

GROUP	<b>4</b>	FUNGICIDE
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## APRON XL<sup>®</sup> LS

FUNGICIDE

SUSPENSION

AGRICULTURAL

A seed treatment fungicide for control of early season *Phytophthora* root rot, systemic downy mildew, and *Pythium* causing damping-off, seed rot diseases of certain crops.

**GUARANTEE:**

Metalaxyl-M and S-isomer.....33.3 %

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



**WARNING - EYE IRRITANT**

**For use in seed treatment plant only. All seed treated with this product must be conspicuously coloured at the time of treatment.**

REGISTRATION NUMBER: **25585**  
PEST CONTROL PRODUCTS ACT

**Syngenta Canada Inc.**  
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N1G 4Z3  
Telephone: 1-877-964-3682

PAMPHLET

## 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 a 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.

## FIRST AID

**IN CASE OF POISONING**, contact a physician or a poison control centre **IMMEDIATELY**. 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

Treat symptomatically. Contact with eyes may require specialized ophthalmologic examination.

## PRECAUTIONS

### Safety Precautions:

1. KEEP OUT OF THE REACH OF CHILDREN.
2. Harmful if swallowed. May be harmful if inhaled. Causes eye irritation. DO NOT get in eyes. When handling this product, wear goggles or a face shield. Avoid prolonged contact with skin. Avoid inhalation of vapours, spray mist or treated seed dust. Wash hands and face after handling and before eating or smoking.
3. Avoid contamination of feed and foodstuffs.
4. Do not apply in a way that this product will contact workers or other persons, either directly or through drift. Only handlers (mixers, loaders and applicators) wearing personal protective equipment may be in the area being treated during application.
5. Treat seed in a well-ventilated area.
6. When handling APRON XL<sup>®</sup> LS Fungicide, contaminated equipment or seed treated with APRON XL LS Fungicide, wear long-sleeved coveralls over normal work clothing,

and chemical-resistant gloves. In addition, wear a suitable dust mask when bagging or sewing bags of seed treated with APRON XL LS Fungicide, or when transferring seed to a storage bin.

### **Environmental Precautions:**

1. Do not apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries or marine habitats.
2. Do not contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.
3. If treated seed is spilled outdoors or in areas accessible to birds, promptly clean up or bury to prevent ingestion.

### **Use Restrictions:**

1. Treated seed must not be used for food, feed or oil processing.
2. Do not use in hopper-box, planter-box, slurry-box or other non-commercial seed treatment applications at, or immediately before, planting.
3. All bags containing treated seed for sale or use in Canada must be labelled or tagged as follows: ***“This seed has been treated with APRON XL LS Fungicide which contains metalaxyl-M and S-isomer. Use chemical resistant gloves when handling treated seed. Do not graze or feed livestock on seeded area for four weeks after planting. Do not use for food, feed or oil processing. Store away from food and feed.”***
4. All bags containing treated seed for export must be labelled or tagged as follows: ***“FOR EXPORT ONLY - NOT FOR DOMESTIC SALE OR USE IN CANADA. This seed has been treated with APRON XL LS Fungicide which contains metalaxyl-M and S-isomer. Use chemical resistant gloves when handling treated seed. Do not use for food, feed or oil processing. Store away from food and feed.”*** For treatment of seed for export, treater should verify actual registered rate in country of destination and/or use before exportation.

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).

## **DECONTAMINATION AND DISPOSAL**

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.

### **CONTAINER DISPOSAL:**

#### **For returnable containers:**

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

#### **For refillable containers:**

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for

any other purpose.

**For recyclable containers:**

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 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.

***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING,  
CALL 1-800-327-8633 (FASTMED)***

**GENERAL INFORMATION**

APRON XL LS Fungicide is a systemic fungicide seed dressing specifically for the control of diseases caused by soil-borne *Pythium* and *Phytophthora* spp. and for systemic downy mildews. For control of other soil-borne diseases, such as *Rhizoctonia* spp., APRON XL LS Fungicide should be applied in combination with other registered seed dressing fungicides.

APRON XL LS Fungicide may be applied as a water-based slurry with other registered seed treatment insecticides and fungicides through standard slurry- or mist-type commercial seed treatment equipment.

