De la constante				
STATENCI - STATES	U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505T) 1200 Pennsylvania Ave., N.W.	EPA Reg. Number: 91234-276	Date of Issuance: 3/6/23	
VAL PROTECT	Washington, D.C. 20460			
NOTICE OF PESTICIDE:		Term of Issuance:		
	<u>X</u> Registration Reregistration	Conditional		
	(under FIFRA, as amended)			
		A1100.03	Name of Pesticide Product:	
		A1100.05		
	egistrant (include ZIP Code):			
Kristen Cianni				
Regulatory Mana Atticus LLC	ger			
940 NW Cary Par	rkway, Suite 200			
Cary, NC 27513				
Note: Changes in labeling	differing in substance from that accepted in connection with this regi	stration must be submitted to ar	ad accepted by the	
Registration Division prio	r to use of the label in commerce. In any correspondence on this prod	uct always refer to the above E	PA registration number.	
<ul> <li>On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).</li> <li>Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.</li> <li>This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:</li> <li>1. Submit and/or cite all data required for registration/reregistration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.</li> </ul>				
Signature of Approving	Official	Date:	Continues page 2	
1		Datt.		
Mine	$\geq$	3/6/23		
Melissa Bridges.	Acting Product Manager 07			
Invertebrate & Ve	ertebrate Branch 3			
Registration Divi				
Office of Pesticid	le Programs			

EPA Form 8570-6

Registration Notice Conditional v.20220527

Page 2 of 2 EPA Reg. No. 91234-276 Decision No. 579324

- 2. You are required to comply with the data requirements described in the generic data call-in (GDCI) identified below:
  - a. Spiromesifen GDCI-024875-1535

You must comply with all of the data requirements within the established deadlines. If you have questions about the GDCI listed above, you may contact the Chemical Review Manager in the Pesticide Re-Evaluation Division: <u>http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1</u>

- 3. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. You have 18 months from the date of registration to provide these data.
- 4. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 91234-276."
- 5. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

The record for this product currently contains the following CSF(s):

- Basic CSF dated 10/10/2021
- Alternative 1 CSF dated 10/10/2021

If you have any questions, please contact Ralph Narain at 202-566-2853 or at Narain.Ralph@epa.gov.

Enclosure: Stamped label

# **Master Label**

{Note to reviewer: [Text] in brackets denotes optional or explanatory language} {Note to reviewer: {Text} in braces denotes where in the final label text will appear}

**{BOOKLET FRONT PANEL LANGUAGE}** 

SPIROMESIFEN GROUP 23 INSECTICIDE/MITICIDE

# A1100.03<sup>[TM]</sup>

[Alternate Brand Name: Refuse 4 F]

Contains spiromesifen, the active ingredient used in Forbid<sup>®</sup> 4F. **A1100.03** is not manufactured, or distributed by Bayer Environmental Science, seller of Forbid<sup>®</sup> 4F.

# [Ornamental Insecticide/Miticide]

 [Intended for professional use only. For control of mites and whiteflies on ornamental plants in and around listed areas such as parks, golf courses, recreational areas, and residential or commercial buildings.]
 [For control of mites and whiteflies on ornamental plants, flowers and foliage plants in the greenhouse and field and container nurseries.]

ACTIVE INGREDIENT:	(% by weight)
Spiromesifen: 2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-4-yl 3,3-dimethylbutanoat	e 45.2%
OTHER INGREDIENTS:	<u>54.8%</u>
TOTAL	
Contains 4 pounds of spiromesifen per US gallon (480 grams ai per liter).	

# STOP – Read the label before use. KEEP OUT OF REACH OF CHILDREN

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 label booklet for First Aid, Precautionary Statements and Directions for Use.] [See below for Additional Precautionary Statements.]

