avoid consecutive use of insecticides with the same mode of action (same insecticide group) on the same insect species.
- Use tank mixtures or premix products containing insecticides with different modes of action (different insecticide groups) provided the products are registered for the intended use.
- Base insecticide use on comprehensive Integrated Pest Management (IRM) programs.
- Monitor treated insect populations in the field for loss of effectiveness.

Contact your local extension specialist, certified crop advisor, and or manufacturer for insecticide resistance management and/or IPM recommendations for the specific site and resistant pest problems.

For further information or to report suspected resistance, you may contact Helena Chemical Company by calling 1-901-761-0050 or over the internet at [www.helenachemical.com](http://www.helenachemical.com).

### Application Rates

Do not apply by aircraft at a rate greater than 1 lb. ai chlorpyrifos per acre.

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

Ounces of SAURUS™ Per 1,000 Feet of Row	Pounds of SAURUS™ Required Per Acre from Various Row Spacing							
	40"	38"	36"	34"	32"	30"	22"	18"
3.7	3.0	3.2	3.4	3.6	3.8	4.0	5.5	6.7
4	3.3	3.4	3.6	3.8	4.1	4.4	5.9	7.3
4.5	3.7	3.9	4.1	4.3	4.6	4.9	6.7	8.2
6	4.9	5.2	5.4	5.8	6.1	6.5	8.9	10.9
6.5	5.3	5.6	5.9	6.2	6.6	7.1	9.7	11.8
7.5	6.1	6.4	6.8	7.2	7.7	8.2	11.1	13.6
8	6.5	6.9	7.3	7.7	8.2	8.7	11.9	14.5
9	7.4	7.7	8.2	8.6	9.2	9.8	13.4	16.3
12	9.8	10.3	10.9	11.5	12.3	13.1	17.8	21.8
15	12.3	12.9	13.9	14.4	15.3	16.3	22.3	27.2
16	13.1	13.8	14.5	15.4	16.3	17.4	23.8	29.0

### Equipment Calibration

**Caution:** The following chart lists suggested initial gauge settings for application of SAURUS™ 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 settings shown on chart.
4. Measure off 1,000 row feet and drive your planter the pre-measured distance at your desired speed.
5. Each bag should contain 6 to 8 ounces (wt.) of granules depending on your desired rate.
6. If the result is over or under the desired rate – adjust the settings and repeat the calibration.



**Table 2**  
**Calibration Settings for Different Types of Equipment**

Planter Type	Speed (mph)									
	4		5		6		7		8	
	Application Rate, oz per 1,000 ft. of row									
	8	16	8	16	8	16	8	16	8	16
Gauge Setting										
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	1 30	2 17	2 5	2 22	2 9	2 27	2 13	2 31	2 16	3 16
John Deere <sup>3</sup> MaxEmerge Plus	18	–	23	–	29	–	33	–	39	–
Allis Chalmers <sup>4</sup> 70 Series	8	13	8	13	8	13	8	13	8	13
Allis Chalmers <sup>5</sup> 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 <sup>1</sup> (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>5</sup>	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
Buffalo All-Flex <sup>6</sup> (Fleischer Mfg.)	4-7/8	10	4-7/8	10	4-7/8	10	–	–	–	–

<sup>1</sup>Gauge setting

<sup>2</sup>Gauge setting with range 1 and 2 – number is  $\frac{\text{range}}{\text{notch}}$ .

<sup>3</sup>An application rate of 16 oz. per 1,000 ft. of row is not attainable with this equipment.

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

<sup>5</sup>Gauge setting shown with stem gates and dial settings – number shown is  $\frac{\text{gate}}{\text{dial}}$ .

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



## APPROVED USES

### ALFALFA

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

Apply **SAURUS™** 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 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.

Target Pests	SAURUS™ (lb./acre)
cutworms grubs wireworms	6.6

**Specific Use Restrictions:**

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

### ASPARAGUS

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

**Postharvest Treatment:** Apply **SAURUS™** 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.

Target Pests	SAURUS™ (lb./acre)
centipede (symphylans )	10

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 180 days of harvest.
- Do not apply more than a total of 3 lbs. active ingredient of chlorpyrifos per acre between harvests.
- For use only in the Midwest and Pacific Northwest states.





