

FOR USE IN GREENHOUSES FOR CONTROL OF SOIL INHABITING AND  
FOLIAR FEEDING INSECTS

### Product Information Bulletin

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## GENERAL INFORMATION

**Adept** insect growth regulator (IGR) is an effective tool for controlling fungus gnats, shore flies, and foliar feeding pests on ornamental crops grown in greenhouses, shadehouses, and interiorscapes.

**Adept** is a 25% WP formulation of the active ingredient Diflubenzuron.

**Common Name:** Diflubenzuron

**Class:** Benzoyl Urea Insect Growth Regulators

GROUP	15	INSECTICIDE
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**Packaging:** 1 pound (16 – 1 oz water soluble packets), 12 per case

## RESTRICTED ENTRY INTERVAL (REI) AND SIGNAL WORD

REI = **12 hours**

Signal Word = **CAUTION**

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

- long-sleeved shirt and long pants
- shoes plus socks
- chemical-resistant gloves

## MODE OF ACTION

**Adept** inhibits chitin biosynthesis. The primary mode of action is by disrupting cuticle formation and chitin deposition occurring when insect larvae change from one developmental stage to another (molting). Studies show that without proper chitin development, larvae are unable to break the egg shells so they are unable to hatch or die soon after hatching. As treated larvae or larvae feeding on treated material grow, internal pressure on its weakened exoskeleton causes it to “rupture” and the larvae dies before it reaches the next growth stage. **Adept** has no effect on adult stages of insects.

## USE SITES

**Adept** can be used in repeat applications as a soil treatment or foliar spray in enclosed commercial greenhouses, shadehouses and interiorscapes.

**Adept** binds rapidly to organic matter, is not affected by irrigation, and it has 30 to 60 day residual activity against fungus gnat larvae.

## KEY INSECTS CONTROLLED

Armyworms Leafminers ( <i>lepidopterous</i> ) Fungus Gnats	Shore Flies Whiteflies (suppression)
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## ADVANTAGES OF ADEPT

- Long residual activity (30-60 days) against fungus gnat larvae
- Excellent fungus gnat control
- Low use rates
- Little to no effect on beneficial insects and mites

## APPLICATION RATES

**Adept** may be applied as a sprench or drench.

Fungus Gnats/Shore Flies: Initial knockdown will typically take between 3 and 5 days. After that period, a number of emerging adults may lay eggs, but any new soil infesting larvae will be controlled for 30 to 60 days. Use 2 oz./100 gallons. Apply as a coarse spray (sprenc). Drench rate is 1 oz./200 gallons water, apply using label specific drench volumes, i.e. 6 fl oz./6 inch pot.

**Adept** may be applied under Greenhouse benches and other non-crop areas. Mix 4 to 8 ozs. (4 to 8 bags) **Adept** in 100 gals of water and apply at rate of 10 - 30 gallons per 1000 sq.ft. of area

Foliar Feeding Insects: Spray Rate: 4 – 8 oz./100 gallons.

## NOTE:

Exceeding label rates, volumes or number of applications of **Adept** can cause serious foliar injury to crops, particularly to poinsettias, hibiscus and Reiger begonia. **Do not** apply **Adept** to poinsettias, hibiscus, or Reiger begonia.

**Do not** re-use potting media which and been treated.  
**Do not** apply to plants grown on capillary water mats.  
 Always read and follow label directions when using this product.

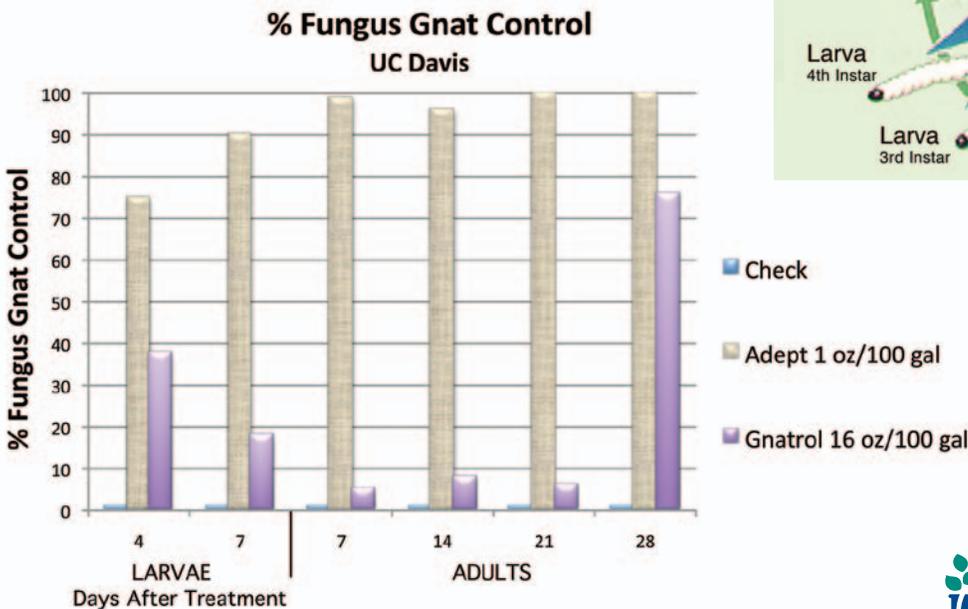
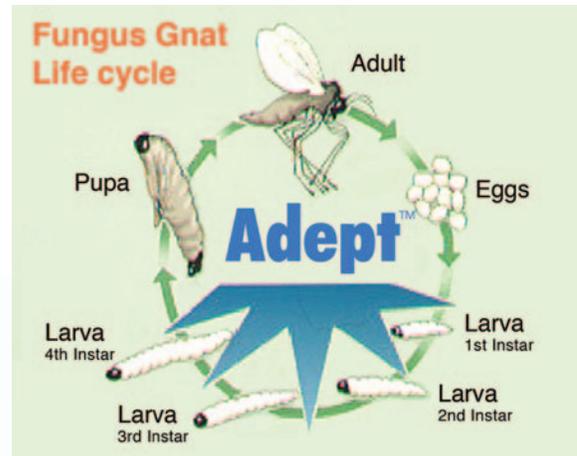
## TANK MIXING

Tank mixing is permitted with **Adept**. Growers should test for compatibility and make sure to follow all directions and precautions on labels prior to application.

## OHP Insect Solutions for Fungus Gnats/Shore Fly Larvae Control

Drench applications	Interval
Follow label drench volumes per pot size as listed on the Adept label.	As necessary
Adept® @ 1/2 oz per 100 gallons + Azatin® XL @ 8 fl oz per 100 gallons	Day 1
Repeat	Day 30

Coarse Soil Spray (Spreng) applications	Interval
Adept® @ 2 oz per 100 gallons + Azatin® XL @ 8 fl oz per 100 gallons.	Day 1
Repeat.	Day 30



Use of Adept according to the labeling is subject to the use precautions and limitations imposed by the label affixed to the container of Adept. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Adept is a registered trademark of Chemtura Corporation.  
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