**Note:** Treatment of highly mechanically scarred or damaged seed, or seed known to be of low vigour and poor quality, except for the purpose of curative control of existing disease pests, may result in reduced germination and/or reduction of seed and seedling vigour. Treat a small quantity of seed using equipment similar to that planned for treating the total seed lot. Conduct germination tests on a small portion of the seed before committing the total seed lot to a selected seed treatment. Due to seed quality and seed storage conditions beyond the control of Syngenta Canada Inc., no claims are made to guarantee the germination of carry-over seed.

**USE LIMITATIONS**

Experience has shown that strains of fungus resistant to metalaxyl-M and S-isomer may develop. Failure to control the disease will result in crop damage and/or yield losses. Since the occurrence of the resistance cannot be foreseen, Syngenta Canada Inc. accepts no responsibility for any loss of, or damage to, crops resulting from the failure of APRON XL LS Fungicide to control the resistant fungus strains.

**DIRECTIONS FOR USE**

Apply APRON XL LS Fungicide as a water-based slurry utilizing standard slurry seed treatment equipment which provides uniform seed coverage. Uneven or incomplete seed coverage may

not give the desired level of disease control. Thoroughly mix the recommended amount of APRON XL LS Fungicide into the required amount of water for the slurry treater and dilution rate to be used. Follow the manufacturer's application instructions for the seed treatment equipment being used. Maintain constant agitation of the slurry during the seed treatment process. Allow the seed to dry before bagging. Depending on planting equipment, seed treated with APRON XL LS Fungicide or a combination of APRON XL LS Fungicide and MAXIM® 480FS Colourless Seed Treatment Fungicide may not flow through planting equipment at the same rate as untreated seed. Recalibrate this equipment before planting treated seed.

For control of seed-borne and soil-borne fungi which cause seed decay, damping-off and seedling blights on field corn, sweet corn and popcorn apply MAXIM 480FS Colourless Seed Treatment following rates and directions on the label, in a tank mix with APRON XL LS Fungicide. Follow all appropriate use rates, directions, precautions, etc. as specified on the APRON XL LS Fungicide and MAXIM 480FS Colourless Seed Treatment Fungicide labels.

When a rate range is specified, use the higher rate of APRON XL LS Fungicide when planting into fields with a history of *Pythium* damping-off disease (*Pythium* spp.) and/or under high disease pressure.

**This product contains no colourant. An appropriate colourant must be added when this product is applied to seed. Regulations pertaining to the "Seeds Act" must be strictly adhered to when using this product. A red colourant must be added when this product is applied to grain.**

Crops	Diseases Controlled	Use Rate per 100 kg Seed	Notes
<b>CEREAL GRAINS (INCLUDING FORAGE AND SILAGE)</b>			
Corn (Field Corn and Popcorn), Sweet Corn, Wheat, Barley (export use only), Oats (export use only), Rye (export use only)	<i>Pythium</i> damping-off	20 – 40 mL	Tank mix with MAXIM 480FS Colourless Seed Treatment Fungicide for corn – Follow appropriate use rates, directions, precautions, etc. as specified on the APRON XL LS Fungicide and MAXIM 480FS Colourless Seed Treatment Fungicide labels.
Sorghum (export use only)	<i>Pythium</i> damping-off on all sorghum cultivars  Systemic downy mildew	20 – 40 mL  40 – 80 mL	Use low rate for seed on cultivars which possess sorghum downy mildew resistance. For those cultivars which do not possess resistance to a particular race of sorghum downy mildew grown in areas with recent history of severe disease, use high rate. Seed treated with the high rate should be planted and not carried over to the following year. Only high quality sorghum seed (90% germ and above) should be treated with APRON XL LS Fungicide.

