

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



OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

OCT 24 2003

Mr. Sterett Robertson  
Dow AgroSciences  
9330 Zionsville Road  
Indianapolis, IN 46268-1054

Dear Mr. Robertson:

Subject:       **Labeling Submitted in Response to the Chlorpyrifos IRED**  
                  **Lorsban 15G**  
                  **EPA Reg. No. 62719-34**  
                  **Your Submission Received April 17, 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.     Under Application Rates add the following restriction: "Do not apply by aircraft at a rate greater than 1 lb ai/A."
2.     Under Specific Use Restrictions for Sugarbeets revise the second bullet point to, "Do not make more than 1 application per season or apply more than 2 lbs ai per acre per season of Lorsban 15G."
3.     Under Specific Use Restrictions for Citrus Orchard Floors revise "(3.0 lb ai chlorpyrifos)" to "(3.0 lb ai chlorpyrifos per acre)."
4.     Delete the Spray Drift Management section. Under Postplant Broadcast Treatment for Corn add the following, "For aerial applications, do not apply within 150 feet of rivers, natural ponds, lakes, streams, reservoirs, marshes, estuaries and commercial fish ponds."

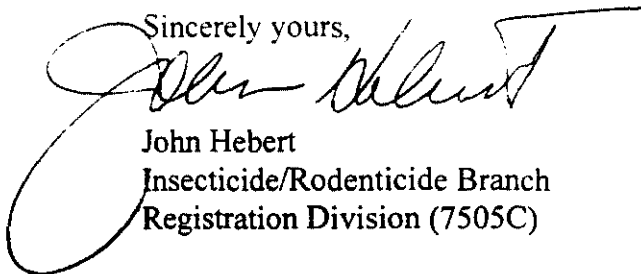
Approval of this labeling amendment does not constitute approval of your application for reregistration of this product. Product reregistration is currently pending and future labeling amendments and/or additional data may be required.

Submit two copies of your final printed labeling before you release the product for shipment.

2 8 28

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](mailto:hebert.john@epa.gov).

Sincerely yours,

A handwritten signature in black ink, appearing to read "John Hebert", with a large, stylized loop at the beginning and a horizontal line extending from the end.

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

c: Venus Eagle, SRRD  
Tom Myers, SRRD

3 8 28  
ACCEPTED  
with COMMENTS  
In EPA Letter Dated:

## Lorsban\* 15G

EPA Reg. No. 62719-34

OCT 24 2003  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under EPA Reg. No.  
62719-34

### Registration Notes:

**To Whom It May Concern:** The minimum package size for this product is 50 lb. The June 7, 2000, Chlorpyrifos Memorandum of Agreement with EPA specifies a minimum package size for "Non-restricted Use" agricultural products of 50 pounds for granular formulations. **For any package size less than 50 lb, a new registration for this product as a Restricted Use Pesticide is required.**

Source label text based on EPA-accepted copy dated December 17, 2002.

**Proposed changes by amendment** in response to Chlorpyrifos IRED dated February 11, 2003:

1. Precautionary Statements: Deleted Spanish signal word.
2. Changed Personal Protective Equipment.
3. Added Engineering Controls section.
4. User Safety Recommendations: Added third bullet point.
5. Environmental Hazards: Revised section; added bee language.
6. Agricultural Use Requirements: Revised REI statement; revised PPE for early entry; added statement "Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas."
7. Storage and Disposal: Revised section.
8. General Information: Added Spray Drift Management section including setbacks and Aerial Drift Reduction Advisory.
9. Revised Table of Contents.
10. Minor revisions throughout for clarity.

