

imidacloprid

ALWAYS READ AND FOLLOW THE LABEL

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

Active Ingredient (a.i.):
Imidacloprid

Target Pest Category:
Insecticide

Examples of Trade Names:
Admire, Merit, Gaucho

Chemical Family:
Chloronicotinyl (neonicotinoid)

What it is:
Broad-spectrum systemic insecticide that is readily taken up by plant roots and leaves.



How it works (Mode of Action):
Interferes with nerve transmission in insects. Imidacloprid penetrates plant roots and leaves and moves to the growing points of plants. Application to leaves provides contact control for 2-4 days and residual control via stomach poisoning for up to up 10 days. Soil drench treatments provide long residual control of foliar-feeding insects.

Types of Formulation:
liquid flowable, granules, wettable powder, seed treatment powder

Toxicity based on active ingredient:

Species	LD ₅₀ /LC ₅₀	Relative Toxicity*
Mammal (rat)	LD ₅₀ Oral : 450 mg/kg	Moderately toxic
	LD ₅₀ Dermal: >5000 mg/kg	Slightly toxic
Bird (quail)	LD ₅₀ 152 mg/kg	Moderately toxic
Bees (direct contact)	Harmful to honeybees	Moderately toxic
Fish (trout) (96 hour)	LC ₅₀ 211 mg/L	Practically non-toxic
Worms (<i>Eisenia foetida</i>)	LC ₅₀ 10.7 mg/kg dry soil	-

*For description of relative toxicity categories please click here.

What it controls:

Its systemic action makes it very effective against such sucking insects as leafhoppers, aphids, thrips, scale insects, mealybugs, lacebugs and whitefly. It is also effective against the immature stages of cherry fruit flies, white grubs, tentiform leafminers, elm leaf beetle, and Colorado potato beetle. Imidacloprid also controls fleas on dogs and cats.

Application Timing:

Refer to the label for application method and timing for specific crop/pest combinations.



BRITISH COLUMBIA

Mixing Instructions:

- To prepare the spray, first add some water to the spray tank, next turn on the agitation, and then add the insecticide. Complete filling the tank with rest of water needed.
- Agitate during both mixing and application.

Application Tips:

- Follow label instructions for the different crop/pest combinations.

Storage:

- Store in a tightly closed **original** container, in a cool, dry, **locked**, well-ventilated area without floor drain,.
- 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:

- Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing.
- Do NOT reenter treated areas for 24 hours after foliar application or as label permits.

Environmental Considerations:

- Half-life in soil is 48-190 days, depending on the amount of ground cover (breaks down faster in soils with plant cover than in fallow soils).
- Generally not a high risk of groundwater contamination, if used as directed.
- Half-life in water is much greater than 31 days at pH 5, 7 and 9.

Resistance Management:

- Imidacloprid is a Group 4 insecticide for resistance management labeling. Follow recommended resistant management strategies or refer to label for directions.

Integrated Pest Management:

- Imidacloprid may be toxic to bees exposed to direct treatment or residues on blooming crops or weeds, but is not considered a hazard to bees when used as a seed treatment or when foliar residues are dry.
- Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. This product is highly toxic to aquatic invertebrates. This product is toxic to birds.
- Research shows this class of chemical (neonicotinoid) stimulates egg production by female plant-feeding mites. Therefore do not use imidacloprid or other neonicotinoid product more than twice per season on plants susceptible to mite injury.

Restrictions:

- DO NOT apply by air.
- Do NOT apply when wind speeds are greater than 12-15 km per hour or during temperature inversions.
- Do NOT apply product or plant treated seed pieces within 15 metres of well-heads or aquatic systems, including marshes, ponds, ditches, streams, lakes, etc.
- Do NOT apply to terrains where surface run-off may enter aquatic systems.
- Do NOT apply product/plant treated seed pieces when rainfall is forecast within 48 hours.
- Do NOT mix, load, clean equipment within 30 metres of well-heads or aquatic systems.
- Do NOT apply this product through any type of irrigation system.

Pesticide Labels:

- Labels for pesticides registered in Canada can be found on the Pest Management Regulatory Agency (PMRA) label search web page:
<http://www.eddenet.pmra-arla.gc.ca/4.0/4.01.asp>