{Note to reviewer: If applicable commercially, the statement for use and disclaimer will appear on the front panel of the final product packaging.}

EPA Reg. No.: 91234-XX

EPA Est. No.:

Net Contents:

Manufactured for: Atticus, LLC 940 NW Cary Parkway, Suite 200 Cary, NC 27513



# {LANGUAGE INSIDE BOOKLET}

	FIRST AID		
If inhaled:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>		
If swallowed:	<ul> <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 a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>		
	<ul> <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> <li>ian: No specific antidote is known. Treat symptomatically. Have a product container or when calling a poison control center or doctor, or going for treatment.</li> </ul>		
	HOT LINE NUMBER act container or label with you when calling a poison control center or doctor, or going You may also contact SafetyCall at <b>1-844-685-9173</b> for emergency medical treatment		

# For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

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

# Mixers, loaders and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material: Barrier Laminate, Butyl Rubber ≥ 14 mils, Nitrile Rubber ≥ 14 mils, Neoprene Rubber ≥ 14 mils, Natural Rubber ≥ 14 mils, Polyethylene, Polyvinyl chloride (PVC) ≥14 mils, Viton ≥ 14 mils.
- Shoes plus socks

# Applicators must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

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 the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove Personal Protective Equipment immediately after handling this product.
- Wash the outside of gloves before removing.
- As soon as possible, wash thoroughly and change into clean clothing.

# **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and aquatic invertebrates. Avoid contamination of surface water through runoff or spray drift. 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 cleaning equipment or disposing of equipment washwater.

**SURFACE WATER ADVISORY:** This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application. 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 loading of spiromesifen from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

**GROUNDWATER ADVIOSRY:** Degradates of spiromesifen have properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

# PHYSICAL OR CHEMICAL HAZARDS:

Do not mix or allow to come in contact with oxidizing or reducing agents. Hazardous chemical reaction may occur.

# **DIRECTIONS FOR USE**

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

Not for use on plants being grown for sale or commercial production, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climatic modification in areas such as landscapes, interior plantscapes[\*], campgrounds, golf courses, athletic fields, parks, gardens, rights of way and other easements, and around residential, institutional, public, commercial, and industrial buildings. [\*Not for Use in California]

**IMPORTANT:** Read entire label and Conditions of Sale before using this product.

# 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 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 worker entry into treated areas during the restricted entry interval (REI) of 12 hours following application. 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, are:

- Coveralls worn over short sleeved shirt and short pants
- Chemical resistant gloves made of any waterproof material: Barrier Laminate, Butyl Rubber ≥ 14 mils, Nitrile Rubber ≥ 14 mils, Neoprene Rubber ≥ 14 mils, Natural Rubber ≥ 14 mils, Polyethylene, Polyvinyl chloride (PVC) ≥14 mils, Viton ≥ 14 mils.
- Shoes plus socks

# **GENERAL INFORMATION**

**A1100.03** is a Flowable (Suspension Concentrate) formulation that is intended for control of mites and whiteflies on ornamental plants, flowers, and foliage plants in and around areas such as parks, golf courses, recreational areas, and residential or commercial buildings, as well as in the greenhouse and field and container nurseries. The active ingredient contained in **A1100.03** is active on all mite development stages. However, mite juvenile stages are often more susceptible than adults. Application should be timed to coincide with early threshold levels in a developing mite population.

**A1100.03** is also highly effective against whitefly nymphs, plus it has a significant effect on the otherwise difficult to control pupal stage. For best results against whitefly, applications should target these life stages.

**A1100.03** can be applied by ground equipment. However, thorough coverage of all plant parts is required for optimum performance. Performance evaluations should be made 4 - 10 days after application.

Apply specific dosage of **A1100.03** as needed for control. For best results, uniform coverage of the upper and lower leaf surfaces is recommended. Avoid excess application that results in runoff from plant foliage. An adjuvant may be used to improve coverage on hard to wet foliage. For best results, the treatment should be made when whitefly or mite population begins to build and before a damaging population becomes established. Rate range is provided and is generally dependent on size of the plant and density of the foliage. Apply with ground application equipment in adequate water for uniform coverage.

# **SPRAY DRIFT ADVISORIES**

# THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### SHIELDED SPRAYERS

Shielding the individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

## TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

### WIND

Drift potential generally increases with wind speed. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

#### **Boomless Ground Applications:**

• Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

## Handheld Technology Applications:

• Take precautions to minimize spray drift.

