

# Shuttle™ 15 SC

## Miticide

**For Use on Commercial Greenhouse, Shadehouse,  
Ornamental, Floral, Foliage and Ornamental Nursery Crops.**

Ingredients	By wt.
Active Ingredient	
*Acequinocyl . . . . .	15.8 %
Inert Ingredients . . . . .	84.2 %
Total . . . . .	100.0 %

\*3-dodecyl-1, 4-dihydro-1, 4-dioxo-2-naphthyl-acetate

Contains 1.25 lb ai/gal.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

See inside booklet for additional precautionary statements.

Produced for:

**ARYSTA LIFESCIENCE  
NORTH AMERICA CORPORATION**

100 First St., Suite 1700  
San Francisco, CA 94105

EPA Est. No. 4841-LA-1  
EPA Registration No. 66330-38  
Label Number 20631-A



**Arysta LifeScience**

**NET CONTENTS: 32 fluid ounces**

# **FIRST AID**

<b>If inhaled</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If in eyes</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If swallowed</b>	<ul style="list-style-type: none"><li>• Call poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	

**FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE:**  
**CALL 1-800-228-5635 Ext. 174**

**FOR 24-HOUR CHEMICAL EMERGENCY (Spill, Leak, Fire or Accident) ASSISTANCE: CALL CHEMTREC 1-800-424-9300**

# **PRECAUTIONARY STATEMENTS**

## **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION.** Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Harmful if absorbed through skin.

## **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Socks
- Shoes
- Chemical Resistant Gloves made of waterproof material

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist 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 the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

## **ENVIRONMENTAL HAZARDS**

This product is toxic to aquatic invertebrates such as Eastern oysters and mysid shrimp. 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 cleaning equipment or disposing of equipment washwaters.

## **SURFACE WATER STATEMENT**

This product may contaminate water through drift of spray in wind. This product has a potential for runoff for several days after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

## **DIRECTIONS FOR USE**

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

Carefully read and understand the Directions for Use and restrictions before applying this product.

Do not apply this product in any 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 on this label about personal protective equipment (PPE), notification to workers and restricted-entry interval. The requirements in this box only apply

**(AGRICULTURAL USE REQUIREMENTS cont.)**

to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow entry into treated areas during restricted entry interval (REI) of 12 hours.

PPE required 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 is: coveralls, socks, shoes, chemical resistant gloves made of waterproof material.

## **GENERAL INFORMATION**

SHUTTLE™ 15 SC is a miticide for the control of Two-spotted spider mite (*Tetranychus urticae*) and Spruce spider mite (*Oligonychus ununquis*) on ornamentals and ornamental nursery plants. When applied to the foliage as directed, SHUTTLE 15 SC provides quick knockdown and long residual control. Due to its unique mode of action, SHUTTLE 15 SC does not show cross-resistance to existing miticides and is very effective against various species of resistant and susceptible mites. SHUTTLE 15 SC is relatively harmless to most predacious mites and beneficial insects, making it compatible with IPM and resistance management programs.

## **NOTICE TO USER**

Plant tolerance to this product has been found to be acceptable in research trials for the general plant species listed on the label. However, due to the large number of species and their associated varieties or cultivars of ornamental and ornamental nursery plants, and due to variable growing conditions, it is impossible to test every plant variety or cultivar for tolerance to this product. Neither the Manufacturer nor the Seller has determined whether or not this product can be safely used on all ornamental or ornamental nursery plants. The user should determine if this product can be used safely prior to commercial use. In a smaller test area, test the recommended rates on plants for phytotoxicity prior to general use.

# **RESISTANCE MANAGEMENT**

Due to its new and unique mode of action, SHUTTLE 15 SC does not show cross-resistance, however, in order to reduce selection pressure, which can lead to the development of resistance, the following strategies are recommended. Since SHUTTLE 15 SC is relatively harmless to predator mite and beneficial insects, it can be compatible with IPM and resistance management programs.

1. Incorporate IPM techniques into your insect/mite control program.
2. Ensure thorough spray coverage of all foliage.
3. Always apply SHUTTLE 15 SC at the recommended rates and according to label recommendations as soon as threshold infestations are observed.
4. Do not use SHUTTLE 15 SC in successive applications. Rotation with other miticides having different modes of action is recommended.

## **PLANT TOLERANCE**

Neither the manufacturer nor the seller has determined whether or not SHUTTLE 15 SC can be used safely on all varieties and cultivars. SHUTTLE 15 SC has been tested on a variety of plants with no phytotoxicity observed at label rates. Since all plant species and their varieties and cultivars have not been tested for tolerance, it is recommended that a small number of plants be sprayed to make certain that no phytotoxicity occurs, prior to any large scale application to plants. The end user assumes all risks arising from application of SHUTTLE 15 SC in a manner inconsistent with its labeling.