#### **Approved Crops (Listed in Alphabetical Order)**

11. **Alfalfa:** Added section from previously approved 24(c) SLN MO-890008.
12. **Asparagus:** Added section from previously approved 24(c) SLN CA-980016.
13. **Brassica (Cole) Crops:** Moved section to end under Vegetables.
14. **Citrus Orchard Floors:** (1) Changed section from paragraph to table format; (2) maximum season application rate reduced from 67 lb to 20.1 lb/acre (3 lb ai/acre); (3) reduced maximum number of applications to 3; (4) added statement allowing foliar application in addition to orchard floor application; (5) added REI statement in box directly under heading; and, (5) added a 10-day minimal interval for re-treatment.
15. **Corn:** (1) Eliminated surface band treatment (only T-band and in-furrow application retained) and preplant broadcast application; (2) eliminated 12 oz/acre rate for severe infestation of wireworms and grubs (3) limited maximum seasonal use rate to 3 lb ai/acre and maximum chlorpyrifos seasonal use to 3; (4) added REI statement in box directly under heading; (5) changed heading to Corn (Field Corn and Sweet Corn, Including Corn Grown for Seed); and, (6) added 10-day minimal interval for re-treatment.
16. **Grain Sorghum/Milo:** (1) Eliminated surface band treatment (only at-plant T-band application retained); (2) reduced maximum use rate from 12 oz to 8 oz/1000 ft of row; (3) specified 10-day re-treatment interval; and, (4) added REI statement in box directly under heading.
17. **Onion (Dry Bulb):** (1) Directions changed from paragraph to table format; and, (2) added REI statement in box directly under heading.
18. **Peanut:** (1) Eliminated aerial broadcast application; (2) deleted burrowing bug (labeled for aerial only); (3) reformatted use directions, moving pest-specific comments below table; (4) reduced maximum seasonal application rate to 15 oz/1000 ft of row (2 lb ai/acre); (5) added REI statement in box directly under heading; (6) added potato leafhopper to list of pests from previously approved 24(c) SLN SC-020001; and, (7) specified 10-day re-treatment interval.
19. **Radishes:** Moved section to end under Vegetables.

4 8 28

20. **Soybean:** (1) Eliminate surface band, but retained T-band at-plant application; (2) added REI statement in box directly under heading; and, (3) specified 10-day retreatment interval.
21. **Sugarbeet:** (1) Surface band application eliminated from table and "re-classified" to T-band application (2) reformatted use directions, moving pest-specific comments below table; (3) limited maximum seasonal application rate to 3 lb ai/acre and number of applications to 3 per season; (4) added REI statement in box directly under heading; and, (5) specified 10-day re-treatment interval.
22. **Sunflower:** (1) Directions changed from paragraph to table format; (2) limited number of applications to 3 per season; (3) added REI statement in box directly under heading; and, (4) specified 10-day re-treatment interval.
23. **Sweet Potato:** (1) Directions changed from paragraph to table format; and, (2) added REI statement in box directly under heading.
24. **Tobacco:** (1) Directions changed from paragraph to table format; (2) added REI statement in box directly under heading; and, (3) reduced maximum rate from 20 lb/acre to 13.5 lb/acre.
25. **Vegetables:** (1) Directions changed from paragraph to table format; (2) added REI statement in box directly under heading; and, (3) specified 10-day re-treatment interval.

[Editor's note: Added text is underlined and deleted text is denoted by ~~strikethrough~~.]

\*Trademark of Dow AgroSciences LLC

00-27-4  
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(Base Label):

(Logo) Dow AgroSciences

# Lorsban\* 15G

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

Active Ingredient:

chlorpyrifos: O,O-diethyl

O-(3,5,6-trichloro-2-pyridinyl)

phosphorothioate. .... 15%

Inert Ingredients ..... 85%

Total ..... 100%

U.S. Patent 4,380,537

**Keep Out of Reach of Children**

## CAUTION PRECAUCION

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.)

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### Precautionary Statements

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#### 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.

**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

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Shoes plus socks

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)(5)].

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 1-800-992-5994 for emergency medical treatment information.

### Environmental Hazards

~~This pesticide is toxic to birds and wildlife, and extremely toxic to fish and aquatic organisms.~~ 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 water adjacent to treated areas/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.

### 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 label booklet for Directions for Use including Storage and Disposal.**

**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 1-800-992-5994. If you wish to obtain additional product information, visit our web site at [www.dowagro.com](http://www.dowagro.com).

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

EPA Reg. No. 62719-34

EPA Est. \_\_\_\_\_

\*Trademark of Dow AgroSciences LLC  
Dow AgroSciences LLC • Indianapolis, IN 46268 U.S.A.

## Granular Insecticide

Net Weight 50 lb

[Note to Label Editor: Minimum package size is 50 lb per EPA Memorandum of Agreement Dated June 7, 2000.]

