



Water Soluble Bio Insecticide from Neem

For Agricultural and Commercial Use

Keep out of reach of children CAUTION

Active Ingredient: Azadirachtin.....6%
Other Ingredients:.....94%
Total:.....100%

Net Contents: See individual packet EPA Reg. No. 81899-4 EPA Est. No. 87465-IND-001

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.)

Available from Arborjet, Inc. 99 Blueberry Hill Road, Woburn, MA 01801

Manufactured for SoluNeem, Inc. 1050 Bridgeway, Sausalito, CA 94965

FIRST AID

IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
Rinse skin immediately with plenty of water for 15-20 minutes.
Call a poison Control center or doctor for treatment advice.

IF IN EYES:

- Hold eye open and rinse slowly and gently with 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, or going for treatment. For medical emergencies, phone 24 hours a days, National Pesticide Information Center at 1-800-858-7378.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: 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.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
Socks and shoes
Chemical resistant gloves

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.

USER SAFETY RECOMMENDATIONS

Users Should: Wash hands before eating, drinking chewing gum, using tobacco or using toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS: 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 contaminate water when disposing of equipment wash water or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply this product through any irrigation system unless the chemigation instructions on this label are followed.

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 requirement for the protection of agriculture workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides.

Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 4 hours. PPE required for early entry to 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 is:

- Long-sleeved shirt and long pants
Shoes and socks
Chemical resistant gloves

NON-AGRICULTURAL USE REQUIREMENTS

These requirements apply to uses of this product that are NOT within the WPS for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, 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.

PRODUCT DESCRIPTION

AzaSol is a pale yellow/white, amorphous powder containing 6% by weight azadirachtin. It will instantly dissolve in water to give a solution that is ready for spray application for pest control. Contains no harmful surfactants or solvents. Non-Oil based and highly effective as a powder.

Use AzaSol for pre-harvest treatment of fruits and vegetables in case of sudden pest infestations.

AzaSol is effective on a very wide spectrum of insects and pests as listed in this label.

Use AzaSol on a wide variety of plants as listed indoors and outdoors. If plans are made to use AzaSol on plants not listed on this label, it is recommended that a small area as a leaf, stem, or branch be "test sprayed", first and checked several days later to make sure that leaf wilting or damage does not occur.

When used as directed, AzaSol will destroy targeted insect larvae when they (1), eat sprayed plants, or (2), come in contact with the spray. AzaSol eliminates insects by stopping the insect's growth and is effective on all insects listed, insect larval stages and pupae.

MODE OF ACTION

AzaSol controls insects in the larval, pupal, and nymphal stages by interfering with the metabolism of ecdysone. Insects typically die between larval to larval, larval to pupal, nymph to nymph molts, or during adult eclosion.

COMPATIBILITY

AzaSol has been found to be compatible with the most commonly used non-alkaline insecticides, fungicides and water soluble fertilizers in the neutral pH range. Check compatibility by using the correct

proportion of each the products application rate in a quart or gallon container. Solubilize AzaSol first in the mixture. Test the tank-mix combinations for possible adverse effects (such as settling out, flocculation, etc.) and for phytotoxic effects on a small sample of plants prior to use. As environmental conditions can alter the interactions between compounds, test compatibility for both new and previously used combinations. Avoid mixtures of several materials and very concentrated spray mixtures.

Do not use AzaSol with Bordeaux mixture, triphenyltin hydroxide, lime sulfur, Rayplex iron or other highly alkaline materials. Use mildly alkaline mixtures immediately after mixing to prevent loss of insecticidal activity.

When using AzaSol in combination with other products, use AzaSol at the rate, or half the rate, specified in the Use Rate table. Follow the directions for use, precautions and limitations for use on the entire product labels used in the combination.

Some suggested tank mix combinations are as follows: AzaSol plus endosulfan\*, AzaSol plus chlorpyrifos\*, AzaSol plus acephate\*, AzaSol plus Bacillus thuringiensis (BT), AzaSol plus bifenthrin\*, AzaSol plus esfenvalerate\*, AzaSol plus abamectin\*, AzaSol plus diflubenzuron\*, AzaSol plus pyrethrum + piperonyl butoxide (for fogging use)\*

Always follow the manufacturer's Directions for Use and Precautionary Statements. Use AzaSol on vegetables, coconut palms and other food crops with such chemicals as Endosulfan.

