AZATIN® XL

Biological Insecticide

FOR INDOOR AND OUTDOOR USE ON ORNAMENTALS AND HORTICULTURAL CROPS INSECT GROWTH REGULATOR

ACTIVE INGREDIENT:
Azadirachtin*.............................................. 3.0%
OTHER INGREDIENTS: .................................... 97.0%
TOTAL: ...................................................... 100.0%

*Contains 0.265 pounds (120 grams) of azadirachtin per gallon.

EPA Reg. No.: 70051-27-59807   EPA Est. No.: 44616-MO-1

If you have questions or comments regarding the use of this product, please call 1-800-356-4647

KEEP OUT OF REACH OF CHILDREN

CAUTION

See leaflet for further Precautionary Statements and Directions for Use

Net Contents: One Quart or 32 fl. oz. (946mL)
KEEP OUT OF REACH OF CHILDREN

CAUTION
PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION: Harmful if swallowed or inhaled. Avoid breathing vapors or spray mist. Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT
Applicators and other handlers must wear:
• long-sleeved shirt and long pants
• chemical resistant gloves such as barrier laminate or Vitran (≥14 ml)
• shoes plus socks, and
• protective eye wear.

Follow the manufacturer’s instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

FIRST AID
If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person.
If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, for going for treatment. Hot Line Number: 1-800-356-4647

ENVIROMENTAL HAZARDS
This pesticide is toxic to fish and aquatic invertebrates. For terrestrial uses, do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not allow runoff from treated areas to enter surface waters, such as streams and ponds. Do not contaminate water when disposing of equipment washwater or rinsate.

PHYSICAL OR CHEMICAL HAZARDS
Combustible: Do not use or store near heat or open flame.

DIRECTIONS FOR USE
It is a violation of Federal law to use this product in a manner inconsis-
tent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS
Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and work practices pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

For entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, wear:
• Coveralls.
• Chemical-resistant gloves, such as barrier laminate or butyl rubber or neoprene rubber or polyvinylchloride (PVC) or Vitran.
• Shoes plus socks.
• Protective Eyewear.

NON-AGRICULTURAL USE REQUIREMENTS
The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standards for agricultural pesticides (40 CFR Part 170). The NMS applies when this product is used to produce agricultural plants on farms, forests, or greenhouses. For other uses including golf courses, and other non-agricultural uses, do not enter treated areas without protective clothing until sprays have dried.

Pesticides controlled by AZATIN® XL
Aphids, such as:
- Apple Aphid
- Cotton Aphid
- Green Peach Aphid
- Melons Aphid
- Pea Aphid
- Potato Aphid
- Rose Aphid

Armyworms, such as:
- Beet Armyworm
- Fall Armyworm
- Lawn Armyworm
- Southern Armyworm
- Yellowstriped Armyworm

Bagworms

Beetles, Grubs and Weevils, such as:
- Black Vine Weevil
- Colorado Potato Beetle
- Elm Leaf Beetle
- Flea Beetle
- Japanese Beetle
- June Beetle
- Mexican Bean Beetle

Cutworms, such as:
- Black Cutworm
- Cimex Cutworm

Flies, such as:
- Caribbean Fruit Fly
- Crane Fly
- Fungus Gnat
- House Fly
- Oriental Fruit Fly
- Mediterranean Fruit Fly
- Melon Fly
- Shore Fly
- Wilt-fluk Fly

Leafs, such as:
- Leaf Caterpillar
- Looper
- Cabbage Looper
- Corn Earworm
- Diamondback Moth
- Grape Leafroller
- Spanish Needle
- Soybean Looper
- Tobacco Looper
- Tobacco Hornworm
- Tomato Hornworm
- Tomato Fruitworm
- Tobacco Hornworm
- Tobacco Looper

Leaffoppers, such as:
- Grape Leafhopper
- Potato Leafhopper
- Vagrant Leafhopper

Leafminers, such as:
- Citrus Leafminer
- Spotted Asparagus Beetle
- Vegetable Leafminer

Leafrollers, such as:
- Blackberry Leafroller
- Bicyclostoma Leafroller

Leaffusters, such as:
- Linear Leafroller
- Bicyclostoma Leafroller
- Croton Leafroller

Fruitne Leschaler
- Grape Leschaler
- Oblique Banded Leschaler
- Leschaler Leschaler

Leaff hollows
- Marsh Crane Flies
- Mealworms
- Moths, such as:
- European Pine Shoot Moth
- Pine Tip Moth
- Tobacco Moth

Psyllids
- Sawflies
- Thrips, such as:
- Citrus Thrips
- Flower Thrips
- Gladiolus Thrips
- Western Flower Thrips

Whitelines, such as:
- Greenhouse Whitely
- Silverstriped Whitely
- Sweetpotatoes Whitely

CROPS ON WHICH AZATIN® XL CAN BE USED
Azatin® XL can be used indoors and outdoors. Plants may be potted, grown in the soil or soil-less mixtures or grown hydroponically.