(Datapack cover):

(Logo) Dow AgroSciences

## Lorsban\* 15G

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

Active Ingredient:

chlorpyrifos: O,O-diethyl

O-(3,5,6-trichloro-2-pyridinyl)

phosphorothioate. .... 15%

Inert Ingredients ..... 85%

Total ..... 100%

U.S. Patent 4,380,537

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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 label booklet for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations and Directions for Use including Storage and Disposal.**

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## Granular Insecticide

## Net Weight 50 lb

[Note to Label Editor: Minimum package size is 50 lb per EPA Memorandum of Agreement Dated June 7, 2000.]



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**Precautionary Statements**

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**Hazard to Humans and Domestic Animals****CAUTION — PRECAUCION**

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Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

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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

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Shoes plus socks

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.

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**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.

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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 water adjacent to treated areas/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.

### 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 ~~worker~~ entry into treated areas during the restricted entry interval (REI) ~~of 24 hours.~~  
A longer restricted entry interval is required for sweet potatoes. See crop-specific use directions. 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 that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over short-sleeved shirt and short pants
- Waterproof gloves/Chemical-resistant gloves made out of any waterproof material
- Shoes/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 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.

**General Information****Spray Drift Management**

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, non-target crops, aquatic and wetland sites, woodlands, pastures, rangelands, or animals.

Avoiding spray drift is the responsibility of the applicator. The interaction of many equipment and weather-related factors determine the potential for spray drift. Make applications only when there is little or no hazard from spray drift. The applicator is responsible for considering all of these factors when making a decision to apply this product.

Observe the following precautions when spraying Lorsban 15G adjacent to permanent bodies of water such as rivers, natural ponds, lakes, streams, reservoirs, marshes, estuaries, and commercial fish ponds.

The following treatment setbacks or no-spray buffer zones must be utilized for applications from the above listed aquatic areas with the following application equipment:

<b>Application Method</b>	<b>Required Setback (No-Spray Buffer Zone)</b>
Aerial (fixed wing or helicopter)	150 feet

Making applications when wind is blowing away from sensitive areas is the most effective way to reduce the potential for adverse effects.

**Aerial Drift Reduction Advisory**

This section is advisory in nature and does not supercede the mandatory label requirements.

**Application Height:** Applications should not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety.

**Swath Adjustment:** When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator should compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, etc.).

**Wind:** Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**Sensitive Areas:** The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

## Application Rates

**Table 1**  
**Application Rates/1000 Ft of Row and Equivalent/Acre**  
**at Different Row Spacings**

Ounces of Lorsban 15G Per 1000 Feet of Row	Pounds of Lorsban 15G 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 Lorsban 15G 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 1000 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**

	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
Planter Type	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 & 2 - number is range.  
Notch

<sup>3</sup> An application rate of 16 oz per 1000 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 & dial settings - number shown is gate  
dial

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

### Approved Uses

#### Brassica (Cole) Crops

(Bok Choy, Broccoli, Broccoli Raab, Brussels Sprout, Cabbage, Cauliflower, Chinese Broccoli, Chinese Cabbage, Collards, Kale, Kohlrabi, Rutabagas, and Turnips)

**Pest Controlled:** root maggot

**Application Rate:** 4.6 to 9.2 oz per 1000 feet of row

**At Plant T-Band Treatment:** ~~For direct seeded and transplanted crops, apply Lorsban 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.~~

#### **Restrictions**

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

### **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.

**At Plant In-Furrow Treatment:** Apply Lorsban 15G 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.

<b>Target Pests</b>	<b>Lorsban 15G (lb/acre)</b>
cutworms grubs wireworms	6.7

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

- 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 Lorsban 15G per year.

### **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 Lorsban 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.

<b>Target Pests</b>	<b>Lorsban 15G (lb/acre)</b>
Symphylans (centipede)	10

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

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

**Citrus Grove Orchard Floors**

**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.

**Pests Controlled:** ~~fire ants and other ant species~~

**Application Rate:** 6.7 lb/acre

**Postplant Broadcast Treatment:** To control foraging ants and suppress mounds, apply Lorsban 15G with ~~as a ground broadcast spray directed to the orchard floor~~ application equipment. Use a suitable granular applicator, such as a cyclone fertilizer spreader, that will uniformly broadcast the granules over the ~~grove orchard floor~~. ~~Re-treat as needed.~~ Lorsban 15G may be custom blended with granular fertilizers provided that application of the blended ~~Lorsban 15G plus fertilizer~~ mixture can be applied uniformly to the ~~grove orchard floor~~. Do not apply where weed growth or other obstructions would impede uniform coverage of the ~~grove orchard floor~~. Foliar applications of Lorsban-4E may be made in addition to orchard floor treatments of Lorsban 15G (see Specific Use Restrictions).

