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# abamectin

# ALWAYS READ AND FOLLOW THE LABEL

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

Active Ingredient (a.i.): abamectin

Target Pest Category:
miticide, insecticide

**Examples of Trade Names:** Agri-Mek, Avid, Avert

Chemical Family: Avermectin

Types of Formulations: emulsifiable concentrate (EC), baits

# What it is:

Abamectin comes from the soil bacterium *Streptomyces* avermitilis. It has limited plant systemic activity, but will move into plant tissue to provide residual control.

How it works (Mode of Action):
Abamectin attacks the nerve
system of insects and mites,
causing paralysis within hours. The
paralysis can not be reversed.
Abamectin is active once eaten
(stomach poison) although there is
some contact activity. Maximum
mortality occurs in 3-4 days

# Toxicity based on pure active ingredient:

Species	LD <sub>50</sub> /LC <sub>50</sub>	Relative Toxicity*
Mammal (rat)	LD <sub>50</sub> Oral : 10 mg/kg	Very toxic
Mammal (rabbit)	LD <sub>50</sub> Dermal: >2000 mg/kg	Slightly toxic
Bird (quail)	LD <sub>50</sub> >2000 mg/kg	Practically non toxic
Bees (honey)	LD <sub>50</sub> >0.009 µg/bee	Highly toxic
Fish (trout) (96 hour)	LC <sub>50</sub> >0.003 mg/L	Very highly toxic
Other (earthworm) (28 day)	LC <sub>50</sub> >28 mg/kg soil	-

<sup>\*</sup>For description of relative toxicity categories please click here.

### What it controls:

Controls mites, leafminers, pear psylla, cockroaches, and ants. Note: the specific crop-pest combination must be on the label.

# **Application Timing:**

For optimum control, apply abamectin when the leaves are young to allow better absorption into leaf tissue. This will extend the residual control period. As leaves age and harden off they lose the ability to take up abamectin and residual control is greatly reduced.



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# **Mixing Instructions:**

- o Not compatible with captan.
- Refer to label for specific mixing instructions.

### Storage:

- Store in cool, dry, locked, wellventilated 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.
- Store in tightly closed original container.

# **Application Tips:**

- Add horticultural oil or nonionic surfactant to tank to improve foliage wetting and enhance penetration in leaves.
- o Ensure thorough coverage.
- Do not apply when bees are actively foraging.

# **Applicator Safety and Re-entry:**

- Do not re-enter treated areas until the spray has dried.
- Causes substantial but temporary eye injury. Do not breathe spray mist.
- Harmful if inhaled or absorbed through the skin. Wash thoroughly after use.
- Refer to label for specific instructions.

## **Environmental Considerations:**

- o Rapidly degraded in soil.
- o Immobile in soil and unlikely to leach or contaminate groundwater.
- o Rapidly degraded in water.
- o Abamectin is stable at water at pH's of 5, 7 and 9.
- o Plants do not absorb abamectin from the soil.
- Toxic to fish, non-target insects and wildlife; follow label instructions for applying near aquatic and sensitive terrestrial habitats.

# **Resistance Management:**

o Abamectin is in resistance management Group 6 for Insecticides/Acaricides. Follow appropriate resistance management strategies. Refer to label for specific instructions.

### **Integrated Pest Management:**

- o Use with caution in a pest management program using beneficial insects and mites.
- Abamectin is toxic to bees, but foliar residue dissipates quickly, making it essentially nontoxic to bees after a few hours.

### Restrictions:

- o Do not apply by air.
- o Follow label instructions for frequency and number of applications per year or crop.
- o Do not apply through irrigation systems.
- Do not apply within 35 metres upwind of aquatic areas or when wind speed is above 13 kph. Do not use during a temperature inversion.
- o It is a violation of the Pest Control Products Act to use this product in a manner inconsistent with its labeling. REFER TO LABEL FOR SPECIFIC RESTRICTIONS.

### Pesticide Labels:

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

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