



# Lorsban™ 15G

## Insecticide

GROUP	<b>1B<sup>1</sup></b>	INSECTICIDE
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- This product is not to be used in and around homes or other residential areas such as parks, school grounds, playing fields. It is not for use by homeowners or other uncertified users.
- Contains chlorpyrifos.
- To control certain pests in onions, field, seed and sweet corn, broccoli, Brussels sprouts, cabbage, cauliflower and rutabagas.

AGRICULTURAL

READ THE LABEL AND BOOKLET BEFORE USING  
KEEP OUT OF REACH OF CHILDREN

ACTIVE INGREDIENT: chlorpyrifos      15%  
granular

REGISTRATION NO. 16458 PEST CONTROL PRODUCTS ACT

**CAUTION**  **POISON**

**WARNING - EYE IRRITANT  
HARMFUL IF SWALLOWED**

NET CONTENTS: 22.7 kg

**Dow AgroSciences Canada Inc.**  
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Calgary, Alberta  
T2P 1M4  
1-800-667-3852

## **PRECAUTIONS**

### **WARNING - EYE IRRITANT**

### **HARMFUL IF SWALLOWED**

### **KEEP OUT OF REACH OF CHILDREN**

Avoid contact with skin, eyes and clothing. Impervious gloves should be used with shirt sleeves worn outside the gloves to prevent granules from falling into the gloves when handling this product. Work with the wind at your back to avoid breathing dust or having chemical blow into the eyes. The use of an organic vapour type respirator and safety glasses is recommended when handling. Do not wear contaminated clothing. Gloves and respirator cartridges should be replaced frequently and clothing laundered daily. Wash thoroughly with soap and water after handling.

### **PRECAUTIONS FOR MIXERS/LOADERS**

Mixers/loaders must wear:

- coveralls over a long-sleeved shirt and long pants
- chemical-resistant gloves
- chemical-resistant footwear and socks
- an air purifying respirator equipped with an -R or -P series filter
- chemical-resistant apron

### **PRECAUTIONS FOR APPLICATORS**

Do not apply with high-pressure handwand equipment.

Applicators using ground application equipment with a closed cab must wear:

- a long-sleeved shirt and long pants
- chemical-resistant gloves when leaving cab for clean up and repair (gloves must be removed when re-entering the cab)
- socks and shoes

Applicators using ground application equipment with an open cab must wear:

- coveralls over a long-sleeved shirt and long pants
- chemical-resistant gloves
- socks and shoes

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at [www.croplife.ca](http://www.croplife.ca).

### **FIRST AID**

**Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.**

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

**If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

**If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

**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 centre or doctor for treatment advice.

## **TOXICOLOGICAL INFORMATION**

Chlorpyrifos is an organophosphate that is a cholinesterase inhibitor. Typical symptoms of overexposure to cholinesterase inhibitors include headache, nausea, dizziness, sweating, salivation, runny nose and eyes. This may progress to muscle twitching, weakness, tremors, incoordination, vomiting, abdominal cramps and diarrhea in more serious poisonings. A life-threatening poisoning is signified by loss of consciousness, incontinence, convulsions and respiratory depression with a secondary cardiovascular component. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate degree of exposure (baseline data are useful). Atropine, only by injection, is the preferable antidote. Oximes, such as pralidoxime chloride, may be therapeutic if used early; however, use only in conjunction with atropine. In cases of severe acute poisoning, use antidotes immediately after establishing an open airway and respiration. With oral exposure, the decision of whether to induce vomiting or not should be made by an attending physician.

## **AGRICULTURAL CHEMICAL**

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

## **ENVIRONMENTAL HAZARDS**

Do not apply directly to water or wetlands. This pesticide is toxic to birds and wildlife and extremely toxic to fish and aquatic organisms. Do not apply when weather conditions favour drift from treated areas. Drift and runoff from treated areas may be hazardous to fish and aquatic organisms in adjacent aquatic sites. Cover or incorporate granules that are spilled during loading or are visible on soil surface in turn areas.