## CITRUS ORCHARD FLOORS

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

Apply **SAURUS™** as a ground broadcast spray directed to the orchard floor to control foraging ants and suppress mounds. Use a suitable granular applicator, such as a cyclone fertilizer spreader, that will uniformly broadcast the granules over the orchard floor. **SAURUS™** may be custom blended with granular fertilizers provided that application of the blended mixture can be applied uniformly to the orchard floor. Do not apply where weed growth or other obstructions would impede uniform coverage of the orchard floor. Foliar applications of **SAURUS™** may be made in addition to orchard floor treatments of **SAURUS™** (see "Specific Use Restrictions").

Target Pests	SAURUS™ (lb./acre)
ants (1)	6.6

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.

### Specific Use Restrictions:

- Preharvest Interval:** Do not apply last treatment within 28 days before harvest.
- Do not make more than 3 applications of **SAURUS™** or other products containing chlorpyrifos per year (does not include foliar applications to citrus trees).
- Do not apply more than 20 lbs. of **SAURUS™** (3 lbs. ai chlorpyrifos per acre) per year.
- 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 in a single application.
- Do not allow meat or dairy animals to graze in treated areas.

## COLE CROP (Brassica) LEAFY VEGETABLES and RADISH, RUTABAGA and TURNIP

**Worker Restricted-Entry Interval:** Do not enter or allow worker 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.

For direct-seeded and transplanted crops, apply **SAURUS™** as an at-plant T-band 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. Equivalent rates of **SAURUS™** per acre for various row spacings are given in Table 1.

Crops	Target Pests	SAURUS™ (oz./1,000 ft. of row)
bok choy broccoli broccoli raab Brussels sprouts cabbage cauliflower Chinese broccoli Chinese cabbage collards kale kohlrabi rutabaga turnip	root maggots	4.6 - 9.2 (0.7 - 1.4 oz. ai)





### COLE CROP (Brassica) LEAFY VEGETABLES and RADISH, RUTABAGA and TURNIP (cont.)

#### Specific Use Restrictions:

- **Preharvest Interval:** Do not apply to cauliflower within 21 days before harvest; to broccoli, Brussels sprouts, cabbage, Chinese cabbage, collard, kale, kohlrabi and turnip within 30 days before harvest; to rutabaga within 7 days before harvest.
- Do not make more than 1 application of **SAURUS™** per season.
- Do not apply more than 7-1/2 lbs. of **SAURUS™** per acre to crops planted in 40-inch rows or more than 15 lbs. of **SAURUS™** 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 lbs. of **SAURUS™** per acre.
- The maximum single application rate is 1.4 oz. ai chlorpyrifos per 1,000 feet of row (36 oz. ai chlorpyrifos per acre).
- Do not make a foliar application of **SAURUS™** or other product containing chlorpyrifos within 10 days of an at-plant application of **SAURUS™**.
- Do not use rutabaga tops for food or feed purposes.

### RADISH

Apply as an at-plant in-furrow treatment. Place the granules in the seed furrow with the seed at planting time.

Target Pests	SAURUS™ (oz./1,000 ft. of row)
root maggots	3.3

#### Specific Use Restrictions:

- **Preharvest Interval:** Do not apply within 7 days before harvest.
- Do not apply more than 18.3 lbs. of **SAURUS™** per acre or more than 1 application per season.
- The maximum single application rate is 0.5 oz. ai chlorpyrifos per 1,000 feet of row (2.75 lbs. ai chlorpyrifos per acre).

### CORN (Field Corn and Sweet Corn, Including Corn Grown for Seed)

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

**SAURUS™** is compatible with all ALS inhibitor herbicides applied in accordance with label recommendations. Refer to the product labels for additional precautions and directions for use. Equivalent rates of **SAURUS™** per acre for various row spacings are given in Table 1.

**At-Plant T-Band Application:** Apply 8 oz. of **SAURUS™** per 1,000 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 1/2 to 1 inch of soil using suitable equipment. Equivalent rates of **SAURUS™** per acre for various row spacings are given in Table 1. A soil-applied T-band treatment may be followed by post-applied herbicides such as Callisto. **SAURUS™** 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 **SAURUS™**.