Crops	Diseases Controlled	Use Rate per 100 kg Seed	Notes
<b>OILSEEDS</b>			
Canola	<i>Pythium</i> damping-off	20 mL	
Sunflower	<i>Pythium</i> damping-off	40 mL	
	Systemic downy mildew	80 mL	
<b>LEGUME VEGETABLES (SUCCULENT OR DRY)</b>			
Soybean Bean ( <i>Lupinus</i> spp. - includes Grain Lupin, Sweet Lupin, White Lupin, White Sweet Lupin), Bean ( <i>Phaseolus</i> spp. - includes Field Bean, Kidney Bean, Lima Bean, Navy Bean, Pinto Bean, Runner Bean, Snap Bean, Tepary Bean, and Wax Bean), Bean ( <i>Vigna</i> spp. - includes Adzuki Bean, Asparagus Bean, Blackeyed Pea, Catjang, Chinese Longbean, Cowpea, Crowder Pea, Moth Bean, Mung Bean, Rice Bean, Southern Pea, Urd Bean and Yardlong Bean), Broad Bean, Chickpea, Guar, Jackbean, Lablab Bean, Pea ( <i>Pisum</i> spp. – includes Dwarf Pea, Edible-Pod Pea, English Pea, Field Pea, Garden Pea, Green Pea, Snow Pea, Sugar Snap Pea), Pigeon Pea, Soybean (immature seed), Sword Bean)	<i>Pythium</i> damping-off  Early season <i>Phytophthora</i> root rot	20 – 40 mL  40 mL	
Lentils	<i>Pythium</i> damping-off	7 mL	Use for low tannin varieties which are for domestic seed production or sold for export only.

Crops	Diseases Controlled	Use Rate per 100 kg Seed	Notes
<b>GRASS FORAGE, FODDER, AND HAY</b>			
All Grasses (including Bermuda grass, Bluegrass, and Fescue or Bromegrass)  All Gramineae family (either green or cured), except those in the Cereal Grains group, that will be fed to or grazed by livestock All pasture and range grasses and grasses grown for hay or silage	<i>Pythium</i> damping-off	20 – 40 mL	
Turf grasses	<i>Pythium</i> damping-off	40 mL	For turf grass seed for golf courses, home lawns, reclamation, and erosion control projects.
<b>NON-GRASS ANIMAL FEEDS (FORAGE, FODDER, STRAW, AND HAY)</b>			
Sainfoin	<i>Pythium</i> damping-off	20 – 40 mL	
Alfalfa, Clover, Trefoil, and Vetch	<i>Pythium</i> damping-off and early season <i>Phytophthora</i> root rot	40 mL	
<b>ROOT VEGETABLES</b>			
Sugar Beet	<i>Pythium</i> damping-off	20 – 40 mL	

**NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS:**

The DIRECTIONS FOR USE for this product for the uses described below were developed by persons other than Syngenta Canada Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Syngenta 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 crops listed below.

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

Crops	Diseases Controlled	Use Rate per 100 kg Seed	Notes
<b>BULB VEGETABLES</b>			
Onion (dry and bunching)	<i>Pythium</i> damping-off	20 mL	One application as a seed treatment.
<b>ROOT VEGETABLES (EXCEPT SUGAR BEET)</b>			
Beet (garden), Burdock (edible), Carrot, Celeriac, Chervil (turnip-rooted), Chicory, Ginseng, Horseradish, Parsley (turnip-rooted), Parsnip, Radish (including oriental), Rutabaga, Salsify (oyster plant, black and Spanish), Skirret, Turnip	<i>Pythium</i> damping-off	20 – 40 mL	One application as a seed treatment.
<b>CUCURBIT VEGETABLES</b>			
Chayote, Chinese Waxgourd, Citron Melon, Cucumber, Gherkin, Gourd Edible (includes Hyotan, Cucuzza, Hechima, Chinese Okra), Momordica, all Muskmelon, Pumpkin, all Squash, and Watermelon	<i>Pythium</i> damping-off	20 – 40 mL	One application as a seed treatment DO NOT TREAT SEEDS IN CANADA. For control of seed decay, damping-off and seedling blights caused by <i>Fusarium</i> (including seedling disease due to <i>F. graminearum</i> ) and <i>Rhizoctonia</i> spp., APRON XL LS Fungicide may be tank-mixed with MAXIM 480FS Colourless Seed Treatment Fungicide.
<b>LEAFY VEGETABLES</b>			
Amaranth, Arugula, Corn Salad, Dandelion Leaves, Dock, Edible Leaved Chrysanthemum, Endives, Fresh Chervil Leaves, Garden Cress, Garden Purslane, Garland Chrysanthemum, Head Lettuce, Leaf Lettuce, New Zealand Spinach, Orach Leaves, Parsley Leaves, Radicchio, Spinach, Upland Cress, Vine Spinach, Winter Purslane	<i>Pythium</i> damping-off	20 – 40 mL	One application as a seed treatment. Do not apply APRON XL LS Fungicide to leafy greens which are destined to be grown in the greenhouse. Containers of bags containing APRON XL LS Fungicide treated leafy greens seed must be labelled with the restriction "Do not use seed for leafy greens destined to be grown in the greenhouse."