READ ALL DIRECTIONS AND PRECAUTIONS BEFORE USE

To apply AzaSol select a suitable power or pump pressure try sprayer or a hand held trigger type sprayer that will deliver a forceful, fine, leaf, fruit covering, wetting, spray mist. To get thorough spray coverage on waxy or pubescent plant surfaces the addition of small amount of a suitable sticker agent (such as NuFilm P) added to the spray mix, at the recommended rates may give better foliage, insect coverage and control.

APPLICATION METHOD AND EQUIPMENT: Apply AzaSol as a foliar spray or a drench to soil or soil less media (e.g., greenhouses and mushroom houses) to control insects and nematodes. When needed, drench soil to control soil borne pests, including soil-borne larvae of foliar insect pests. When applying as a drench, avoid excessive leaching. Apply AzaSol through sub-surface soil treatment equipment (E.g. turf grass). To repel adult flies, apply through fogging equipment.

Always follow equipment manufacturer's use directions.

Apply AzaSol by using any powered or manual pesticide application equipment, which includes but is not restricted to: high-volume, low-volume, ultra-low volume, electrostatic, fogging, and chemigation. Follow the original manufacturer's recommendations when using these types of equipment.

For optimum results, 2 to 3 applications made at 7 to 10 day intervals is recommended, unless otherwise specified. Foliar applications should be made to both side of leaves. In addition, a sticker agent used as per the manufacturer's recommendations may improve product performance.

AZASOL USE RATE RECOMMENDATIONS FOR KEY PESTS BY USE SITE

AzaSol is intended for use on outdoor plants and food crops, mushroom houses, plants grown indoors or in greenhouses, shade cloth, interiorscapes and nurseries. It can be used to control any of the following insects and nematodes. Use the table below to determine the appropriate use rate for your site / pest combination.

AZASOL PEST CONTROL CHART:

USE RATES for indoor and outdoor plants including, FOOD CROPS, TREES, TURFGRASS, NURSERY, GREENHOUSE, INTERIORSCAPE & LANDSCAPE PLANTS

Table with 3 columns: PEST, RATES: AzaSol Oz's./Acre-tsp./1,000 sq. ft., COMMENTS For Spray, Drench or Chemigation. Rows include Whiteflies, Leaf Miners, Scale, Mealy Bugs, Thrips, Aphids, Psyllids, Bugs, Flies, Sawflies, Caterpillars.

(continued on reverse side)

BEETLES, larvae of : such as Bark beetles, Blueberry Flea beetles, Boll weevils, Colorado, potato beetles, Flea beetles, Japanese beetles, Leaf beetles, Mexican, bean beetles, Phylloxera, Rose Chafers, Twig girdlers	6 oz in 50 gal water/A 1 tsp/ 1 gal water/1000 sq.ft.	Spray when pests first appear. For Food crops, Repeat application after 7 to 10 days. Do no use with oil! Make sure that all plant surfaces are thoroughly spray treated. Repeat in 5 to 7 days if required.
WEEVILS, such as Black vine weevils, Pepper weevils, Strawberry vine weevils.	6 oz in 50 gal water/A 1 tsp/ 1 gal water/1000 sq.ft.	Foliar anti-feedant sprays will stop adult feeding. Make at least 3 to 4 applications 10 days apart.
BORERS, Larvae of: Peach twig, borer, Peach tree borers, Cranberry borers.	6 oz in 50 gal water/A 1 tsp/ 1 gal water/1000 sq.ft.	Thoroughly spray in spring after egg hatch to control young larvae.
MOLE CRICKETS, nymphs and young "instars". Turf Treatment	6 oz in 50 gal water/A 1 tsp/ 1 gal water/1000 sq.ft.	For turfgrass, spray to drench turf for young cricket nymphs in spring. Stops young from growth to adults.
MUSHROOM FLIES Nematodes and Phorid Flies	Mix ½ oz. in 1 to 2 gal of water and mist over, (or drench) 1,000 sq. ft.	See "For Mushrooms" section on this label.

## USE SITES FOR AZASOL

**AzaSol can be used on Green-house: food crops, such as:** Brassica (cole) crops, cucurbits, eggplants, herbs and spices, legumes, peppers, tomatoes.

**MUSHROOMS,** Varieties such as: Agaricus, enoki, maitake, oyster, shiitake and other specialty mushrooms

**Food crops including, Root, and tuber vegetables such as:** Artichoke, beets carrots, ginger, horseradish, potatoes, radishes, rutabagas, sweet potatoes, turmeric, tunips, yams.