Bedding Plants,
Flowers,
Potted Plants and
Foliage, such as:
- Acanthus
- Ageratum
- Alstroemeria
- Alpinia Ivy
- Althea
- Aralia
- Aplasia
- Aralia
- Aster
- Araucaria
- Asclepias
- Azalea
- Baby’s Breath
- Begonia
- B_given
- Bouganvillea
- Boston Fern
- Boxwood
- Broccoli
- Cork
- Coleus
- Cymbidium
- Cymbidium
- Dahlia
- Daisy
- Daylily
- Delphinium
- Dendrobium
- Dendrobium
- Deutzia
- Daffodil
- Dusty Miller
- Erector Lily
- English Ivy
- Euphorbia
- Fern
- Fors"
Trees and Shrubs, such as:
- Azalea
- Aucuba
- Illex
- Aster
- Arborvitae

Ornamentals, such as:
- Zinnia
- Wandering Jew
- Vinca
- Verbena
- Stock
- Spathiphyllum
- Snapdragon
- Sempervivum
- Sedum
- Schefflera
- Salvia
- Rose
- Portulaca
- Pothos
- Poinsettia
- Pinks
- Walnuts
- Pistachio
- Pecan
- Macadamia
- Lychee
- Hickory nuts
- Chestnut
- Cashew
- Butternut
- Brazil nut
- Beach nut

Nuts, such as:
- Turnip tops
- Swiss Chard
- Spinach
- Rhubarb
- Parsley
- Orach
- Mustard Greens
- Lettuce
- Kohlrabi
- Kale
- Radish, Japanese (Daikon)

Miscellaneous Crops, such as:
- Fig
- Hop
- Guava
- Kiwi
- Okra
- Yum
- Yum bean

Stone Fruits, such as:
- Apricot
- Cherry, sour
- Cherry, sweet
- Nectarine
- Peach
- Plum
- Prune

Pome Fruits, such as:
- Apple
- Crabapple
- Loquat
- Myrtus
- Pear
- Quince
- Jujube

Root and Tuber Crops, such as:
- Beet, red
- Beet, sugar
- Carrot
- Garlic
- Ginger
- Horseradish
- Jezebel
- Parsnip
- Potato
- Radish

Rutabaga
- Salsify
- Sweet potato
- Turnip
- Yum

Important note: This product has been evaluated for phytotoxicity on a wide range of crops. However, since all combinations or sequences of pesticide sprays including fertilizers, surfactants and adjuvants have not been tested, spray a small area first to make certain that no phytotoxicity occurs.

PREHARVEST INTERVAL
There are no restrictions on applying this product up to the time of harvest. Individual state regulations may vary and should be consulted for allowable pre-harvest interval.

MODE OF ACTION
This product controls targeted insect larvae when they ingest or come in contact with it, by interfering with the insect’s ability to molt. It is effective on all larval stages and pupae. It also reduces crop damage by repelling and deterring feeding of all stages of insects.

GENERAL APPLICATION DIRECTIONS READ ALL DIRECTIONS BEFORE USING.

Dilute Azatin® XL in water at a rate up to 21 fluid ounces (20 grams active ingredient) per acre. Apply using any suitable ground or aerial equipment, in a manner to obtain uniform and complete plant coverage.
For agronomic crops apply using conventional application equipment in a minimum of 30 gallons of water per acre and aerial application equipment in a minimum of 3 gallons of water per acre. Avoid over-spraying to the point of excessive runoff.

Refer to tables for detailed dilution rates.