Target Pests	Lorsban 15G (lb/acre)
imported fire ant	6.7
other ant species	

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply last treatment within 28 days before harvest.
- Do not make more than 3 applications or more than 6720.1 lb of Lorsban 15G (3.0 lb ai chlorpyrifos) per acre per crop season/year to the orchard floor.
- 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 ~~livestock meat or dairy animals~~ to graze in treated areas.

**Corn —(Field Corn and Sweet Corn, (Including Corn Grown for Seed) <sup>†</sup>**

**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.

Lorsban 15G is compatible with all ALS inhibitor herbicides, including Accent, Beacon, Python\* and Hornet\* WDG herbicides, applied in accordance with label recommendations. Refer to the product labels for additional precautions and directions for use.

**At Plant T-Band Treatment:** ~~In conventional, minimum and no-till corn, for control of rootworm, cutworm, and billbug, in addition to lesser cornstalk borer, symphylans, wireworm, seedcorn beetle, seedcorn maggot and grubs, apply~~ Apply 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 Lorsban 15G 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. ~~For severe wireworm and grub infestations, use 12 oz/1000 ft of row.~~ Lorsban 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 Lorsban 15G.



**At Plant In-Furrow Treatment:** Apply Lorsban 15G at planting time as an in-furrow treatment in conventional, minimum and no-till corn. Direct the granules into the planter shoe with the seed or place the applicator tube directly behind the planter shoe so that the granules drop into the seed furrow or place the granular band applicator behind the planter shoe so that the granules fall on the soil surface and into the open seed furrow and are covered with soil. ~~Equivalent rates of Lorsban 15G per acre for various row spacings are given in Table 1.~~

**Postplant Treatment:** To control corn rootworm larvae, apply Lorsban 15G 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 granules with soil. To control European and southwestern corn borer larvae, apply Lorsban 15G in a band over the row so that the granules are directed into the whorl or use a postplant broadcast treatment. ~~Use application rates of 3.5 to 4 oz of Lorsban 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 Lorsban 15G per 1000 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 proper time to treat and local threshold information. Scouting for insect damage is strongly encouraged.

**Postplant Broadcast Treatment:** Use Lorsban 15G for control of European and southwestern corn borers by uniformly broadcasting the granules over the corn plants by aerial application or applying the granules into the corn whorls by ground application. Apply at a rate of 5.0 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.

#### Application Rates and Pests Controlled

Pests Controlled	Banded Applications (oz/1000 feet of row)				Preplant Broadcast Application (lb/acre)	Aerial Broadcast Application (lb/acre)
	At Plant Treatments			Postplant Treatment		
	T-Band	Band	In-Furrow			
northern and western corn rootworm larvae	8	8	8	8	-	-
southern corn rootworm larvae	8	8	8	8	-	-
cutworms <sup>††</sup>	8	8	8	-	6.75 to 13.5	-
wireworms <sup>†††</sup>	8	8	8	-	13.5	-
billbugs	8	8	-	-	13.5	-
seed corn maggots	8	-	8	-	-	-
grubs <sup>††††</sup>	8	-	8	-	13.5	-
lesser cornstalk borer	8	8	-	-	-	-
seed corn beetle	8	-	8	-	-	-
flea beetle larvae	-	-	-	-	13.5	-
symphylans	8	8	-	-	-	-
armyworms	-	-	-	6 to 8	-	-
European and southwestern corn borer						
— 1st Generation	-	-	-	3.5 to 8	-	5.0 to 6.5
— 2nd Generation	-	-	-	6 to 8	-	6.5
fire ants <sup>††</sup>	8	-	-	-	-	-
chinch bug <sup>††</sup>	8	-	8	-	-	-

**† Lorsban 15G insecticide is compatible with all ALS inhibitor herbicides, including Accent, Beacon and Broadstrike<sup>®</sup> herbicides, applied in accordance with label recommendations. Refer to the product labels for additional precautions and directions for use.**

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

**††† For best control, apply as an in-furrow treatment. Consider using a hopper box insecticidal seed treatment with band and T-band applications. Use 12 oz/1000 ft of row for severe infestations.**