## **RESISTANCE MANAGEMENT**

For resistance management, **A1100.03** contains a Group 23 insecticide. Any insect population may contain individuals naturally resistant to **A1100.03** and other Group 23 insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of **A1100.03** or other Group 23 insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues for the targeted pests between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
  - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
  - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
  - Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistancemanagement and/or IPM recommendations for the specific site and pest problems in your area.

• For further information or to report suspected resistance contact Atticus, LLC at 984-465-4800.

# **Product Features**

- Controls all stages of whiteflies (nymphs, pupae, and adults).
- Provides knockdown and residual control of all developmental stages of mites.

PESTS CONTROLLED		USE RATE	
Spider mites (including twospotted spider mite, Southern red mite, maple spider mite, spruce spider mite, honeylocust spider mite, Euonymus mite, boxwood spider mite, tumid mite and Lewis mite)		1 to 4 fl. oz. (30 - 120 ml)/100 gallons of spray solution	
Tenuipalpid mites (including	g False spider mites)	or 1.5 - 6 ml/5 gallons of spray solution	
Rust and blister mites (fami	Rust and blister mites (family Eriophyidae)		
Tarsonemid mites (including broad mites and cyclamen mites)		[In CA: 1.4 to 4 fl. oz. (40 - 120 ml)/100 gallons of spray solution	
		or	
		2 - 6 ml/5 gallons of spray solution]	
Whiteflies (Including silverleaf, greenhouse, and sweetpotato whitefly)		2 to 4 fl. oz. (60 - 120 ml)/100 gallons of spray solution	
		or	
		3-6 ml/5 gallons of spray solution	
WHERE TO APPLY	To shrubs, trees (including non-bearing fruit and nut trees), flowers and foliage plants in outdoor landscapes, interior plantscapes[*], greenhouses, shade houses, and plants grown in field and container nurseries. [*Not for Use in California]		
HOW TO APPLY	Apply specific dosage of <b>A1100.03</b> as needed for control. Good coverage of the foliage is recommended. For best results, apply to achieve uniform coverage of the upper and lower leaf surfaces but avoid excess application that results in runoff from plant foliage.		
	An adjuvant may be used to improve coverage on hard-to-wet foliage. For best results, the treatment should be made when the whitefly or mite population begins to build and before a damaging population becomes established.		
	<b>A1100.03</b> is highly effective against the egg and nymphal stages of whiteflies and mites. For best results, applications should target these stages. Control should be directed at these stages.		
	For maximum efficacy against adult whiteflies, use the 4 fl oz rate of <b>A1100.03</b> . For heavy infestations, two applications may be necessary to control adult whiteflies.		
	Rate range is provided and is generally dependent on size of the plant and densi of the foliage. Apply when pests first appear and prior to leaf damage discoloration. Apply with ground application equipment in adequate water f		