### Application Rates for Key Insect Pests in Vegetables, Fruits, and Nut Crops

**Application Rates for Whitefly and Other Greenhouse (including Lath and Shade), Nursery and Interiorscape Pests**

<table>
<thead>
<tr>
<th>Pests controlled by Azatin® XL</th>
<th>Rate of Azatin® XL per 100 gallons water</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aphids</td>
<td>12 to 16 fl.oz.</td>
<td></td>
</tr>
<tr>
<td>Black Vine Weevil</td>
<td>21 fl.oz/acre</td>
<td></td>
</tr>
<tr>
<td>Leafminers</td>
<td>10 to 16 fl.oz.</td>
<td>Foliar application to larvae</td>
</tr>
<tr>
<td>Western Flower Thrips</td>
<td>12 to 16 fl.oz.</td>
<td></td>
</tr>
<tr>
<td>Sweetpotato Whitefly</td>
<td>10 to 16 fl.oz.</td>
<td>Foliar application to larvae and nymphs</td>
</tr>
<tr>
<td>Greenhouse Whitefly</td>
<td>10 to 16 fl.oz.</td>
<td>Foliar application to larvae and nymphs</td>
</tr>
<tr>
<td>Others</td>
<td>10 to 16 fl.oz.</td>
<td>Foliar application to nymphs / larvae</td>
</tr>
</tbody>
</table>

**Leafminers, such as:**

- Cotton Leafminer
- Spotted Leafminer
- Sweetpotato Whitefly

**Leafrollers:**

- Female rollers

**Leafhoppers:**

- Hop Lath
- Soybean Looper

**Cutworms:**

- Citrus Cutworm
- Black Cutworm
- Tobacco Cutworm

**Loopers:**

- Colorado Looper

**Caterpillars, such as:**

- Corn Earworm
- Diamondback Moth
- Imported Cabbage Looper
- Novel Orangeworm
- Tobacco Budworm
- Tobacco Hornworm
- Tomato Fruitworm
- Western Grapeleaf Skeletonizer

**Sawflies:**

- Colorado Potato Beetle
- Hop Aphid
- Potato Aphid
- Sawfly

**Beetles, such as:**

- Colorado Potato Beetle
- Hop Aphid
- Potato Aphid
- Nearlly Admireds

**Fungus Gnats:**

- 8 fl. oz.

**Armyworms, such as:**

- Bagworms
- Gracilaria
- Leafminers
- Leafrollers
- Sawflies
- Tent Caterpillars

**Whitelines, such as:**

- Greenhouse Whitefly
- Slanted Whitefly
- Sweetpotato Whitefly

When using lower rates, combine Azatin® XL with an approved adjuvant such as a non-phytotoxic crop oil, up to 1%. Always ensure good coverage by adjusting spray gallonage to obtain uniform and complete coverage.

**Aerial / Low/ultra low volume - Apply Azatin® XL at rates of 5 to 21 fl. oz./acre (10-21 fl. oz. in California) in a minimum of 3 gallons of water per acre. For best results, use uniform and complete plant coverage.**

**DRENCH / CHEMIGATION:**

This product is effective as a soil drench for controlling soil-borne insect larvae (e.g. Fungus Gnats). It is also effective as a soil drench for controlling foliar and soil-borne pests, particularly when alternated with Azatin® XL foliar sprays.

Apply Azatin® XL in sufficient water and for sufficient duration so as to distribute the application evenly to the entire treated area.

**CHEMIGATION:**

Refer to supplemental labeling entitled "OHP’s Chemigation Bulletin" for use directions for chemigation. Do not apply this product through any irrigation system unless the supplemental labeling on chemigation is followed.

**SPRAY EQUIPMENT**

Use suitable equipment that allows for uniform coverage of the targeted treatment area, such as hand or power operated spray equipment.

**MIXING DIRECTIONS**

**Azatin® XL WITH WATER:**

For best results,

1. Use clean equipment.
2. Maintain dilute solutions (1-2% concentration).
3. Agitate prior to use.
4. Use sufficient water and for sufficient duration so as to disperse the application evenly to the entire treated area.
5. Uniform plant coverage is required.
6. Do not use this product through any irrigation system unless the supplemental labeling on chemigation is followed.

**Azatin® XL WITH WATER: FOR BEST RESULTS,**

1. Use clean equipment.
2. Agitate prior to use.
3. Use sufficient water and for sufficient duration so as to disperse the application evenly to the entire treated area.
4. Uniform plant coverage is required.
5. Do not use this product through any irrigation system unless the supplemental labeling on chemigation is followed.

**Azatin® XL WITH WATER:**

For best results,

1. Use clean equipment.
2. Use sufficient water and for sufficient duration so as to disperse the application evenly to the entire treated area.
3. Uniform plant coverage is required.
4. Do not use this product through any irrigation system unless the supplemental labeling on chemigation is followed.
2. Fill tank 1/2 full to 3/4 full with water and begin agitation.
3. Add pesticide to the tank.
4. Fill the tank completely with water and mix thoroughly before applying.
5. Adjust spray solution to between 3 to 7 pH, if necessary.
6. Apply pesticide mix immediately after mixing.
7. If the mixture is not applied immediately, agitate before application.
8. Thoroughly clean equipment following application.