## **COMPATIBILITY OF MIXTURES**

SHUTTLE 15 SC can be combined with most commonly used pesticides with the exception of strongly alkaline material, which can reduce the activity of this product. **DO NOT** combine SHUTTLE 15 SC with Phosethyl (Fosetyl). To obtain broad-spectrum insect control, SHUTTLE 15 SC can be tank-mixed with most other miticide/insecticide products. However, all plant species and their varieties and cultivars have not been tested with possible tank mix combinations, sequen-

tial pesticide treatments and adjuvants and surfactants. The user should conduct a spray mix compatibility and phytotoxicity trial under local conditions to ensure compatibility prior to any large-scale use.

## **PREPARATION OF SPRAY SOLUTION**

Begin with clean equipment. Add sufficient clean water to the spray tank for one-half of the mix load. Start tank agitation. Add and properly suspend the necessary amount of product before adding any other products. Agitate to ensure thorough mixing while adding the remaining required water. A high quality wetting agent or other spray adjuvant, approved for use on your crop, may be added to spray solutions according to the manufacturer's use instructions. SHUTTLE 15 SC should be properly suspended and diluted prior to the addition of any adjuvant. Consult the adjuvant label or manufacturer for crop tolerance and safety information when used with this product. Maintain agitation during mixing and application. DO NOT allow the spray mixture to stand without agitation. If agitation is stopped for any reason, the spray solution must be thoroughly re-mixed prior to any further use. Apply with properly calibrated spray equipment.

## **APPLICATION**

SHUTTLE 15 SC should be applied when threshold populations are observed. Do not wait until large mite populations have been established.

Apply SHUTTLE 15 SC in sufficient water to ensure uniform and thorough coverage of foliage. Thorough coverage is required for optimum control. To achieve adequate coverage, use proper spray pressures, nozzles, nozzle spacing, and water volume per acre. When used as directed, SHUTTLE 15 SC is effective for the control of a variety of mite species, but is not effective against rust mites. SHUTTLE 15 SC shows efficacy on all mite life stages of susceptible mites. Using SHUTTLE 15 SC in successive miticide applications is not recommended. Use SHUTTLE 15 SC as part of a sound resistance management program that includes rotation with other miticide treatments having different modes of action.

## **GENERAL RESTRICTION AND LIMITATIONS**

Do not apply this product through any type of irrigation system.  
Do not use SHUTTLE 15 SC in successive miticide applications. Use SHUTTLE 15 SC in rotation with other treatments having different modes of action.  
Not for use in or around residential areas. Do not apply by air.  
Do not apply within 75 feet of aquatic areas.

## **GREENHOUSE AND SHADEHOUSE ORNAMENTALS AND ORNAMENTAL NURSERY PLANTS**

For control of Two-spotted spider mite (*Tetranychus urticae*) and Spruce spider mite (*Oligonychus ununquis*) mix 6.4-12.8 fluid ounces of SHUTTLE 15 SC in 100 gallons of water (0.06-0.125 lb ai/100 gal of water) and apply as a full coverage spray to the foliage to drip except for roses where the maximum application rate is 6.4 fluid ounces in 100 gallons of water (0.06 lbs ai/100 gal of water) (Table 1. and 2.). Actual spray volume will vary depending on the size of plants being sprayed. Application should be made as soon as mite population reach economic infestation levels.

**Table 1. Application Rate For Floral, Foliage and Ornamental Nursery Crops (For Roses See Table 2) DO NOT USE ON MINIATURE ROSES OR IMPATIENS.**

<b>PEST</b>	<b>Rate of product per 100 gallons of water</b>
Two-spotted spider mite ( <i>Tetranychus urticae</i> ) Spruce spider mite ( <i>Oligonychus ununquis</i> )	6.4 fl. oz. - 12.8 fl. oz. (0.06 - 0.125 lbs ai/100 gal)

Do not apply more than 0.6 lb ai/A per crop cycle.

**Table 2. Maximum Application Rate for Roses (Except Miniature Roses)**

<b>PEST</b>	<b>Rate of product per 100 gallons of water</b>
Two-spotted spider mite ( <i>Tetranychus urticae</i> ) Spruce spider mite ( <i>Oligonychus ununquis</i> )	6.4 fl. oz. (0.06 lbs ai/100 gal)

Do not apply more than 0.3 lb ai/A per crop cycle.

## **STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store in a dry place away from excessive heat. Do not store near food or feed. Store in original container only. To close package, replace and tighten cap to form an airtight seal.

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

## **CONDITIONS OF SALE**

1. Arysta LifeScience North America Corporation warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with the Directions for Use under normal conditions of use.
2. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal use conditions, or under conditions not reasonably foreseeable to Arysta LifeScience North America. **ARYSTA LIFESCIENCE NORTH AMERICA DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY. SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE. ARYSTA LIFESCIENCE NORTH AMERICA DOES NOT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTY, GUARANTEE OR REPRESENTATION CONCERNING THIS PRODUCT.**
3. Critical and unforeseeable factors beyond Arysta LifeScience North America's control prevent Arysta LifeScience North America from eliminating all risks in connection with the use of this product. Such risks include, but are not limited to, damage to plants and crops to which the product is applied, lack of complete control, and damage caused by drift to other plants or crops. Such risks occur even though the product is reasonably fit for the use stated on the label and even though label directions are followed. Except as stated in 1 above, Buyer and User acknowledge and assume all risks and liabilities resulting from handling, storage, and use of this product.

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