**At-Plant In-Furrow Application:** Apply 8 oz. of **SAURUS™** per 1,000 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 **SAURUS™** per 1,000 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 cover the granules with soil. To control European and southwestern corn borer larvae, apply **SAURUS™** 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 Application:** To control of European and southwestern corn borers, apply **SAURUS™** by uniformly broadcasting the granules over the corn plants by aerial application, or 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 fish ponds. Apply at a rate of 5.0 lbs. per acre for low to moderate first generation infestations or at 6.5 lbs. 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.



Target Pests	Banded/In furrow Applications (oz./1,000 ft. of row)			Aerial Broadcast Application (lb./acre)
	At Plant Treatments		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	-	-	3.5-8	5.0 -6.5
2nd Generation	-	-	6-8	6.5
grubs	8	8	-	-
lesser cornstalk borer	8	-	-	-
northern and western corn rootworm larvae	8	8	8	-
seed corn beetle	8	8	-	-
seed corn maggots	8	8	-	-
southern corn rootworm larvae	8	8	8	-
symphylans	8	-	-	-
wireworms (2)	8	8	-	-

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

**Pest-Specific Use Directions:**

- Cutworms, fire ants and chinch bugs:** The 8 oz. rate provides suppression only for in-furrow treatments.
- Wireworms:** For best control, apply as an in-furrow treatment. Consider using a hopper box insecticidal seed treatment with T-band applications.
- European corn borer:** When using postplant banded applications use rates of 3.5 to 4 oz. of **SAURUS™** per 1,000 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 **SAURUS™** per 1,000 feet of row for severe first generation infestations and all second-generation infestations. Make applications 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 Restrictions:**

- Preharvest Interval:** Do not apply within 21 days before harvest of grain or ears.
- 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 **SAURUS™** 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 lbs. ai chlorpyrifos per acre per season.
- Maximum single application rate for at-plant applications of 8 oz. of **SAURUS™** per 1,000 ft. of row (1.3 lbs. ai chlorpyrifos per acre).
- Maximum single application rate for postplant application is 6.5 lbs. of **SAURUS™** (1 lb. ai chlorpyrifos) per acre.
- Do not make a second application of **SAURUS™** or other product containing chlorpyrifos within 10 days of the first application.
- Do not apply by aircraft at a rate greater than 1 lb. ai chlorpyrifos per acre.
- Do not make more than 1 at-plant application and 1 foliar application of **SAURUS™** per season at the 1 lb. ai chlorpyrifos rate.
- If more than 1 lb. ai granular chlorpyrifos per acre is applied at-plant (for a maximum of 1.3 lbs. ai chlorpyrifos per acre per season), only 1 additional application of a liquid product containing chlorpyrifos at 1 lb. ai chlorpyrifos per acre is allowed per season, for a total of 2.3 lbs. ai chlorpyrifos per acre per season.



## ONION (Dry Bulb)

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

**At Plant In-Furrow Treatment:** Apply as an at plant in-furrow treatment.

Target Pests	SAURUS™ (oz./1,000 ft. of row)
onion maggot (1)	3.7

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

### Pest-Specific Use Directions:

- 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 **SAURUS™** 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.

### Specific Use Restrictions:

- Do not apply more than 1.0 lb. ai chlorpyrifos per crop season.
- The maximum single application rate is 0.56 oz. ai chlorpyrifos per 1,000 feet of row.
- Do not make more than 1 application per year of **SAURUS™** or other product containing chlorpyrifos.

## PEANUT

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

### At-Plant Preventive Application:

Apply **SAURUS™** 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 Preventive Application:

Apply **SAURUS™** 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 **SAURUS™** may be made (see "Specific Use Restrictions").

### Band Rescue Application:

Apply **SAURUS™** in a 10- to 18-inch band over the fruiting zone.