**TANK MIXTURES OR FLUID FERTILIZERS:**
1. Before using this product in a tank mix with fertilizer or registered pesticide, determine compatibility by conducting a compatibility test with a small amount of each product.
2. Observe all cautions and limitations on labels of all products used in combination.
3. Follow all tank mix directions and observe limitations listed in the combination product(s) label.

**COMPATIBILITY TEST**
Perform a compatibility test before tank mixing this product with other product(s) or liquid fertilizer(s). Fill three separate 1 quart jars with 1 pint of water and fertilizer. To a first jar add this product and mix well. To a second jar, add the desired other tank mix product(s) and mix well. To a third jar, combine this product with the other tank mix product(s) and mix well. If more than one product is used, add them separately with dry formulations first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix. For the appropriate amount of product for this test use the following:

**DRY PRODUCTS** - For each pound to be applied per acre, add 1.5 level teaspoons to each jar.
**LIQUID PRODUCTS** - For each pint to be applied per acre, add 0.5 teaspoons or 2.5 ml to each jar.

Note any differences between the mixtures in the jars (compounds alone vs mixtures) after 15 minutes. Look for evidence of physical incompatibility such as clumping, precipitation, oily residues on the sides of the glass or other signs of incompatibility. If either mixture separates, but can be readily re-mixed, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, do not use the mixture.

**STORAGE AND DISPOSAL**
Do not contaminate water, food or feed by storage and disposal.

**PESTICIDE STORAGE:** Do not store above 100 degrees F or below -20 degrees F for extended periods of time. Keep containers tightly closed when not in use.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at the approved waste disposal facility.
**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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**WARRANTY**
OHP, Inc. warrants that the material contained herein conforms to the description on the label and is reasonably fit for the purposes referred to in the directions for use. Timing and method of application, weather, watering practices, nature of soil, the insect problem, condition of the crop, incompatibility with other chemicals not specifically recommended, and other influencing factors in the use of this product are beyond the control of the seller. Buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given herein. NO OTHER EXPRESS OR IMPLIED WARRANTY OF THE FITNESS OR MERCHANTABILITY IS MADE.

Azatin is a registered trademark of Certis USA, LLC.
For Indoor and Outdoor Use on Ornamental and Horticultural Crops/Insect Growth Regulator

ACTIVE INGREDIENT:
Azadirachtin* . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .       3.0%

OTHER INGREDIENTS:  . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .      97.0%
TOTAL:  . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .     100.0%

*Contains 0.265 pounds (120 grams) of azadirachtin per gallon.

EPA Reg. No.: 70051-27-59807          EPA Est. No.: 44616-MO-01

If you have questions or comments regarding the use of this product. Please call 1-800-356-4647

KEEP OUT OF REACH OF CHILDREN

CAUTION

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed or inhaled. Avoid breathing vapors or spray mist. Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:
• long-sleeved shirt and long pants
• chemical resistant gloves such as barrier laminate or Viton (≥ 14 mil)
• shoes plus socks, and
• protective eye wear

Follow manufacturer’s instructions for cleaning / maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

See attached booklet for additional Precautionary Statements and First Aid.

Net Contents: One Quart or 32 fl. oz. (946mL)
User Safety Recommendations:
Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

ENVIRONMENTAL HAZARDS
This pesticide is toxic to fish and aquatic invertebrates. For Terrestrial Uses: Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

PHYSICAL OR CHEMICAL HAZARDS
Combustible: Do not use or store near heat or open flame.

DIRECTIONS FOR USE
It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply the product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS
Use this product only in accordance with its labeling and the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, documentation, certification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow workers entry into treated areas during the restricted-entry interval (REI) of 4 hours. For early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, wear:
• Coveralls.
• Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinylchloride (PVC) or Viton.
• Shoes plus socks.
• Protective Eyewear.

STORAGE AND DISPOSAL
Do not contaminate water, food or feed by storage and disposal.

PESTICIDE STORAGE:
Do not store above 100 degrees F or below -20 degrees F for extended periods of time. Keep containers tightly closed when not in use.

PESTICIDE DISPOSAL:
Wastes resulting from the use of this product must be disposed of on-site or at an approved waste disposal facility.

CONTAINER DISPOSAL:
Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

See booklet accompanying this container for complete labeling including Directions for Use, Storage and Disposal, Conditions of Sale, etc.