**Leafy vegetables (including Brassica leafy vegetables) such as:** Amaranth, broccoli, Brussels, sprouts, cabbage, cauliflower, celereby Chervil, Chinese cabbage, collards, cress, endives, fennel, kale, kohlrabi, lettuce, mizuna (mustard greens, parsley, purslane, rape greens, rhubarb, spinach, Swiss chard.

**Legume vegetables such as:** Beans (field, kidney etc.), chick-peas, cowpeas, guar, jackbeans, lablab beans, lentils, peas, pigeon peas soybeans, sword beans.

**Fruiting vegetables such as:** Eggplants, ground-cherries, pepinos, peppers, pimentos, tomatillos, tomatoes.

**Cucurbit vegetables such as:** Bitter melons, Chayotes, Chinese wax gourds, citron melons, cucumbers gherkins, gourds, muskmelons (such as cantaloupes, casabas cranshaw etc..) pumpkins, squash, watermelons.

**Citrus Fruits such as:** Calamondins, citrus citron,s citrus hybrids, Grapefruits, Kumquats, Lemons, Limes, Mandarins, Oranges, pumellos, satusama mandarins.

**Pome fruits such as:** Apples, crabapples, loquats, mayhaws, oriental pears, pears, quinces.

**Stone fruits such as:** Apricots, cherries, nectarines, peaches, plums, prunes.

**Berries such as:** Blackberries, cranberries, blueberries, currants, cranberries, elderberries, gooseberries, huckleberries, loganberries, raspberries, strawberries, youngberries.

**Cereal grains such as:** Barley, buckwheat, corn, millet, oats, popcorn, rice, rye, sorghum, teosinites, triticale hybrids, wheat, wild rice,

**Herbs and spices such as:** All spice, angelica, anise, annatto, balm, basil, black and white peppers, borage, burnet, chamomile, caper buds, cardamom, caraway, cassia, catnip, celery seeds, chervil, chives, cinnamon, caraway, cloves, coriander (cilantro), costmary, curmin, curry leaf, dills, fennels, fenugreek, grains of paradise, horehound, hyssop, juniper berry, lavender, lemongrass, lyeage, mace, marjorids, marjoram, mustard seeds, nasturtium, nutmeg, parsley, pennyroyal, pepper (black & white), poppy seeds, rosemary, rue, saffron, sage, savory, sweet bay (bay leaf), tansy, tarragon, thyme, vanilla, wintergreen, woodruff, wormwood.

**Bulb vegetables such as:** Garlic, leek, onions, shallots.

**Nuts such as:** Almonds, bechnuts, Brazil nuts, butternuts, cashews, chestnuts, chinquapin, coconuts, filberts, hickorynuts, imacadamia, pecans, pistachios, walnuts.

**Oilseed crops such as:** Canola, castor, crambe, guar, jojoba, peanuts, rape, safflower, sesame, soybean, sunflower.

**Tropical fruits such as:** Atemoyas, bananas, breadfruits, cherimoyas, durians, guavas, malangas, mangos, papayas, passionfruits, starfruits.

**Other food & non-food crops such as:** Asparagus, avocados, birdseed, cacao, coffee, edible flowers, feijoa, figs, ginseng, grapes, guayule, hops, kiwis, okras, olives, palms, papayas, pawpaws, persimmons, pineapples, rambutans, sugarcane, tamarillos, tea, tobacco, water chestnuts, watercress.

**Ornamental Plants such as:** African violets, ageratum, aster, aucuba, begonia, cacti, calendula, calla, carnation, ceanothus, chrysanthemum, cineraria, coleus, cyclamen, daffodil, dahlia, delphinium, ficus, foliage plants, fuschia, gardenia, geranium, gloxinia, hyacinth, hydrangea, iris, ivy, lily, maidenhair fern, marigold, narcissus, orchid, pansy, pelargonium, peony, phlox, pittisporum, poinsettia, pyracantha, rubber plant, snapdragon, stock, tulip, wandering jew, yew, yucca, zinnia.

**Ornamental Trees and Shrubs such as:** Andromeda, Arbovitae, ash, Austrian pine, azalea, beech, birch, birdsnest spruce, blue spruce, bouginvillea, boxwood, butternut, camellia, cedar, chamaecypripus, dogwood, Douglas fir, elm, euonymus, firethorn, forsythia, hackberry, hawthorn, hemlock, hickory, holly, honeylocust, horsechestnut, ilex, juniper, larch, laurel, lilac, linden, London plane, magnolia, manvillea, maple, mimosa, mountain ash, myrtle, oak, pachysandra, peach, pine, Pinhota, pines, plane tree, poplar, privet, quince, rhododendron, roses, spruce, sycamore, white cedar and white pine.