	uniform coverage.
	unioni coverage.
	Do not apply via chemigation.
	Do not apply <b>A1100.03</b> more than three times per season.
PLANT TOLERANCE	<b>A1100.03</b> has been evaluated for phytotoxicity on a wide range of ornamental plants. However, due to the large number of species and varieties of ornamental plants, it is impossible to test every one for tolerance to <b>A1100.03</b> . The professional user should determine if <b>A1100.03</b> can be used safely prior to commercial use. In a small area, test the recommended rates on a small number of plants for phytotoxicity prior to widespread use. Before using <b>A1100.03</b> in tank mixture with other products and adjuvants, test the mixture on a small number of plants for phytotoxicity, nor to widespread use.
	Do not use <b>A1100.03</b> on geraniums ( <i>Pelargonium</i> sp.), <i>Peperomia, Dracaena</i> , and 'Classy', 'Attache', or 'Vogue' varieties of rose.
	Use of <b>A1100.03</b> on ferns, English ivy ( <i>Hedera helix</i> ), lily-of-the-Incas ( <i>Alstroemeria</i> ), Dracaena, Peperomia, croton, Cordyline, Mexican heather, fuschia, geraniums ( <i>Pelargonium</i> spp.), Schefflera, and Impatiens spp. is not recommended.
	Insufficient information on tolerance is available for the following ornamentals: lily-of-the-Incas ( <i>Alstromoeria</i> ), New Guinea impatiens, <i>Bacopa</i> , ferns, phlox, English ivy ( <i>Hedera helix</i> ), cyclamen, orchids, hoya, <i>Agyranthemum</i> , hydrangea, schefflera, <i>Matthiola</i> (stock), Mexican heather, <i>Lobelia</i> , fuschia, <i>Cordyline</i> , croton, neanthebella palm, and primula. It is recommended that <b>A1100.03</b> not be used on these plants.
IRRIGATION TIMING	If irrigation is used, conduct irrigations efficiently to prevent excessive loss of irrigation waters through runoff. Time applications to allow sprays to dry prior to rain or sprinkle irrigations. Allow at least 24 hours between applications of product and any irrigation that results in surface water runoff into lakes, reservoirs, rivers, permanent streams, marshes, potholes, vernal pools, natural ponds, estuaries, or commercial fish farm ponds.
ENDANGERED SPECIES ADVISORY	The use of any pesticide in a manner that may kill or otherwise harm endangered species or adversely modify their habitat is a violation of Federal law.
RESTRICTIONS	<ul> <li>Do not use on vegetable gardens.</li> <li>Do not use on plants intended for use as feed or forage.</li> <li>Do not use through irrigation systems.</li> <li>Do not use on bearing fruit or nut trees.</li> <li>Maximum Application Rate for ornamentals for commercial production, residential trees and greenhouses: 0.125 lbs. ai/A per calendar year</li> <li>For all crops and use sites do not use more than 0.35 lbs. spiromesifen per acre per year.</li> </ul>
PACKAGING HANDLING	<b>A1100.03</b> is packaged in polyethylene containers. Do not allow product or containers to freeze.

# COMPATIBILITY / MIXING / ORDER-OF-MIXING

**A1100.03** is physically and biologically compatible with many registered pesticides and fertilizers or micronutrients. When considering mixing **A1100.03** with other pesticides or other additives, first contact your supplier for advice. For further information, contact your local Atticus, LLC representative. If your supplier and Atticus, LLC representative have no experience with the combination you are considering, you should conduct a test to determine physical compatibility. To determine physical compatibility, add the recommended proportions of each chemical with the same proportion of water as will be present in the chemical supply tank, into a suitable container, mix thoroughly and allow to stand for five minutes. If the combination remains mixed, or can be readily re-mixed, the mixture is considered physically compatible.

**A1100.03** may be used with other recommended pesticides, fertilizers and micronutrients. The proper mixing procedure for **A1100.03** alone or in tank mix combinations with other pesticides is:

- Fill the spray tank 1/4 to 1/3 full with clean water;
- While recirculating and with the agitator running, add any products in PVA bags. Allow time for thorough mixing;
- Continue to fill spray tank with water until 1/2 full;
- Add any other wettable powder (WP) or wettable granules (WG) products;
- Add the required amount of A1100.03, and any other "flowable" (FL or SC) type products;
- Allow enough time for thorough mixing of each product added to tank;
- If applicable, add any remaining tank mix components: emulsifiable concentrates (EC), fertilizers and micronutrients.
- Fill spray tank to desired level and maintain constant agitation to ensure uniformity of spray mixture.

Mix pesticides in areas not prone to runoff such as concrete mixing/loading pads, disked soil in flat terrain or graveled mix pads, or use a suitable method to contain spills and/or rinsate. Properly empty and triple-rinse pesticide containers at time of use.

# For Use in California:

Allow growth of a vegetative filter strip within 25-ft (on which this product should not be applied) along lakes, reservoirs, rivers, permanent streams, marshes, potholes, vernal pools, natural ponds, estuaries or commercial fish farm ponds. This requirement does not apply to retention or holding ponds used to collect and recycle water for irrigation.