**†††† Use 12 oz/1000 ft of row for severe infestations.**

**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 1 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.

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

<b>Pests</b>	<b>Banded/In furrow Applications (oz/1000 feet of row)</b>			<b>Aerial Broadcast Application (lb/acre)</b>
	<b>At Plant Treatments</b>	<b>Postplant Treatment</b>		
<b>Controlled</b>	<b>T-Band</b>	<b>In-Furrow</b>	<b>Treatment</b>	
<u>northern and western corn rootworm larvae</u>	8	8	8	-
<u>southern corn rootworm larvae</u>	8	8	8	-
<u>cutworms (1)</u>	8	8	-	-
<u>wireworms (2)</u>	8	8	-	-
<u>billbugs</u>	8	-	-	-
<u>seed corn maggots</u>	8	8	-	-
<u>grubs</u>	8	8	-	-
<u>lesser cornstalk borer</u>	8	-	-	-
<u>seed corn beetle</u>	8	8	-	-
<u>symphylans</u>	8	-	-	-
<u>armyworms</u>	-	-	6 - 8	-
<u>European and southwestern corn borer (3)</u>				
<u>1st Generation</u>	-	-	3.5 - 8	5.0 - 6.5
<u>2nd Generation</u>	-	-	6 - 8	6.5
<u>fire ants (1)</u>	8	8	-	-
<u>chinch bug (1)</u>	8	8	-	-

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

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

- 1. Cutworms, fire ants 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 postplant banded applications use rates of 3.5 to 4 oz of Lorsban 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 Lorsban 15G per 1000 feet of row for severe first generation infestations and all second-generation infestations before larvae have entered corn stalks.

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

- **Preharvest Interval:** Do not apply within 35 days before harvest of grain.
- Do not apply by aircraft at a rate greater than 1 lb ai per acre.
- For foliar insect control, do not exceed the equivalent of 16 oz of Lorsban 15G per 1000 feet of row or 13 lb of Lorsban 15G per acre per crop season.
- Do not make more than 1 at-plant application and 1 foliar application of Lorsban 15G per season or make more than 3 applications per season of products containing chlorpyrifos. Re-treatment with a second soil application of Lorsban 15G is allowed under replant situations due to loss of crop during establishment.
- Do not apply more than a total of 3 lb active ingredient of chlorpyrifos per acre per season.
- Do not make a second application within 10 days of any application of chlorpyrifos to corn.
- Do not allow meat or dairy animals to graze in treated areas or 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.

#### **Restrictions**

For soil insect control, do not exceed the equivalent of 16 oz of Lorsban 15G per 1000 feet of row or 13.5 lb of Lorsban 15G per acre applied as a broadcast application per crop season. For foliar insect control, do not exceed the equivalent of 16 oz of Lorsban 15G per 1000 feet of row or 13 lb of Lorsban 15G per acre per crop season. Do not apply within 35 days before harvest of grain. Do not allow livestock to graze in treated areas nor harvest treated corn silage as feed for meat 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.

### **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.

**At Plant T-Band or Band Treatments:** Apply as a T-band in a 6 to 8 inch band over the row-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 Lorsban 15G per acre for various row spacings are given in Table 1. Use the lowest rate for lesser cornstalk borer control when protection is desired for 2 to 3 weeks and/or a higher rates for longer residual activity. It is absolutely necessary to incorporate the granules, especially at lower rates.

#### **Application Rates and Pests Controlled**

Pests Controlled	Banded Applications (oz/1000 feet of row)	
	At Plant Treatments	
	T-Band	Band
lesser cornstalk borer	4 to 12	4 to 12
corn rootworm and cutworms	8	8
fire ants <sup>†</sup>	8	-
chinch bug <sup>†</sup>	8	-

<sup>†</sup> 8-oz rate suppression only.

Pests Controlled	At Plant T-Band Applications (oz/1000 feet of row)
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<b>Pests Controlled</b>	<b>At Plant T-Band Applications (oz/1000 feet of row)</b>
lesser cornstalk borer	4 - 8
chinch bugs (1)	8
corn rootworm	
cutworms	
fire ants (1)	

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

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

1. **Chinch bugs and fire ants:** 8 oz rate-suppression only.

