

# Shuttle™ 15 SC

**Miticide**

GROUP 20B INSECTICIDE

**FOR USE ON ORNAMENTALS IN LANDSCAPES AROUND THE OUTSIDE OF RESIDENCES, BUSINESSES, SCHOOLS AND PUBLIC PROPERTY; AND ON ORNAMENTALS IN NON-RESIDENTIAL INTERIORSCAPES**

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 lbs. ai/gal.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION / PRECAUCION**

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.)

See inside booklet for First Aid, additional Precautionary Statements and Directions for Use

For Product Use Information Call 1-866-761-9397

Produced for:

**ARYSTA LIFESCIENCE NORTH AMERICA, LLC**

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Cary, NC 27513

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**NET CONTENTS: 32 FL OZ**



Arysta LifeScience™

<b>FIRST AID</b>	
<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 a 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.	
<b>FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE:</b> Call PROSAR at 1-866-303-6952 or 1-651-632-8946 if calling from outside of the U.S.	

**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 or rinsate.

### **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 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 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.

## 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 Standard 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. The area being treated must be vacated by unprotected persons.

Keep children, pets and unprotected persons out of treated areas until sprays have dried.

## GENERAL INFORMATION

SHUTTLE 15 SC is a miticide for the control of Citrus red mite (*Panonychus citri*), European red mite (*Panonychus ulmi*), Pacific spider mite (*Tetranychus pacificus*), Texas citrus mite (*Eutetranychus banksi*) and Spruce spider mite (*Oligonychus ununquis*), Strawberry spider mite (*Tetranychus turkestani*), Willamette spider mite (*Eotetranychus willamettei*) and Two spotted spider mite (*Tetranychus urticae*).

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 is not expected to have 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.

Certain varieties of impatiens and miniature roses are known to be sensitive to certain pesticides. Before using this product for mite control in the production of these ornamentals in particular, test them for sensitivity to this product on a limited scale before widespread use.

## RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, SHUTTLE 15 SC contains a Group 20B insecticide. Mites with acquired resistance to Group 20B insecticides may eventually dominate the mite population if this group of insecticides is used repeatedly in the same field or in successive years as the primary method of control for targeted pests. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance management strategies should be followed. If resistance develops, the product may lose effectiveness in controlling the target pests.

To delay insecticide resistance:

- Where possible, rotate the use of SHUTTLE 15 SC or other Group 20B insecticides with different groups that control the same pests in a field.
- Use tank mixtures with insecticides from a different group when such use is permitted.
- Insecticide use should be based on an IPM program that includes scouting, record keeping, and considers cultural, biological and other chemical control practices.
- Monitor treated pest populations for resistance development.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Arysta Life-Science North America at 1-866-761-9397.
- Incorporate IPM techniques into your insect/mite control program.
- Ensure thorough spray coverage of all foliage.
- It is recommended that SHUTTLE 15 SC not be used 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. **Certain varieties of IMPATIENS and MINIATURE ROSES are known to be sensitive to certain pesticides. Before using SHUTTLE 15 SC for mite control in the production of these ornamentals in particular, test them for sensitivity to SHUTTLE 15 SC on a limited scale before widespread use.**

### **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 Phos-ethyl (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, sequential 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. Allowing the spray mixture to stand without agitation may result in an improperly suspended mixture. If agitation is stopped for any reason, thoroughly re-mix the spray solution prior to any further use. Apply with properly calibrated spray equipment.

### **APPLICATION INFORMATION**

SHUTTLE 15 SC should be applied when threshold populations are observed and before 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. 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.

### **RESTRICTIONS AND LIMITATIONS**

- Do not apply this product through any type of irrigation system.
- Do not apply by air.
- Do not apply within 75 feet of aquatic areas.
- Not for indoor residential use.

### **APPLICATION TO PRODUCTION AND LANDSCAPE ORNAMENTALS**

SHUTTLE 15 SC is a miticide for the control of Citrus red mite (*Panonychus citri*), European red mite (*Panonychus ulmi*), Pacific spider mite (*Tetranychus pacificus*), Texas citrus mite (*Eutetranychus banksi*) and Spruce spider mite (*Oligonychus ununquus*), Strawberry spider mite (*Tetranychus turkestanii*), Willamette spider mite (*Eotetranychus willamettei*) and Two spotted spider mite (*Tetranychus urticae*) on production and landscape ornamentals.

For control of susceptible mites, mix 6.4 – 12.8 fluid ounces of SHUTTLE 15 SC in 100 gallons of water. Apply as a full coverage spray to the foliage to the point of drip. Actual spray volume used per acre will vary depending on the size of plants being sprayed. Application should be made as soon as mite population reaches threshold infestation levels.

SHUTTLE 15 SC will control susceptible mite infestations on ornamental plants growing in interiorscapes, arboretums, field nursery plantings, container nurseries, forest nurseries, residential and commercial landscapes, greenhouses, lath and shade houses, parks and recreation areas and areas surrounding schools. Not for indoor residential use.

## APPLICATION RATES

PEST	RATE PER ACRE
Citrus red mite ( <i>Panonychus citri</i> ) European red mite ( <i>Panonychus ulmi</i> ) Pacific spider mite ( <i>Tetranychus pacificus</i> ) Spruce spider mite ( <i>Oligonychus ununquis</i> ) Two spotted spider mite ( <i>Tetranychus urticae</i> ) Willamette spider mite ( <i>Eotetranychus willamettei</i> ) Strawberry spider mite ( <i>Tetranychus turkestanii</i> ) Texas citrus mite ( <i>Eutetranychus banksi</i> )	6.4 fl oz – 12.8 fl oz

### RESTRICTIONS AND LIMITATIONS

- **Apply a maximum of 12.8 oz/acre/application, not to exceed 25.6 oz/acre/year.**
- Do not use less than 100 gallons of water volume per acre.
- Allow a minimum of 14 days between treatments.

## STORAGE AND DISPOSAL

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

### PESTICIDE STORAGE

Store in original container and keep tightly closed. Store in a cool, dry place. Protect from excessive heat. For help with any spill, leak, fire or exposure involving this material, call CHEMTREC day or night at (703) 527-3887 or 1-800-424-9300.

### PESTICIDE CONTAINER DISPOSAL

Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

### PESTICIDE DISPOSAL

Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

## WARRANTY AND DISCLAIMER STATEMENT

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America Corporation ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. All such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above.

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