- TOXIC to birds. Any spilled or exposed granules must be incorporated into the soil or otherwise cleaned-up from the soil surface.
- TOXIC to wild mammals. Any spilled or exposed granules must be incorporated into the soil or otherwise cleaned-up from the soil surface.
- TOXIC to bees exposed to direct treatment, drift, or residues on blooming plants. Do not use on flowering crops or weeds.
- TOXIC to certain beneficial insects. Minimize spray drift to reduce harmful effects on beneficial insects in habitats next to the application site such as hedgerows and woodland
- DO NOT apply this product or allow it to drift to flowering crops or weeds if bees are visiting the treatment area. Applicators should inform local bee keepers prior to application if hives are in adjacent fields. Minimize spray drift to reduce harmful effects on bees in habitats close to the application site.
- To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to, heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g., soils that are compacted or fine textured such as clay).
- Avoid application of this product when heavy rain is forecast.
- Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip (buffer zone) between the treated area and the edge of the water body.

## **STORAGE**

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

## **DISPOSAL**

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

**GENERAL USE PRECAUTIONS**

- DO NOT APPLY BY AIR
- **DO NOT** apply this product directly to aquatic habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries habitats or marine habitats.
- **DO NOT** contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.
- A plantback interval of 30 days must be observed between application and planting of rotational crops, with the exception of radish, Chinese cabbage, pak choi and cole crops for which no plantback restriction is required.

**DIRECTIONS FOR USE**

Apply Lorsban 15G Insecticide to control corn rootworm and aid in the suppression of cutworm in corn and also to control onion maggot larvae in onions and cabbage maggot in broccoli, Brussels sprouts, cabbage, cauliflower and rutabagas. **Every effort should be made to completely incorporate granules. Granule deposits from spills and accumulation at row ends should be covered with soil.**

**Field, Seed and Sweet Corn**

CORN (FIELD, SWEET)	Do not apply more than 1 application per season. Do not apply within 70 days of harvest. Ground application only (DO NOT APPLY BY AIRCRAFT). Do not enter treated fields until 1 day after application.
Northern corn rootworm, western corn rootworm, cutworm (suppression)	<b>ROW TREATMENT</b> Apply 75 grams product per 100 m row. Incorporate the granules into the top 2.5 cm of soil by placing a 15–18 cm wide band over the row behind the planter shoe and ahead of the press wheels. When applied as directed for rootworm control, this product will provide some reduction of cutworm populations. However, under heavier infestations of cutworms, further insecticidal treatment with other formulations may be necessary.

Equivalent rates of Lorsban 15G Insecticide per hectare for various row spacing are given in the accompanying table.

Amount of Lorsban 15G Insecticide/ 100 m of Row	kg of Lorsban 15G Insecticide Required/ha For Various Row Spacing					
	102 cm	96.5 cm	91.5 cm	86.5 cm	81 cm	76 cm
75 g	7.4	7.8	8.2	8.7	9.2	9.8

## GENERAL INSTRUCTIONS FOR EQUIPMENT CALIBRATION

**CAUTION:** The following table lists suggested initial gauge settings for application of Lorsban 15G Insecticide 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 the table.
4. Measure off 100 row metres and drive your planter the premeasured distance at your desired speed.
5. Each bag should contain 75 grams of granules depending on your desired rate.  
**NOTE:** Grams WT of granules - 75 grams  
Approx. mL (volume) - 100 mL
6. If the result is over or under the desired rate, adjust the settings and repeat the calibration.