(continued)

Target Pests	Banded Applications (oz./1,000 feet of row)	
	At-Plant Treatment	Postplant Treatment
<b>Preventative applications:</b> cutworms lesser cornstalk borer southern corn rootworm larvae wireworms white mold (southern blight) (1)	7.5 -15	7.5 -15
potato leafhopper	-	15
<b>Rescue applications:</b> lesser cornstalk borer (2)	-	7.5 -15

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

**Pest-Specific Use Directions:**

- Suppression of white mold:** Best suppression of white mold (southern blight) is obtained by applying the maximum rate of 15 oz. per 1,000 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 cornstalk borer:** Use **SAURUS™** for the control of lesser cornstalk borer as a rescue treatment when the insect first appears, usually just prior to or at pegging.

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 21 days before harvest of peanut.
- Do not apply more than 15 oz. of **SAURUS™** per 1,000 ft. of row per crop season or apply more than 4 lbs. ai chlorpyrifos per season.
- Do not make more than 2 applications of **SAURUS™** per year.
- Aerial application to peanuts is prohibited.
- Do not make a second application of **SAURUS™** or other product containing chlorpyrifos within 10 days of the first application.
- Do not feed treated peanut forage or hay to meat or dairy animals.
- The combined total of preplant and postplant applications of SAURUS-4E and **SAURUS™** or other product containing chlorpyrifos must not exceed 4 lbs. ai chlorpyrifos per acre per season.

## Sorghum – Grain Sorghum (Milo)

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

Apply as a T-band in a 6- to 8-inch band over the open seed furrow in front of the press wheel and incorporate into the top 1/2 to 1 inch of soil using suitable equipment. Equivalent rates of **SAURUS™** 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 or a higher rate for longer residual activity. It is absolutely necessary to incorporate the granules, especially at lower rates.

Pests Controlled	At-Plant T-Band Applications (oz./1,000 ft. of row)
lesser cornstalk borer	4 - 8
ants (2)	8
chinch bugs (1)	
corn rootworm	
cutworms	

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

### Pest-Specific Use Directions:

- 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.

### Specific Use Restrictions:

- Do not make more than 1 application of **SAURUS™** per season.
- The maximum single application rate is 8 oz. per 1,000 feet of row (1.3 lbs. ai chlorpyrifos in 30-inch row spacing). Use proportional amounts for other row spacings not to exceed 1.5 lbs. ai chlorpyrifos per acre.
- Do not make a foliar application of SAURUS-4E or other product containing chlorpyrifos within 10 days of an at-plant application of **SAURUS™**.

## SOYBEAN

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

Apply as an at-plant T-band in a 4- to 10-inch band over an open seed furrow in front of the press wheel and incorporate into the top 1/2 to 1 inch of soil using suitable equipment. For postplant application, incorporate the granules in a 4- to 10-inch band to a depth of 1/2 to 1 inch using a suitable cultivator. Apply **SAURUS™** with equipment that will provide uniform distribution of the granules over the row. Equivalent rates of **SAURUS™** per acre for various row spacing are given in Table 1.

Target Pests	Banded Applications (oz./1,000 feet of row)	
	At-Plant T-Band	Postplant Treatment
cutworms	8	8
lesser cornstalk borer		
Ants (suppression)	8	-

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.

**Specific Use Precautions:**

- Do not apply as an in-furrow treatment.

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 28 days before harvest of soybeans.
- 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 8 oz. of **SAURUS™** (1.2 oz. ai chlorpyrifos) per 1,000 feet of row.
- The maximum single application rate is 2 lbs. 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 SAURUS-4E or other product containing chlorpyrifos within 10 days of an at-plant application of **SAURUS™**.

**SUGARBEET**

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

Equivalent rates of **SAURUS™** per acre for various row spacings are given in Table 1.

**At-Plant T-Band Application:**

Apply **SAURUS™** 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 **SAURUS™** at the rate of 4.5 to 9 oz. per 1,000 feet of row (equivalent to 6.7 to 13.4 lbs. per acre based on 22-inch row spacing). Incorporate **SAURUS™** into the top 1/2 to 1 inch of soil using suitable equipment.

**Postemergence Band Application:**

Apply **SAURUS™** in a band 3 to 5 inches wide over the beet row (up to 2 to 4 true leaf stage of plant growth). Apply **SAURUS™** at the rate of 6.5 to 9 oz. per 1,000 feet of row (equivalent to 10 to 13.5 lbs. per acre based on 22-inch row spacing). Incorporate **SAURUS™** into the top 1/2 to 1 inch of soil using a suitable incorporation device.