[Optional Marketing Claims]

- For Greenhouse and Nursery Use
- Miticide/Insecticide

# STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Handle and open container in a manner as to prevent spillage.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, 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

#### CONTAINER HANDLING:

[For containers  $\leq$  5 gallons: Nonrefillable Container. Do not reuse or refill this container. Triple 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 ¼ 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. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

**[For containers > 5 gallons: Nonrefillable container.** Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Turn the container or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

#### LIMITATION OF WARRANTY AND LIABILITY

**IMPORTANT: READ BEFORE USE.** Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. **CONDITIONS:** 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. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

**A1100.03** is a trademark of Atticus, LLC Forbid<sup>®</sup> [4F] is a registered trademark of Bayer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, neither ATTICUS, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

# {LANGUAGE ON LABEL AFFIXED TO CONTAINER}

# SPIROMESIFEN GROUP 23 INSECTICIDE/MITICIDE

# A1100.03[<sup>™</sup>]

[Alternate Brand Name: Refuse 4 F]

Contains spiromesifen, the active ingredient used in Forbid<sup>®</sup> 4F. A1100.03 is not manufactured, or distributed by Bayer Environmental Science, seller of Forbid<sup>®</sup> 4F.

#### [Ornamental Insecticide/Miticide]

[Intended for professional use only. For control of mites and whiteflies on ornamental plants in and around listed areas such as parks, golf courses,

recreational areas, and residential or commercial buildings.]		
ACTIVE INGREDIENT:	(% by weight)	
Spiromesifen: 2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro	[ 4.4]non-3-en-4-yl	
3,3-dimethylbutanoate	45.2%	
OTHER INGREDIENTS:	<u>54.8%</u>	
TOTAL		

Contains 4 pounds of spiromesifen per US gallon (480 grams ai per liter).

# STOP – Read the label before use. KEEP OUT OF REACH OF CHILDREN CAUTION

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.)

	FIRST AID
If inhaled:	<ul> <li>Move person to fresh air.</li> </ul>
	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration.</li> </ul>
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
If swallowed:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>
	<ul> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> </ul>
	• Do not give anything by mouth to an unconscious person.
If on skin or clothing:	<ul> <li>Take off contaminated clothing.</li> </ul>
	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
Have a produ	<b>sician:</b> No specific antidote is known. Treat symptomatically. Ict container or label with you when calling a poison control ctor, or going for treatment.
	HOT LINE NUMBER
Have the pro	duct container or label with you when calling a poison control

center or doctor, or going for treatment. You may also contact SafetyCall at **1-844-685-9173** for emergency medical treatment information.

#### For Chemical Emergency:

Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

**ENVIRONMENTAL HAZARDS:** This pesticide is toxic to fish and aquatic invertebrates. Avoid contamination of surface water through runoff or spray drift. 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 cleaning equipment or disposing of equipment washwater.

**SURFACE WATER ADVISORY:** This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application. 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 loading of spiromesifen from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

**GROUNDWATER ADVIOSRY:** Degradates of spiromesifen have properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

#### PHYSICAL OR CHEMICAL HAZARDS

Do not mix or allow to come in contact with oxidizing or reducing agents. Hazardous chemical reaction may occur.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, 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 **CONTAINER HANDLING:** 

[For containers ≤ 5 gallons: Nonrefillable Container. Do not reuse or refill this container. Triple 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 ¼ 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. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.] [For containers > 5 gallons: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

See inside label booklet for additional Precautionary Statements and Directions for Use.

{Note to reviewer: If applicable commercially, the statement for use and disclaimer will appear on the base label of the final product packaging.}

Manufactured for: Atticus, LLC 940 NW Cary Parkway, Suite 200 Cary, NC 27513

EPA Reg. No.: 91234-XX EPA Est. No.: \_\_\_\_\_ NET CONTENTS: \_\_\_\_\_

# Sublabel A

{Note to reviewer: [Text] in brackets denotes optional or explanatory language} {Note to reviewer: {Text} in braces denotes where in the final label text will appear}

**{BOOKLET FRONT PANEL LANGUAGE}** 

SPIROMESIFEN GROUP 23 INSECTICIDE/MITICIDE

# A1100.03<sup>[™]</sup>

[Alternate Brand Name: Refuse 4 F]

Contains spiromesifen, the active ingredient used in Forbid® 4F. A1100.03 is not manufactured, or distributed by Bayer Environmental Science, seller of Forbid<sup>®</sup> 4F.

# [Ornamental Insecticide/Miticide]

[Intended for professional use only. For control of mites and whiteflies on ornamental plants in and around listed areas such as parks, golf courses, recreational areas, and residential or commercial buildings.]