### Lorsban 15G Insecticide - Calibration

Planter	Speed, kmph								
	3	4.5	6.5	8	10	11	13	14.5	16
	Application Rate, 75 g/100 row metres								
	Gauge Setting								
Gandy <sup>1</sup>	13.6	16.7	19.7	22.8	24.8	26.3	27.8	29.3	30.7
John Deere 7000 Max Emerge <sup>1</sup>	9	12	16	19	22	25	27	30	31
John Deere 721 Flexi-Planter <sup>2</sup>	1/22	1/25	1/28	2/4	2/7	2/11	2/16	2/22	2/29
Allis Chalmers 70 Series <sup>3</sup>	8	8	8	8	8	8	8	8	8
Allis Chalmers 78 & 79 Series <sup>4</sup>	1/2.9	1/5.1	1/7.3	2/0.5	2/2.8	2/6.0	2/9.0	3/2.3	3/5.5
Noble <sup>1</sup> (new)	6	8	10	13	14	15	17	18	20
Noble <sup>1</sup> (old)	7	10	13	16	19	22	25	27	30
International Harvester <sup>4</sup>	1/2.9	1/5.1	1/7.3	2/0.5	1/2.8	2/6.0	2/9.0	3/2.3	3/5.5

<sup>1</sup>Gauge setting.

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

<sup>3</sup>Gauge setting is constant regardless of speed.

<sup>4</sup>Gauge setting shown with stem gates & dial settings - number shown is gate/dial.

### Onions

To control larvae of the onion maggot, apply Lorsban 15G Insecticide as an in-furrow at-plant treatment. Refer to the following table for the required amount of Lorsban 15G Insecticide.

ONION (bulb, pickling)	Ground application only (DO NOT APPLY BY AIRCRAFT). Do not apply more than once per season. Do not enter treated fields until 1 day after application. Do not apply to bunching onions. [See also below.]  Do not apply within 109 days of harvest for bulb onions, or 97 days of harvest for pickling onions.
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Spacing of seed furrow width (cm)	2.5-5	7.5	10-15
gm/100 metres	32	48	64
kg of product/ha	7.9	11.8	15.7
kg a.i./ha	1.2	1.8	2.4

Calculate the amount of Lorsban 15G Insecticide per 100 metres of row required as shown in the following examples: For dry onions using a precision seeder equipped with a double line coulter; seed furrow width is 2.5 cm per line x 2 lines; therefore apply 32 gm of Lorsban 15G Insecticide per 100 metres of double row.

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

For pickling onions use a Planet Jr. seeder equipped with a 10 cm shoe; seed furrow width is 10 cm; therefore apply 64 gm of Lorsban 15G Insecticide per 100 metres of row. Use no more than 16 kg of Lorsban 15G Insecticide per hectare.

**Broccoli, Brussels sprouts, Cabbage, Cauliflower and Rutabagas**

PAK CHOI, BROCCOLI, BRUSSELS SPROUT, CABBAGE, CAULIFLOWER, CHINESE CABBAGE	Ground application only (DO NOT APPLY BY AIRCRAFT). Do not enter treated fields until 1 day after application for pak choi and Chinese cabbages. Do not enter treated fields until 10 days after application for cauliflower, 1 day after application for all other crops. [See also below.]  Do not apply more than once per season.														
Cabbage maggot (BROCCOLI, BRUSSELS SPROUT, CABBAGE, CAULIFLOWER, RUTABAGA, only)	Apply 0.6-1.0 kg product per 1000 m of row. Apply as an in-furrow, at-plant treatment. Application rates for different row spacings are as follows:  <table border="1" data-bbox="570 764 1166 974"> <thead> <tr> <th>Row Spacing</th> <th>kg product per hectare</th> </tr> </thead> <tbody> <tr> <td>30 cm</td> <td>20-33.3</td> </tr> <tr> <td>60 cm</td> <td>10-16.7</td> </tr> <tr> <td>75 cm</td> <td>8.0-13.3</td> </tr> <tr> <td>80 cm</td> <td>7.5-12.5</td> </tr> <tr> <td>90 cm</td> <td>6.7-11.1</td> </tr> <tr> <td>105 cm</td> <td>5.7-9.5</td> </tr> </tbody> </table>	Row Spacing	kg product per hectare	30 cm	20-33.3	60 cm	10-16.7	75 cm	8.0-13.3	80 cm	7.5-12.5	90 cm	6.7-11.1	105 cm	5.7-9.5
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RUTABAGA	Ground application only (DO NOT APPLY BY AIRCRAFT). Do not enter treated fields until 1 day after application. Do not apply within 30 days of harvest. [See also below.]  Do not apply more than once per season.														
Cabbage maggot	Apply 0.6-1.0 kg product per 1000 m of row. Apply as an in-furrow, at-plant treatment. Application rates for different row spacings are as follows:  <table border="1" data-bbox="570 1255 1166 1465"> <thead> <tr> <th>Row Spacing</th> <th>kg product per hectare</th> </tr> </thead> <tbody> <tr> <td>30 cm</td> <td>20-33.3</td> </tr> <tr> <td>60 cm</td> <td>10-16.7</td> </tr> <tr> <td>75 cm</td> <td>8.0-13.3</td> </tr> <tr> <td>80 cm</td> <td>7.5-12.5</td> </tr> <tr> <td>90 cm</td> <td>6.7-11.1</td> </tr> <tr> <td>105 cm</td> <td>5.7-9.5</td> </tr> </tbody> </table>	Row Spacing	kg product per hectare	30 cm	20-33.3	60 cm	10-16.7	75 cm	8.0-13.3	80 cm	7.5-12.5	90 cm	6.7-11.1	105 cm	5.7-9.5
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**NOTE TO BUYER/USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS:**

