

carbathiin

ALWAYS READ AND FOLLOW THE LABEL

Information on this page is not to be substituted for label directions

Active Ingredient (a.i.):
carbathiin



Target Pest Category:
fungicide, seed protectant

Examples of Trade Names:
Anchor, Arrest, Crown, Gaucho,
Prosper, Vitaflo, Vitavax

Chemical Family:
Anilides (Oxathiin).

What it is:
Carbathiin is a systemic fungicide that controls important diseases such as cereal smuts and turfgrass snow molds.

How it works (Mode of Action):
Carbathiin is a systemic fungicide that enters treated seed to control internal diseases like loose smut in cereals. It is absorbed by the plant and transported in the vascular system towards the leaf tips. It does not move downwards to the roots. It has curative effects against pathogens that have already invaded the plant. The mode of action involves inhibition of fungal respiration.

Types of Formulation:
flowable concentrate, wettable powder

Toxicity based on pure active ingredient:

Species	LD ₅₀ /LC ₅₀	Relative Toxicity*
Mammal (rat)	LD ₅₀ Oral : 3820 mg/kg	Slightly toxic
Mammal (rabbit)	LD ₅₀ Dermal: >4000 mg/kg	Slightly toxic
Birds (mallard, 8 day diet)	LD ₅₀ >4640 mg/kg diet	Practically non-toxic
Bees	LD ₅₀ >181 µg/bee	Practically non-toxic
Fish (trout) (96 hour)	LC ₅₀ >0.1 mg/L	Highly toxic
Worms (earthworm, 14 days)	LC ₅₀ 500-1000 ppm	-

* For description of relative toxicity categories please click [here](#).

What it controls:

Used as seed treatments to control smuts and bunts on wheat, barley, oats and onions. Controls seedling diseases such as *Rhizoctonia*, *Pythium*, *Penicillium* and *Fusarium* spp., on cereals, corn, canola, flax, lentils, peas, beans, soybeans and other crops. Controls or suppresses some seed-borne diseases including leaf stripe on barley, blackleg on canola and anthracnose and ascochyta on pulse crops. It is also used to control snow mold on turf grass. Note: the specific crop-disease combination must be on the label.

Expected Results:

Carbathiin may be used to prevent infection by diseases or to cure existing plant diseases. Use the higher rate from the label when expecting heavy disease pressure.



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Mixing Instructions:

- Liquid seed treatments are generally formulated as “ready to use”
- Some seed treatments are for use in commercial seed treatment facilities only.
- Do not mix with any pesticide or additive unless indicated on the label.

Application Tips:

- Uniform application is necessary for best disease control.
- Refer to label for information on seed treatment equipment and instructions.

Storage:

- Store in a cool, dry location.
- Do not store in direct sunlight.
- Protect from extreme temperatures.
- Do not contaminate water, food or feed by storage or disposal.

Applicator Safety and Re-entry:

- Carbathiin can cause skin irritation and severe eye irritation.
- Be aware that many seed treatments also contain insecticides, which are more toxic than carbathiin.
- Wear goggles or face shield, dust mask and other personal protective equipment when handling. Read the label for more information on safety precautions.
- Wash thoroughly with soap and water after handling. If contact with skin, remove contaminated clothing, and rinse with plenty of water.
- In case of contact with eyes flush immediately with water and seek medical attention.

Environmental Considerations:

- Carbathiin does not readily adsorb to soil and is rapidly degraded. It has a low persistence, with a soil half-life of about 3 days.
- In water, carbathiin breaks down within seven days.
- Carbathiin is toxic to fish; do not contaminate water by spray, drift, cleaning or disposal.

Resistance Management:

- Carbathiin is a Group 7 fungicide.
- Follow appropriate resistance management strategies. Please read the label for further instructions.
- Where possible, rotate with fungicides from different chemical groups.

Restrictions:

- Do not use treated seed for food, feed or oil purposes.
- Treated seed must be labeled according to instructions on the pesticide label.
- Do not graze or feed livestock on treated areas for 6 weeks after application.

Pesticide Labels:

- To find labels for pesticides registered in Canada, please link to the Pest Management Regulatory Agency (PMRA) label search web page:
<http://www.eddenet.pmra-arla.gc.ca/4.0/4.01.asp>

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