#### **Specific Use Restrictions**

~~Do not make more than one application per season.~~

- Do not make more than 1 application of Lorsban 15G per season.
- The maximum single application rate is 8 oz per 1000 feet of row (1.5 lb ai chlorpyrifos per acre).
- Do not make a foliar application of Lorsban-4E or other product containing chlorpyrifos within 10 days of an at-plant application of Lorsban 15G.

## **Onions (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.

**Pest Controlled:** onion maggot

**Application Rate:** 3.7 oz per 1000 feet of row at an 18-inch row spacing

**At Plant In-Furrow Treatment:** Apply as an at plant 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 Lorsban 15G at the rate of 3.7 oz per 1000 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 6.7 lb per acre.~~

<b>Target Pest</b>	<b>Lorsban 15G (oz/1000 ft of row)</b>
onion maggot (1)	3.7

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

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

1. 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 Lorsban 15G at the rate of 3.7 oz per 1000 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. ~~Do not make more than 1 application per year.~~
- The maximum single application rate is 0.56 oz ai chlorpyrifos per 1000 feet of row.
- Do not make more than 1 application per year of Lorsban 15G or other product containing chlorpyrifos.

## **Peanuts**

**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.

Use Lorsban 15G to control cutworms, lesser cornstalk borer, southern corn rootworm larvae, suppress wireworms, and inhibit the growth and development of white mold (southern blight) disease caused by *Sclerotium rolfsii*. Lorsban 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

Pests Controlled	Banded Applications (oz/1000 feet of row)		Aerial Broadcast (lb/acre)
	At Plant Treatment	Postplant Treatment	
† Preventative treatments: cutworms lesser cornstalk borer southern corn rootworm larvae wireworms white mold (southern blight)	7.5 to 15	7.5 to 15	-
†† Rescue treatments: lesser cornstalk borer	-	7.5 to 15	10 to 13
burrowing bug	-	-	13.3

† **At Plant Preventive Treatment:** Apply Lorsban 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 1000 feet of row should be made postplant to extend control.

† **Postplant Preventive Treatment:** Apply Lorsban 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 Lorsban 15G may be made (see Specific Use Restrictions). Best suppression of white mold (southern blight) is obtained by applying the maximum rate of 15 oz per 1000 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 Lorsban 15G for the control of lesser cornstalk borer when the insect first appears, usually just prior to or at pegging. Apply Lorsban 15G in a 10 to 18 inch band over the fruiting zone.

†† **Broadcast Rescue Treatment:** Use Lorsban 15G for the control of lesser cornstalk borer when the insect first appears, usually just prior to or at pegging. Uniformly apply at a rate of 10 to 13 lb per acre by aerial broadcast application. For control of burrowing bugs, use Lorsban 15G when adults first appear, usually at mid to late pegging. Uniformly apply at a rate of 13.3 lb per acre by aerial broadcast application. Care must be taken to ensure proper equipment calibration and delivery.

**Banded Applications  
(oz/1000 feet of row)**

22 7 28

<u>Pests Controlled</u>	<u>At Plant Treatment</u>	<u>Postplant Treatment</u>
<u>Preventative treatments:</u> <u>cutworms</u> <u>lesser cornstalk borer</u> <u>southern corn rootworm larvae</u> <u>wireworms</u> <u>white mold (Southern blight) (1)</u>	<u>7.5 - 15</u>	<u>7.5 - 15</u>
<u>potato leafhopper</u>	-	15
<u>Rescue treatments:</u> <u>lesser cornstalk borer (2)</u>	-	<u>7.5 - 15</u>

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

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

- 1. 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.
- 2. Lesser cornstalk borer:** Use Lorsban 15G 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 Lorsban 15G per 1000 ft of row per crop season or apply more than 4 lb ai chlorpyrifos per season.**
  - **Do not make more than 2 applications per year.**
  - **Aerial application to peanuts is prohibited.**
  - **Do not make a second application of Lorsban 15G or other product containing chlorpyrifos within 10 days of the first application.**
  - **Do not feed peanut forage or hay to meat or dairy animals.**
  - **The combined total of preplant and postplant applications of Lorsban-4E and Lorsban 15G or other product containing chlorpyrifos must not exceed 4 lb of active ingredient per acre per crop season.**
- Do not apply more than 15 oz of Lorsban 15G per application per 1000 feet of row or 13.3 lb of Lorsban 15G per acre per application. Do not apply more than 30 oz per 1000 ft of row or 26.6 lb per acre per crop season. Do not harvest within 21 days after treatment. Do not feed peanut forage or hay to meat or dairy animals. The combined total of preplant and postplant applications of Lorsban-4E and Lorsban 15G must not exceed 4 lb of active ingredient per acre per crop season.