ACTIVE INGREDIENT:	(% by weight)
Spiromesifen: 2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-4-yl 3,3-dimethylbutanoate	e 45.2%
OTHER INGREDIENTS:	<u>54.8%</u>
TOTAL	
Contains 4 pounds of spiromesifen per US gallon (480 grams ai per liter).	

pounds of spiromesifen per US gallon (480 grams al per liter).

# STOP – Read the label before use. **KEEP OUT OF REACH OF CHILDREN** CAUTION

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 label booklet for First Aid, Precautionary Statements and Directions for Use.] [See below for Additional Precautionary Statements.]

{Note to reviewer: If applicable commercially, the statement for use and disclaimer will appear on the front panel of the final product packaging.}

EPA Reg. No.: 91234-XX

EPA Est. No.:

**Net Contents:** 

Manufactured for: Atticus, LLC 940 NW Cary Parkway, Suite 200 Cary, NC 27513

# {LANGUAGE INSIDE BOOKLET}

	FIRST AID
If inhaled:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
If swallowed:	<ul> <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 a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
	<ul> <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> <li>ian: No specific antidote is known. Treat symptomatically. Have a product container or when calling a poison control center or doctor, or going for treatment.</li> </ul>
	HOT LINE NUMBER act container or label with you when calling a poison control center or doctor, or going You may also contact SafetyCall at <b>1-844-685-9173</b> for emergency medical treatment

For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

# PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

# PERSONAL PROTECTIVE EQUIPMENT (PPE):

Mixers, loaders and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material: Barrier Laminate, Butyl Rubber ≥ 14 mils, Nitrile Rubber ≥ 14 mils, Neoprene Rubber ≥ 14 mils, Natural Rubber ≥ 14 mils, Polyethylene, Polyvinyl chloride (PVC) ≥14 mils, Viton ≥ 14 mils.
- Shoes plus socks

# Applicators must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

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 the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove Personal Protective Equipment immediately after handling this product.
- Wash the outside of gloves before removing.
- As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and aquatic invertebrates. Avoid contamination of surface water through runoff or spray drift. 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 cleaning equipment or disposing of equipment washwater.

**SURFACE WATER ADVISORY:** This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application. 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 loading of spiromesifen from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

**GROUNDWATER ADVIOSRY:** Degradates of spiromesifen have properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

## PHYSICAL OR CHEMICAL HAZARDS:

Do not mix or allow to come in contact with oxidizing or reducing agents. Hazardous chemical reaction may occur.

# **DIRECTIONS FOR USE**

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

Not for use on plants being grown for sale or commercial production, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climatic modification in areas such as landscapes, interior plantscapes[\*], campgrounds, golf courses, athletic fields, parks, gardens, rights of way and other easements, and around residential, institutional, public, commercial, and industrial buildings. [\*Not for Use in California]

**IMPORTANT:** Read entire label and Conditions of Sale before using this product.

# **GENERAL INFORMATION**

**A1100.03** is a Flowable (Suspension Concentrate) formulation that is intended for control of mites and whiteflies on ornamental plants, flowers and foliage plants. The active ingredient contained in **A1100.03** is active on all mite development stages. However, mite juvenile stages are often more susceptible than adults. Application should be timed to coincide with early threshold levels in a developing mite population.

**A1100.03** is also highly effective against whitefly nymphs, plus it has a significant effect on the otherwise difficult to control pupal stage. For best results against whitefly, applications should target these life stages.

**A1100.03** can be applied by ground equipment. However, thorough coverage of all plant parts is required for optimum performance. Performance evaluations should be made 4 – 10 days after application.

Apply specific dosage of **A1100.03** as needed for control. For best results, uniform coverage of the upper and lower leaf surfaces is recommended. Avoid excess application that results in runoff from plant foliage. An adjuvant may be

used to improve coverage on hard-to-wet foliage. For best results, the treatment should be made when whitefly or mite population begins to build and before a damaging population becomes established. Rate range is provided and is generally dependent on size of the plant and density of the foliage.

# SPRAY DRIFT ADVISORIES

## THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### SHIELDED SPRAYERS

Shielding the individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### WIND

Drift potential generally increases with wind speed. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

#### **Boomless Ground Applications:**

• Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

#### Handheld Technology Applications:

• Take precautions to minimize spray drift.

