

CANOLA

General Information

PRODUCT INFORMATION

Helix Xtra Insecticide with Fungicides is a seed treatment product that contains both insecticide and fungicide components with activity against aphids, flea beetles, seedcorn maggot, white grubs, wireworm, and certain seed-borne and damping-off diseases of canola. Thiamethoxam, the insecticide component, provides activity against flea beetles and the remaining components are fungicides with activity against damping-off diseases caused by *Pythium* species, *Fusarium* species, *Rhizoctonia* species, and seed-borne blackleg (*Leptosphaeria maculans*).

RESISTANCE MANAGEMENT

Helix Xtra Insecticide with Fungicides contains thiamethoxam, a Group 4A insecticide.

Thiamethoxam is a systemic insecticide belonging to the neonicotinoid class of chemistry which includes nicotinic acetylcholine receptor (nAChR) agonists.

Insect populations may contain individuals naturally resistant to Group 4A insecticides and if used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, use sound resistance management strategies established for the crop and use area.

Base seed treatment on an integrated pest management program that includes field sanitation, historical information related to pesticide use, careful selection of pest tolerant crop varieties, scouting, and management practices which optimize populations of natural enemies of insect pests such as within-field refugia (untreated areas).

Sound management programs also consider cultural and biological control practices. In order to maintain susceptibility to this class of chemistry:

- Use products at their full, specified doses.
- Use appropriate, well-maintained equipment. Use specified water volumes and apply at optimal temperatures in order to obtain optimal treatment.
- When rate ranges are given, use the higher rate within the listed rate range when insect pressure is expected to be high.

- Avoid using a single active ingredient or mode of action (same insecticide group) exclusively for season long control of insect species with more than one generation per crop season.
- For insect species with successive or overlapping generations, use a treatment window approach. A treatment window is a period of time defined by the stage of crop development and the biology of the pests of concern. Within the treatment window, depending on the length of residual activity, single or consecutive applications may be made using seed, in-furrow, or foliar treatments unless otherwise excluded by product labels. Do not exceed the maximum amount of this insecticide's mode of action allowed per growing season.
- Following a treatment window of this insecticide's mode of action, rotate to a treatment window of effective products with a different mode of action before making additional applications of this insecticide.

If resistance to this product develops in your area, this product or other products with a similar mode of action may not provide adequate control. If poor performance cannot be attributed to improper application or weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for the crop and use area.

Syngenta encourages responsible product stewardship to ensure effective long term control of the insect pests on this label.

For additional information on Insect Resistance Management:

- Contact Syngenta representatives at 1-800-334-9481
- Contact your local extension specialist, or certified crop advisor - Visit the Insecticide Resistance Action Committee (IRAC) on the web at: <http://www.irac-online.org>

Helix Xtra Insecticide with Fungicides contains difenoconazole, a Group 3 fungicide, mefenoxam, a Group 4 fungicide, and fludioxonil, a Group 12 fungicide.

Difenoconazole belongs to the triazole class of chemistry and is a demethylation inhibitor of sterol biosynthesis (DMI) which disrupts membrane synthesis of the fungal cell.

Mefenoxam belongs to the phenylamide class of chemistry which interferes with fungal RNA synthesis. Fludioxonil belongs to the phenylpyrrole class of chemistry which interferes with osmotic signal transduction.

Fungal populations may contain individuals naturally resistant to Group 3, 4 or 12 fungicides and if used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies such as alternation with fungicides with a different mode of action and/or tank mixes established for the crop and use area.

Use should be based on an IPM program that includes field sanitation, scouting, historical information related to pesticide use, and crop rotation. The IPM program should also consider cultural, biological, and other chemical control practices.

Syngenta encourages responsible product stewardship to ensure effective long term control of the fungal diseases on this label.

For additional information on Fungicide Resistance Management:

- Contact Syngenta representatives at 1-800-334-9481
- Contact your local extension specialist or certified crop advisor
- Visit the Fungicide Resistance Action Committee (FRAC) on the web at:

<http://www.frac.info>

SEED CONTAINER LABEL REQUIREMENTS

The Federal Seed Act requires that bags containing treated seeds shall be labeled with the following statements:

- This seed has been treated with thiamethoxam insecticide and difenoconazole, fludioxonil, and mefenoxam fungicide.
- Do not use for feed, food, or oil purposes.

In addition, the U.S. Environmental Protection Agency requires the following statements on bags containing seeds treated with Helix Xtra Insecticide with Fungicides:

- Pollinator Precautions: Thiamethoxam is highly toxic to bees and other pollinating insects exposed to direct treatment, and effects may be possible as a result of exposure to translocated residues in blooming crops.
- Surface Water Advisory: This product has a high potential for runoff after application. This is especially true for poorly draining soils and soils with shallow groundwater. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features will reduce the potential loading of the chemicals in this product from runoff water and sediment.

To reduce runoff, avoid applications when rainfall or irrigation is expected to occur within 48 hours.

- Groundwater Advisory: Mefenoxam is known to leach through soil into groundwater under certain conditions as a result of label use. Fludioxonil and

Thiamethoxam have properties and characteristics associated with chemicals detected in ground water. These chemicals may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed, and (2) no measurable residues of pesticide remain in the ethanol by-products that are used in agronomic practice.
- Do not allow children, pets, or livestock to have access to treated seed.
- Store away from feeds and foodstuffs.
- Wear long-sleeved shirt, long pants and chemical-resistant gloves when handling treated seed.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading.
- Treated seed must be planted into the soil at a depth greater than 1/2 inch.
- Dispose of all excess treated seed. Leftover treated seed may be double-sown around the headland or buried away from water sources in accordance with local requirements.
- Do not contaminate water bodies when disposing of planting equipment wash water.
- Dispose of seed packaging in accordance with local requirements.
- For any other crop, the minimum plant back interval is 120 days from the date the field was planted with seed treated with Helix Xtra Insecticide with Fungicides. A cover crop other than the crops listed above that is planted for erosion control or soil improvement may be planted sooner than the 120-day interval; however, the crop may not be grazed or harvested for food or feed.
- Do not use at a rate that will result in more than 0.05 lb Thiamethoxam per Acre (22.7 grams Thiamethoxam/A) per calendar year as a seed treatment application.
- This seed has been treated with 0.018 mg Thiamethoxam/seed.
- Do not make any soil or foliar application with products containing a neonicotinoid insecticide to crops grown from seed treated with Helix Xtra Insecticide with Fungicides.

Limitations, Restrictions, and Exceptions

CANOLA

To provide early season protection against flea beetles, seedcorn maggot, white grubs, wireworm, seed-borne blackleg (*Leptosphaeria maculans*), seed-borne *Alternaria*, and the seedling disease complex (damping-off, seedling blight, seed rot,

and root rot) caused by Pythium species, Fusarium species, and Rhizoctonia species, apply Helix XTra.

Method

[Seed Treatment](#)

Rates

[field rates 0](#)

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Timings

[N.A.](#)