#### **Radishes**

**Pest Controlled:** root maggot

**Application Rate:** 3.3 oz per 1000 feet of row

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

#### **Restrictions**

Do not apply more than 18.3 lb of Lorsban 15G per acre or make more than 1 application per season.

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## Soybeans

**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.

### Application Rates and Pests Controlled

Pests Controlled	Banded Applications (oz/1000 feet of row)		
	At Plant Treatments		Postplant Treatment
	T-Band	Band	
lesser cornstalk borer cutworms	8	8	8

**At Plant and Postplant Treatments:** Use Lorsban 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 1000 feet of row. In the southeast apply 4 to 8 oz per 1000 feet of row as an at-plant treatment. Equivalent rates of Lorsban 15G per acre for various row spacing are given in the accompanying table. When applied at planting time incorporate the granules into the top 1 inch of soil 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 Lorsban 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 Lorsban 15G at 8 oz per 1000 feet of row as an at-plant T-band treatment. Apply as a 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 treatment, incorporate the granules in a 4 to 10 inch band to a depth of 1/2 to 1 inch using a suitable cultivator. Apply Lorsban 15G with equipment that will provide uniform distribution of the granules over the row. Equivalent rates of Lorsban 15G per acre for various row spacing are given in Table 1.

Pests Controlled	Banded Applications (oz/1000 feet of row)	
	At Plant T-Band	Postplant Treatment
cutworms	8	8
lesser cornstalk borer		
fire ants (suppression)	8	-

### Specific Use Precautions:

- Do not apply as an in-furrow treatment.

### Specific Use Restrictions:

Do not make more than one application per season.

- Preharvest Interval:** Do not apply within 7 days before harvest of soybeans.
- Do not make more than 1 application of Lorsban 15G per season or apply more than 3 applications of other products containing chlorpyrifos.
- The maximum single application rate is 1.2 oz ai chlorpyrifos per 1000 feet of row.
- Do not make a foliar application of Lorsban-4E or other product containing chlorpyrifos within 10 days of an at-plant application of Lorsban 15G.

## Sugarbeets

**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.

**Granular insecticides, including Lorsban 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.**

#### Application Rates and Pests Controlled

Pests Controlled	Banded Applications (oz/1000 feet of row)		
	At Plant Treatments		Postplant Treatment
	T-Band	Band	
sugar beet root maggot	-	4.5 to 9.0	6.5 to 9.0
cutworms	-	6.6 to 9.0	-
wireworms (suppression)	-	6.5 to 9.0	-

**At Plant T-Band Treatment:** To control sugar beet root maggot larvae and cutworms at planting time, place Apply Lorsban 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 Lorsban 15G at the rate of 4.5 to 9 oz per 1000 feet of row (equivalent to 6.75 to 13.5 lb per acre based on 22-inch row spacing). Incorporate Lorsban 15G into the top 1/2 to 1-inch of soil using suitable equipment. When root maggot populations are expected to be low, apply Lorsban 15G at a rate of 4.5 oz per 1000 feet of row (equivalent to 6.75 lb per acre based on 22-inch row spacing). If initial adult fly activity indicates higher than anticipated populations, apply Lorsban 4E at or near the time of peak adult emergence to augment control. (Review label for Lorsban 4E for recommended use rates, application timing, methods of application, and insecticide resistance management.) Incorporate Lorsban 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 Apply Lorsban 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 Lorsban 15G at the rate of 6.5 to 9 oz per 1000 feet of row (equivalent to 10 to 13.5 lb per acre based on 22-inch row spacing). Incorporate Lorsban 15G into the top 1/2 to 1 inch of soil using a suitable incorporation device.

Pests Controlled	Banded Applications (oz/1000 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 Lorsban 15G at a rate of 4.5 oz per 1000 feet of row (equivalent to 6.75 lb per acre based on 22-inch row spacing). If initial adult fly activity indicates higher than anticipated populations, apply Lorsban-4E at or near the time of peak adult emergence to augment control.