#### **RESISTANCE MANAGEMENT**

For resistance management, **A1100.03** contains a Group 23 insecticide. Any insect population may contain individuals naturally resistant to **A1100.03** and other Group 23 insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of **A1100.03** or other Group 23 insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues for the targeted pests between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):

- Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
- Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
- When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
- Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
- The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistancemanagement and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact Atticus, LLC at 984-465-4800.

# **Product Features**

- Controls all stages of whiteflies.
- Provides knockdown and residual control of all developmental stages of mites.

PESTS CONTROLLED		USE RATE
Spider mites (including twospotted spider mite, Southern red mite,		1 to 4 fl. oz. (30 – 120 ml)/100 gallons
	oider mite, honeylocust spider mite,	of spray solution
Euonymus mite, boxwood sp	pider mite, tumid mite and Lewis mite)	
		or
False spider mites		
Dust and blistor mitos (famil	(Frienbuildae)	1.5 – 6 ml/5 gallons of spray solution
Rust and blister mites (family	γ επορηγιαάε)	[In CA:
Tarsonemid mites (including	broad mites and cyclamen mites)	1.4 to 4 fl. oz. (40 – 120 ml)/100
		gallons of spray solution
		or
		2 – 6 ml/5 gallons of spray solution]
Whiteflies (Including silverle	af greenhouse and sweethotato whitefly)	2 to 4 fl. oz. (60 – 120 ml)/100 gallons
Whiteflies (Including silverleaf, greenhouse, and sweetpotato whitefly)		of spray solution
		or
		3-6 ml/5 gallons of spray solution
WHERE TO APPLY	To shrubs, trees (including non-bearing fruit and nut trees), flowers and foliage	
	plants in outdoor landscapes and interior plantscapes[*].	
	[*Not for Use in California]	
	Apply specific decage of A1100 02 as peeded for control. Cood soverage of the	
	HOW TO APPLY Apply specific dosage of A1100.03 as needed for control. Good coverage of the	

	oliage is recommended.
r	An adjuvant may be used to improve coverage on hard-to-wet foliage. For best results, the treatment should be made when the whitefly or mite population begins to build and before a damaging population becomes established.
	A1100.03 is highly effective against the egg and nymphal stages of whiteflies and nites. For best results, applications should target these stages.
	For maximum efficacy against adult whiteflies, use the 4 fl oz rate of <b>A1100.03</b> . For neavy infestations, two applications may be necessary to control adult whiteflies.
o d	Rate range is provided and is generally dependent on size of the plant and density of the foliage. Apply when pests first appear and prior to leaf damage or discoloration. Apply with ground application equipment in adequate water for uniform coverage.
D	Do not apply via chemigation.
D	Do not apply <b>A1100.03</b> more than three times per season.
p p u s p o	A1100.03 has been evaluated for phytotoxicity on a wide range of ornamental plants. However, due to the large number of species and varieties of ornamental plants, it is impossible to test every one for tolerance to A1100.03. The professional user should determine if A1100.03 can be used safely prior to commercial use. In a small area, test the recommended rates on a small number of plants for phytotoxicity prior to widespread use. Before using A1100.03 in tank mixture with other products and adjuvants, test the mixture on a small number of plants for phytotoxicity, nor to widespread use.
L C	Jse of <b>A1100.03</b> on ferns, English ivy ( <i>Hedera helix</i> ), lily-of-the-Incas ( <i>Alstroemeria</i> ), Dracaena, Peperomia, croton, Cordyline, Mexican heather, fuschia, geraniums Pelargonium spp.), Schefflera, and Impatiens spp. Is not recommended.
ir	f irrigation is used, conduct irrigations efficiently to prevent excessive loss of rrigation waters through runoff. Time applications to allow sprays to dry prior to rain or sprinkle irrigations.
	The use of any pesticide in a manner that may kill or otherwise harm endangered species or adversely modify their habitat is a violation of Federal law.
RESTRICTIONS • •	Do not use on plants intended for use as feed or forage.
	A1100.03 is packaged in polyethylene containers. Do not allow product or containers to freeze.
C	COMPATIBILITY / MIXING / ORDER-OF-MIXING
A1100.03 is physically and	biologically compatible with many registered pesticides and fertilizers or

micronutrients. When considering mixing **A1100.03** with other pesticides or other additives, first contact your supplier for advice. For further information, contact your local Atticus, LLC representative. If your supplier and Atticus, LLC representative have no experience with the combination you are considering, you should conduct a test to determine physical compatibility. To determine physical compatibility, add the recommended proportions of each chemical with the same proportion of water as will be present in the chemical supply tank, into a suitable container, mix thoroughly and allow to stand for five minutes. If the combination remains mixed, or can be readily re-mixed, the mixture is considered physically compatible.

