propamocarb HCL

ALWAYS READ AND FOLLOW THE LABEL

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

Active Ingredient (a.i.): propamocarb hydrochloride (propamocarb HCL)

Target Pest Category: fungicide



Examples of Trade Names: Tattoo, Previcur

Chemical Family: Carbamate

Types of Formulation: aqueous solution, suspension concentrate

What it is:

Propamocarb HCL is a protectant fungicide with systemic activity. It is absorbed by roots & leaves, and transported upwards in the plant. Propamocarb has activity against several Oomycete (water mold) fungi which cause seed, seedling, root and stem rots and foliar diseases.

How it works (Mode of Action): Propamocarb hydrochloride disrupts the formation of fungal cell walls by interfering with synthesis of phospholipids and fatty acids. It affects mycelial growth, spore production and germination.

Toxicity based on pure active ingredient:

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Species	LD ₅₀ /LC ₅₀	Relative Toxicity
Mammal (rat)	LD ₅₀ Oral: 2000-2900 mg/kg	Slightly toxic
Mammal (rabbit)	LD ₅₀ Dermal: >3000 mg/kg	Slightly toxic
Bird (pheasants)	LD ₅₀ 3050 mg/kg	Practically non-toxic
Bees (contact)	LD ₅₀ >0.1 mg/bee	Moderately toxic
Fish (trout) (96 hour)	LC ₅₀ 275 mg/L	Practically non-toxic
Worms (14 days)	LC ₅₀ >1000 mg/kg soil	-

*For description of relative toxicity categories please click here.

What it controls:

For control of late blight (Phytophthora infestans) in potatoes or pythium root diseases in greenhouse cucumbers. Refer to label for registered uses. Used as a foliar spray on potatoes or a soil drench on greenhouse cucumbers.

Mixing Instructions:

For field application, add one-half of the required amount of water to the spray tank and start agitation. Add the required amount of product and complete filling of water. Agitate thoroughly and spray out immediately. Some formulations of propamocarb HCL are corrosive to all metals except stainless steel. Rinse all metal application equipment after use. Refer to label for complete instructions.



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Application Timing:

- In potato, begin applications before infection when conditions are favourable for disease, and continue on 7-14 day intervals
- In greenhouse cucumber, apply to growing medium during the propagation stage and at early post transplanting. A third application may be made if pressure warrants.
- Read and follow the label instructions.

Application Tips:

- It is recommended that a few plants be test treated before widespread use.
- Occasional damage may occur following overhead drenching of recently planted seedlings. It is advisable to wash off the product solution with pure water.
- DO NOT allow spray mixture to remain in the tank overnight.

Storage:

- Store in cool (between 0 and 30°C), dry, locked, well-ventilated area without floor drain, in closed, original container.
- Do not ship or store near food, feed, seeds, fertilizers or other pesticides. Keep away from fire, open flame, or other heat sources.

Applicator Safety and Re-entry:

- DO NOT re-enter treated areas within 48 hours of application. Refer to label for specific times on particular crops.
- Hazardous to humans and domestic animals.
- Corrosive. Causes eye damage. Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin, or on clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling.
- Prolonged or frequent repeated skin contact may cause allergic reactions in some individuals.
- 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.

Integrated Pest Management:

 Not toxic to web-building spider, staphylinid beetle; not harmful to carabid beetle or earthworms; slightly harmful to ladybird beetle

Environmental Considerations:

- Propamocarb HCL is toxic to fish and other aquatic organisms. DO NOT allow waste water, effluents or runoff containing this product to enter lakes, streams, ponds, or other waters. DO NOT apply when winds exceed 16 kph.
- Does not persist in the soil. The average half-life is less than 30 days; 90% of the material is decomposed in less than 70 days.
- Unlikely to contaminate groundwater. Rapidly decomposed by aquatic micro-organisms (up to 97% within 35 days). The material is also bound to the sediment.
- In potatoes and cucumbers it is degraded into carbon dioxide which is reincorporated into natural plant constituents.

Resistance Management:

- For resistance management, propamocarb HCL is a Group U Fungicide.
- Where possible, rotate propamocarb HCL fungicide with fungicides from different groups that control the same pathogens, or use tank mixtures with fungicide from a different group. Note: some products that contain propamocarb also contain chlorothalonil fungicide for resistance management purposes.
- o Use a maximum of three applications of propamocarb HCL per season.
- Fungicide use should be based on an IPM program that includes scouting, historical information related to pesticide use, crop rotation, and considers cultural, biological and other chemical control practices.

Restrictions:

- o DO NOT make more than 3 applications in a growing season. DO NOT apply thru irrigation systems.
- o DO NOT apply within 14 days of harvest. See specific label guidelines. DO NOT apply by air.
- o DO NOT feed treated crops to livestock. DO NOT apply when winds exceed 16 kph.
- This product is toxic to fish, aquatic invertebrates, and marine/estuarine organisms. Runoff from treated areas may be hazardous to aquatic organisms in neighbouring areas. DO NOT apply where runoff is likely to occur. DO NOT contaminate any water body, a buffer zone of 15 meters should be observed.

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