Crops	Diseases Controlled	Use Rate per 100 kg Seed	Notes
<b>BRASSICA VEGETABLES</b>			
Crop Group 5A: Broccoli, Chinese Broccoli, Brussels Sprouts, Cabbage, Chinese Napa Cabbage, Chinese Mustard Cabbage, Cauliflower, Cavalo Broccoli, Kohlrabi	<i>Pythium</i> damping-off	20 – 40 mL	<p>One application as a seed treatment.</p> <p><b>DO NOT TREAT SEEDS IN CANADA.</b> For import use only – not for domestic commercial or on-farm seed treatment.</p> <p>For control of seed decay, damping off and seedling blight caused by <i>Fusarium</i> spp. and <i>Rhizoctonia</i> spp., APRON XL LS Fungicide may be tank mixed with MAXIM 480FS Colourless Seed Treatment Fungicide. Follow appropriate use rates, directions, precautions, etc. as specified on the APRON XL LS Fungicide and MAXIM 480FS Colourless Seed Treatment Fungicide labels.</p> <p>Do not plant treated seed by hand.</p>
<b>FRUITING VEGETABLES</b>			
Crop Group 8: Eggplant, Groundcherry, Pepino, Bell Pepper, Chili Pepper, Cooking Pepper, Pimento, Sweet Pepper, Tomatillo, Tomato	<i>Pythium</i> damping-off	20 – 40 mL	<p>One application as a seed treatment.</p> <p><b>DO NOT TREAT SEEDS IN CANADA.</b> For import use only – not for domestic commercial or on-farm seed treatment.</p> <p>For control of seed decay, damping off and seedling blight caused by <i>Fusarium</i> spp. and <i>Rhizoctonia</i> spp., APRON XL LS Fungicide may be tank mixed with MAXIM 480FS Colourless Seed Treatment Fungicide. Follow appropriate use rates, directions, precautions, etc. as specified on the APRON XL LS Fungicide and MAXIM 480FS Colourless Seed Treatment Fungicide labels.</p> <p>Do not plant treated seed by hand.</p>

## Export Use:

**For treatment of seed for export, treater should verify actual registered rate in country of destination and/or use before exportation. Seed treated in accordance with the export use pattern must be labelled or tagged as follows: “FOR EXPORT ONLY - NOT FOR DOMESTIC SALE OR USE IN CANADA. This seed has been treated with APRON XL LS Fungicide which contains metalaxyl-M and S-isomer. Use chemical resistant gloves when handling treated seed. Do not use for food, feed or oil processing. Store away from food and feed.”**

## Resistance Management Recommendations

For resistance management, APRON XL LS Fungicide contains a Group 4 fungicide. Any fungal population may contain individuals naturally resistant to APRON XL LS Fungicide and other Group 4 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance management strategies should be followed.

### To delay fungicide resistance:

Where possible, rotate the use of APRON XL LS Fungicide or other Group 4 fungicides with different groups that control the same pathogens.

Avoid application of more than the maximum number listed in the label and consecutive sprays of APRON XL LS Fungicide or other fungicides in the same group in a season.

Fungicide use should be based on an IPM program that includes scouting, historical information related to pesticide use and crop rotation and considers cultural, biological and other chemical control practices.

Monitor treated fungal populations for signs of resistance development. If disease continues to progress after treatment with this product, do not increase the use rate. Discontinue use of this product, and switch to another fungicide with a different target site of action, if available.

Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for specific crops and disease problems in your area.

For further information or to report suspected resistance, contact Syngenta company representatives at 1-87-SYNGENTA (1-877-964-3682) or at [www.syngenta.ca](http://www.syngenta.ca).