azoxystrobin

ALWAYS READ AND FOLLOW THE LABEL

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

Active Ingredient (a.i.):

azoxystrobin

Target Pest Category:

fungicide



Examples of Trade Names:

Quadris, Heritage, Abound

Chemical Family:

Azoxystrobin is in the chemical family of Strobilurins. They are based on naturally occurring antifungal compounds in certain wood-decaying mushrooms.

What it is:

Azoxystrobin is a broad spectrum fungicide with protectant, curative, eradicant and systemic properties.

Types of Formulation:

solid, free flowing granules, wettable granule

How it works/Mode of Action:

Azoxystrobin is a systemic fungicide. It is absorbed through the roots and translocated in the xylem to the stems and leaves, or through leaf surfaces to the leaf tips and growing edges. The mode of action is by inhibition of mitochondrial respiration in fungi. It inhibits spore germination, mycelial growth, and spore production of fungi. Azoxystrobin is active at very low doses against a wide range of fungal pathogens.

Toxicity based on pure active ingredient:

Species	LD ₅₀ /LC ₅₀	Relative Toxicity*
Mammal (rat)	LD ₅₀ Oral : >5000 mg/kg	Slightly toxic
	LD ₅₀ Dermal: >2000 mg/kg	Slightly toxic
Bird (quail)	LD ₅₀ : >2000 mg/kg	Practically non toxic
Bees (honeybees)	LD ₅₀ : >200 μg/bee	Practically non toxic
Fish (trout) (96 hour)	LC ₅₀ : 0.47 mg/L	Highly toxic
Worms (earth) (14 days)	LC ₅₀ : 283 mg/kg	-

^{*}For description of relative toxicity categories please click here.

What it controls:

Controls foliar and soil-borne diseases including downy and powdery mildew, early and late blight, and pathogens *Sclerotinia*, *Alternaria*, *Ascochyta*, *Pythium*, and *Rhizoctonia* on many crops. In Canada, crops that may be treated with azoxystrobin include beans, peas, lentils, chickpea, canola, ginseng, potato, field tomato and turf. Note: the specific crop-disease combination must be on the label.

Application Timing:

Refer to the label for detailed instructions on rates, application timing and technique for the specific crop and disease.



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Mixing Instructions:

- Maintain agitation while spraying. If the spray mixture is left to stand for a long period (i.e. overnight), vigorous agitation will be required to resuspend the fungicide.
- Stable in water at pH 5, 7 & 9, at 25 °C.

Application Tips:

- AVOID SPRAY DRIFT. Azoxystrobin has been shown to be extremely phytotoxic to certain apple and crabapple varieties and should not be applied where there is the possibility of spray drift reaching apple or crabapple trees.
- o Do not apply through irrigation equipment.
- o Do not apply by air.

Storage:

- Store in tightly closed original container.
- Store in a cool, dry, well ventilated area away from feed and foodstuffs, and out of reach of children and animals.
- Keep away from fire, open flame, or other sources of heat.

Applicator Safety and Re-entry:

 Do not re-enter fields until residues have dried.

Environmental Considerations:

- Azoxystrobin is toxic to fish and aquatic organisms. Observe buffer zones specified on the label to prevent drift or runoff into aquatic habitats.
- It is moderately persistent in soil, with a half-life of 1 to 4 weeks, or up to 7 weeks in anaerobic (flooded) soils.
- Azoxystrobin may present a leaching risk to groundwater. Therefore carefully manage irrigation.
- It is not harmful to honeybees, beneficial insects, earthworms or birds.

Resistance Management:

- o Azoxystrobin is a Group 11 fungicide.
- Do not apply more than two consecutive applications of azoxystrobin or any other fungicide in the same group, in a season.
- o Please check the label for more information on preventing resistance.

Integrated Pest Management:

- o Cultural practices such as canopy management and removal of overwintered plant debris should be integrated with the use of fungicides to reduce disease incidence.
- Under field conditions at field application rates, azoxystrobin is harmless to non-target organisms, including predatory mites and bugs, spiders, lacewings, hoverfly, ladybird, carabid beetle, parasitoid wasps and bees.

Unique Characteristics/Special Instructions:

 Azoxystrobin is very toxic to Macintosh apple trees and any apple varieties derived from Macintosh. Injury to crabapples has also been reported.

Pesticide Labels:

o 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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