The DIRECTIONS FOR USE for this product for the use(s) described below were developed by persons other than Dow AgroSciences Canada Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Dow AgroSciences Canada Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crop(s) listed below.

Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Dow AgroSciences Canada Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the use(s) described below.

## DIRECTIONS FOR USE

### SHALLOTS (Dry Bulb)

For the control of onion maggot larvae on shallots (dry bulb), apply Lorsban 15G as an in-furrow at-plant ground application as indicated in table following:

<b>Spacing of seed furrow width (cm)</b>	<b>2.5-5</b>	<b>7.5</b>	<b>10-15</b>
<b>gm/100 metres</b>	<b>32</b>	<b>48</b>	<b>64</b>
<b>kg of product/ha</b>	<b>7.9</b>	<b>11.8</b>	<b>15.7</b>
<b>kg a.i./ha</b>	<b>1.2</b>	<b>1.8</b>	<b>2.4</b>

Ground application only (DO NOT APPLY BY AIRCRAFT). Do not make more than one application per season. DO NOT apply more than 11 kg a.i./day (73.5 kg product/day). Do not enter treated fields until 1 day after application. Do not apply within 109 days of harvest.

Refer to the main Lorsban 15G Insecticide product label for additional details

### Preharvest Intervals

<b>Crop</b>	<b>Interval (Days) Between Last Application and Harvest</b>
rutabagas	30
broccoli, Brussels sprouts, cabbage, cauliflower, field, seed and sweet corn	32
pickling onions	70
dry onions, shallots (dry bulb)	97
	109

### Restricted Entry Intervals

The worker restricted entry level (REI) is 24 hours for all crops except cauliflower which is 10 days.

### RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, please note that Lorsban 15G Insecticide contains a Group 1B<sup>1</sup> insecticide. Any insect population may contain individuals naturally resistant to Lorsban 15G Insecticide and other 1B<sup>1</sup> insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance:

- Where possible, rotate the use of Lorsban 15G Insecticide or other Group 1B<sup>1</sup> insecticides with different groups that control the same pests in a field.
- Use tank mixtures with insecticides from a different group when such use is permitted.
- Insecticide use should be based on an IPM program that includes scouting, record keeping, and considers cultural, biological and other chemical control practices.
- Monitor treated pest populations for resistance development.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Dow AgroSciences Canada Inc. at 1-800-667-3852 or at [www.corteva.ca](http://www.corteva.ca).

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in any way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

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Label Code: CN-16458-010-E  
Replaces: CN-16458-009-E