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**Specific Use Precautions:** Granular insecticides, including Lorsban 15G, 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

~~Do not make more than one application per year.~~

- **Preharvest Interval:** Do not apply within 7 days before harvest of sugarbeets.
- Do not make more than 3 applications of Lorsban 15G per year.
- 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.
- Do not make a foliar application of Lorsban-4E or other product containing chlorpyrifos within 10 days of an at-plant application of Lorsban 15G.
- The maximum single application rate is 1.35 oz ai chlorpyrifos per 1000 feet of row or 2 lb ai chlorpyrifos per acre based on a 22-inch row spacing.

### Sunflowers

**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.

**Pest Controlled:** cutworms

**Application Rate:** 8 oz per 1000 feet of row

**At Plant T-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.

Target Pests	Lorsban 15G (oz/1000 ft of row)
cutworms	8

#### Specific Use Restrictions

~~Do not make more than one application per season.~~

- **Preharvest Interval:** Do not apply within 7 days before harvest of sunflowers.
- Do not make more than 1 application of Lorsban 15G per season or apply more than 3 applications of other product containing chlorpyrifos.
- Do not make a foliar application of Lorsban-4E or other product containing chlorpyrifos within 10 days of an at-plant application of Lorsban 15G.
- The maximum single application rate is 1.25 oz per 1000 feet of row.

### Sweet Potatoes

**Worker Restricted Entry Interval:** Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days-24 hours unless PPE required for early entry is worn.

**Pests Controlled:** wireworms (*Conoderus*), flea beetles (*Systena*), and sweet potato beetle

**Application Rate:** 13.5 lb/acre

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

Target Pests	Lorsban 15G (lb/acre)
<u>Conderus (wireworm)</u>	13.5
<u>Systema (flea beetle)</u>	
sweet potato flea beetle	

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

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

- **Preharvest Interval:** Do not harvest within 125 days of treatment.
- Do not make more than 1 application of Lorsban 15G or other product containing chlorpyrifos per season.
- The maximum single application rate is 2 lb 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.

**Pests Controlled:** cutworms, flea beetle larvae, root maggots, and wireworms

**Application Rate:** 13.5 to 20.0 lb/acre

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

Target Pests	Lorsban 15G (lb/acre)
<u>cutworms</u>	13.5
<u>fire ant (suppression)</u>	
<u>flea beetles</u>	
<u>mole crickets</u>	
<u>root maggots</u>	
<u>wireworms</u>	

#### **Specific Use Restrictions**

- **Preharvest Interval:** Do not harvest within 7 days of treatment.
- Do not make more than 1 application of Lorsban 15G or other product containing chlorpyrifos per season.
- The maximum single application rate is 2.025 lb ai chlorpyrifos per acre.

### **Vegetables**

27 8 28

**Including, but not limited to: Bok Choy, Broccoli, Broccoli Raab, Brussels Sprout, Cabbage, Cauliflower, Chinese Broccoli, Chinese Cabbage, Collards, Kale, Kohlrabi, 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.

**At Plant T-Band Treatment:** For direct seeded and transplanted crops, apply Lorsban 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.

<b><u>Target Pests</u></b>	<b><u>Lorsban 15G (oz/1000 ft of row)</u></b>
root maggots	4.6 - 9.2

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not harvest within 21 days of treatment for cauliflower and within 7 days for all other crops.
- Do not apply more than 7 1/2 lb of Lorsban 15G per acre to crops planted in 40-inch rows or more than 15 lb of Lorsban 15G per acre to crops planted in 20-inch rows (or two rows per bed). Use proportional amounts for other row spacings not to exceed 15 lb of Lorsban 15G per acre.
- Do not make more than 1 application of Lorsban 15G per season.
- Do not make a foliar application of Lorsban-4E or other product containing chlorpyrifos within 10 days of an at-plant application of Lorsban 15G.
- The maximum single application rate is 1.4 oz ai chlorpyrifos per 1000 feet of row.
- Do not use rutabaga tops for food or feed purposes.

**Radish**

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

<b><u>Target Pests</u></b>	<b><u>Lorsban 15G (oz/1000 ft of row)</u></b>
root maggots	3.3

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not harvest within 7 days.
- The maximum single application rate is 0.5 oz ai chlorpyrifos per 1000 feet of row (2.76 lb ai chlorpyrifos per acre).
- Do not apply more than 18.3 lb of Lorsban 15G per acre or make more than 1 application per season.

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