# **AZATIN®** O

### **BIOLOGICAL INSECTICIDE**



FOR INDOOR AND OUTDOOR USE ON ORNAMENTALS, TURF (including commercial lawns), VEGETABLES, HERBS, AND OTHER HORTICULTURAL CROPS

Product Information Bulletin

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#### **GENERAL INFORMATION**

**Azatin® O** is a highly effective biological insect growth regulator (IGR) used to control a broad-spectrum of greenhouse and nursery insects.

**Azatin O** insecticide is a 4.5% formulation of azadirachtin, a naturally-derived active ingredient that comes from the seeds of the Neem tree. **Azatin O** contains 175 grams of active ingredient per gallon.

**Azatin O** works by disrupting the molting process of immature insects and by repelling and deterring feeding by adult insects.

Common Name: Azadirachtin

Class: Biopesticide insect growth regulator

GROUP UN INSECTICIDE

Packaging: 1 Quart (32 fl. oz.) (946 mL) container

## RESTRICTED ENTRY INTERVAL (REI) AND SIGNAL WORD

REI = 4 hours Signal Word = CAUTION

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicator and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC), or Viton
- Shoes plus socks
- Protective eyewear

#### ADVANTAGES OF AZATIN O

- OMRI Listed
- · Labeled for use on all greenhouse crops
- Labeled for use on herbs and vegetables
- 0 Day preharvest interval (PHI)
- · Controls a broad-range of insect pests
- 4-hour REI
- · Excellent tank mix partner
- · Natural fit with IPM programs



### CAN BE USED IN ORGANIC PRODUCTION

#### PRODUCT APPLICATION TIPS

- Kills larval stages of insects. Tank mix with adulticide to kill both adults and larvae.
- Spray directly at insect for maximum effectiveness.
- Apply in early to mid-morning or late afternoon.
  This is especially important with whitefly adults
  which are typically sedentary on the undersides of
  leaves at this time of day.
- Make a minimum of two applications, 5 to 7 days apart.
- Maintain Azatin O in a diluted solution at pH between 3-7 and apply soon after preparation.
- For best results use a spreader sticker at the suggested labeled rates.

#### **MODE OF ACTION**

**Azatin O** interferes with the key molting hormone, ecdysone, which prevents insects from progressing from one life stage to the next. It also acts as a feeding deterrent and repellent of adult insects.

#### **USE SITES**

**Azatin O** may be used in greenhouse and other covered structures (including lathe and shade houses), interiorscapes, turf, nurseries and landscapes. Plants may be potted, grown in the soil or in soilless mixtures, or grown hydroponically.

## AZATIN O MAY BE USED ON THE FOLLOWING CROPS

- Bedding plants, flowering plants and foliage
- Woody ornamentals
- Trees and shrubs
- Citrus, pome and stone fruits
- · Cucurbit vegetables
- Nuts

- Bulb, cole and leafy vegetables
- Legumes and fruiting vegetables
- Root and tuber vegetables
- Small fruits and vegetables
- · Herbs and spices

#### **INSECTS CONTROLLED**

Aphids	Mealybugs	
Borers	Psyllids	
Caterpillars	Shore Flies	
Fungus Gnats	Stink bugs	
Grubs	Thrips	
Leafminers	Whiteflies	
See label for complete list of insects controlled		

#### **APPLICATION RATES**

**Foliar spray:** Spray **Azatin O** on a preventative 7-day schedule or at the first sign of insect presence. Foliar spray rates range from 4 to 16 fl. oz. per 100 gallons of water, depending on target insect.

**Drench:** For drench applications, use **Azatin O** at the rate of 8 fl. oz. per 100 gallons of water. Apply **Azatin O** in sufficient water and for sufficient duration to distribute evenly to entire treated area.

Apply to moderately moist soils using volumes that thoroughly wet the soil but do not cause significant runoff or drip from pots.

#### TANK MIXING

**Azatin O** user should adhere to any applicable restrictions on the tank mix product. If the compatibility of tank mix partners is unknown, mixing a small amount of the products in a clear jar is advised prior to mixing a large tank.

#### CHEMIGATION

**Azatin O** may be applied through drip (trickle), sprinkler, flood (basin), furrow, or border irrigation systems.

#### TRADITIONAL PROGRAM

Foliar feeding insects (aphids, whiteflies, scales, mealybugs)

Application	Foliar Sprench	
Day 1	Kontos <sup>®</sup>	
Day 2	Azatin®O + Decathlon®	
Day 7	Azatin®O + Decathlon®	
Day 10	Azatin <sup>®</sup> O	
Day 14	Repeat <b>Azatin 0</b> apps as necessary	

### ORGANIC/BIOCONTROL-BENEFICAL COMPATIBLE PROGRAM

Foliar feeding insects (aphids, whitefly, scales, mealybugs)

Application	Drench or Sprench	Foliar
Day 1	Azatin <sup>®</sup> O	<b>BotaniGard</b> ®
Day 5	Azatin <sup>®</sup> O	Triact® 70
Day 10	Azatin <sup>®</sup> O	<b>BotaniGard</b> ®
Day 15	Triact® 70	
Day 20	Repeat as necessary	

Read label directions and cautions before use.

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