Pests Controlled	Banded Applications (oz./1,000 feet of row)	
	At-Plant T-Band	Postplant Treatment
sugar beet root maggot (1)	4.5-9.0	6.5-9.0
cutworms	6.6-9.0	-
wireworms (suppression)	6.5-9.0	-

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

**Pest-Specific Use Directions:**

1. When **root maggot** populations are expected to be low, apply **SAURUS™** at a rate of 4.5 oz. per 1,000 feet of row (equivalent to 6.75 lbs. per acre based on 22-inch row spacing). If initial adult fly activity indicates higher than anticipated populations, apply SAURUS-4E at or near the time of peak adult emergence to augment control.

**Specific Use Precautions:** Granular insecticides, including **SAURUS™**, may contribute to the stress of the sugarbeet 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 of sugarbeets.
- Do not make more than 1 application of **SAURUS™** per season or apply more than 2 lbs. ai chlorpyrifos per acre per season.
- Do not apply more than a total of 3 lbs. ai chlorpyrifos per acre per year, or make more than 3 applications of products containing chlorpyrifos per season.
- Do not make a foliar application of SAURUS-4E or other product containing chlorpyrifos within 10 days of an at-plant application of **SAURUS™**.
- The maximum single application rate is 1.35 oz. ai chlorpyrifos per 1,000 feet of row or 2 lbs. ai chlorpyrifos per acre based on a 22-inch row spacing.

#### SUNFLOWER

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

Apply as an at-plant T-band. 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.

Equivalent rates of **SAURUS™** per acre for various row spacings are given in Table 1.

Target Pests	SAURUS™ (oz./1,000 ft. of row)
cutworms	8

#### 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.
- Do not make a foliar application of SAURUS-4E or other product containing chlorpyrifos within 10 days of an at-plant application of **SAURUS™**.
- The maximum single application rate is 1.25 oz. ai chlorpyrifos per 1,000 feet of row or 1.3 lbs. ai chlorpyrifos per acre based upon a 30-inch row spacing.
- The maximum single application rate is 2 lbs. ai chlorpyrifos per acre for preplant/at-plant incorporation and 1 lb. ai chlorpyrifos per acre for foliar and postharvest application.

#### SWEET POTATO

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

Apply **SAURUS™** as a **preplant broadcast treatment** by evenly distributing the granules over the soil surface and then incorporating 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 **SAURUS™** will protect against feeding damage). **SAURUS™** will not control false wireworm or whitefringed beetle and other grubs that attack sweet potatoes.

Target Pests	SAURUS™ (lb./acre)
<i>Conderus</i> (wireworm) <i>Systema</i> (flea beetle) sweet potato flea beetle	13.5

#### Specific Use Restrictions:

- **Preharvest Interval:** Do not harvest within 125 days of treatment.
- Do not make more than 1 application of **SAURUS™** or other product containing chlorpyrifos per season.
- The maximum single application rate is 2 lbs. ai chlorpyrifos per acre.







## TOBACCO

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

Apply **SAURUS™** as a **preplant broadcast treatment** one week before transplanting, using equipment that evenly distributes 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.

Target Pests	SAURUS™ (lb./acre)
cutworms flea beetles mole crickets root maggots wireworms	13.5

### Specific Use Restrictions:

- **Preharvest Interval:** Do not harvest within 7 days of treatment.
- Do not make more than 1 application of **SAURUS™** or other product containing chlorpyrifos per season.
- The maximum single application rate is 2.025 lbs. ai chlorpyrifos per acre.

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## Warranty Disclaimer

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Seller MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

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## Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of the seller. All such risks shall be assumed by buyer.

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## Limitation of Remedies

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Seller's election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used.

Seller shall not be liable for losses or damages resulting from handling or use of this product unless Seller is promptly notified of such loss or damage in writing. In no case shall Seller be liable for consequential or incidental damages or losses.

The terms of the "Warranty Disclaimer", "Inherent Risks of Use", and this "Limitation of Remedies" cannot be varied by any written or verbal statements or agreements. No employee or sales agent of the seller is authorized to vary or exceed the terms of the "Warranty Disclaimer" or this "Limitation of Remedies" in any manner.