**TURF GRASSES such as:** Bent grass, Bermuda grass, Fescue, Bluegrass, annual & perennial; Ryegrass, annual & perennial; Buffalo grass, St. Augustine grass, Centipede grass, Wheat grass, Zoysia grass.

For control of Sod Webworms, Cutworms, Aphids, Leafhoppers, ants and chiggers: use a suitable pressure sprayer and mix 1 tbsp. in 2 to 3 gal of water and apply to 2,500 sq ft of turf. Apply when insect larvae first appear and if necessary repeat application in 10 to 14 days. The use of an approved "spreader sticker" may help the spray to penetrate turf down to the larvae/ worm feeding area.

### AzaSol For Mushrooms and the Mushroom House

For Mushroom Files, Nematode and Phorid Flies use AzaSol at the rate indicated on the PEST CONTROL CHART as a drench to the casing layer, media or compost. Make 4 to 5 applications 7 to 10 days apart. To repel fly adults, apply with fogging equipment at the first sign of activity. Can be applied between breaks up to the final flush.

## CHEMIGATION OF AZASOL

### General Information

Apply this product only through drip (trickle) or sprinkler (center pivot, lateral move, end tow, side roll, traveler, big gun, solid set, or hand move), flood (basin) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Solubilize AzaSol with water before introduction into the system; use the diluted mixture within 8 hours. Do not apply in irrigation water if the pH exceeds 7.0. The optimum pH for application is a range of 5.5 to 6.5. If needed, the pH of the irrigation water can be adjusted by use of a suitable buffering agent. Agitation is necessary. Apply at the rate stated in the Directions for use using sufficient water to achieve an even distribution within an 8 hour period. Do not apply AzaSol at a rate that exceeds 20 grams active ingredient per acre. If applying AzaSol in combination with other products refer to the compatibility statement in the Directions for Use section.

Observe the following precautions if your Chemigation system is connected to a public water system

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of a year.

Chemigation systems connected to the public water systems must contain a functional, reduced-pressure zone (RPZ), backflow prevention the functional equivalent in the water supply line upstream from the point of pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top of overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in the cases where there is not a water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected, Systems must use a metering pump, such as a positive displacement injection pump(e.g. diaphragm pump)effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock,

Do not apply when wind speeds favor drift beyond the area intended for treatment.

Statements concerning the operation of sprinkler Chemigation; drip (trickle), utilizing a pressurized water and pesticide injection system

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow. The pesticide injection pipeline must contain a functional, automatic, quick – closing check valve to prevent the flow of fluid back toward the injecting pump. The pesticide injection pipeline must also contain a functional, normally closed solenoid – operated valve located on the intake side of the injection pump and connected to the system, interlock to prevent fluid from being withdrawn from the supply tank when the irrigating system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops; the irrigation line or water pump must include a functional pressure with that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Statements concerning the operation of flood (basin) irrigation utilizing gravity flow or pressurized water and pesticide injection system.

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drip structure or weir box to decrease potential for water source contamination from back flow if water flow stops.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements.

- The system must contain a functional interlocking check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.
- The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of the fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side to the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decrease to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump, (e.g. Diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

## STORAGE AND DISPOSAL FOR AGRICULTURAL / COMMERCIAL USE

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store product in the original labeled container in a cool, dry, locked place out of reach of children. Keep containers tightly closed when not in use.

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

CONTAINER DISPOSAL: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

## IMPORTANT: PLEASE READ BEFORE USE

To the extent consistent with applicable laws, SoluNeem, Inc. warrants that,

- This product conforms to the chemical description on its label
- This product is reasonably fit for the purposes stated on its label, subject to the inherent risks referred to herein, when used in accordance with its directions; and
- That the direction, cautions and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and plants, and upon reports of field experience. Testing has not been performed on all varieties of food crops, and plants, in all states, or under all application, weather and crop conditions.

There are no express warranties other than those set forth herein, SoluNeem, Inc neither makes nor intends, nor does it authorize any agent or representative to make, any other warranty, express or implied. SoluNeem, Inc. expressly excludes and disclaims all implied warranties of merchantability, fitness for particular purpose, or any other warranty of quality of performance. This warranty does not extend to, and the user shall be solely responsible for, any loss or damage that results from the use of this product in any manner that is inconsistent with this label's directions, or cautions.



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