**A1100.03** may be used with other recommended pesticides, fertilizers and micronutrients. The proper mixing procedure for **A1100.03** alone or in tank mix combinations with other pesticides is:

- Fill the spray tank 1/4 to 1/3 full with clean water;
- While recirculating and with the agitator running, add any products in PVA bags. Allow time for thorough mixing;
- Continue to fill spray tank with water until 1/2 full;
- Add any other wettable powder (WP) or wettable granules (WG) products;
- Add the required amount of A1100.03, and any other "flowable" (FL or SC) type products;
- Allow enough time for thorough mixing of each product added to tank;
- If applicable, add any remaining tank mix components: emulsifiable concentrates (EC), fertilizers and micronutrients.
- Fill spray tank to desired level and maintain constant agitation to ensure uniformity of spray mixture.

Mix pesticides in areas not prone to runoff such as concrete mixing/loading pads, disked soil in flat terrain or graveled mix pads, or use a suitable method to contain spills and/or rinsate. Properly empty and triple-rinse pesticide containers at time of use.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Handle and open container in a manner as to prevent spillage.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, 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.

#### CONTAINER HANDLING:

**[For containers \leq 5 gallons: Nonrefillable Container.** Do not reuse or refill this container. Triple 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 ¼ 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. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

**[For containers > 5 gallons: Nonrefillable container.** Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Turn the container or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

#### LIMITATION OF WARRANTY AND LIABILITY

**IMPORTANT: READ BEFORE USE.** Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. **CONDITIONS:** 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. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

**A1100.03** is a trademark of Atticus, LLC Forbid<sup>®</sup> [4F] is a registered trademark of Bayer. **DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. **LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, neither ATTICUS, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

# {LANGUAGE ON LABEL AFFIXED TO CONTAINER}

# SPIROMESIFEN GROUP 23 INSECTICIDE/MITICIDE A1100.03[™]

[Alternate Brand Name: Refuse 4 F]

Contains spiromesifen, the active ingredient used in Forbid<sup>®</sup> 4F. A1100.03 is not manufactured, or distributed by Bayer Environmental Science,

seller of Forbid<sup>®</sup> 4F.

#### [Ornamental Insecticide/Miticide]

[Intended for professional use only. For control of mites and whiteflies on ornamental plants in and around listed areas such as parks, golf courses,

recreational areas, and residential or commercial buildings.] CTIVE INGREDIENT: (% by weight)

ACTIVE INGREDIENT:	(% by weight)
Spiromesifen: 2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4	4.4]non-3-en-4-yl
3,3-dimethylbutanoate	45.2%
OTHER INGREDIENTS:	<u>54.8%</u>
TOTAL	100.0%

Contains 4 pounds of spiromesifen per US gallon (480 grams ai per liter).

# STOP – Read the label before use. KEEP OUT OF REACH OF CHILDREN CAUTION

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.)

	FIRST AID
If inhaled:	<ul> <li>Move person to fresh air.</li> </ul>
	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration.</li> </ul>
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
If swallowed:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>
	<ul> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> </ul>
	• Do not give anything by mouth to an unconscious person.
If on skin or	<ul> <li>Take off contaminated clothing.</li> </ul>
clothing:	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>Jote To Physician:</b> No specific antidote is known. Treat symptomatically. Have a product container or label with you when calling a poison control enter or doctor, or going for treatment.	
	HOT LINE NUMBER
Have the pro	duct container or label with you when calling a poison control

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at **1-844-685-9173** for emergency medical treatment information.

#### For Chemical Emergency:

Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and

water after handling. Remove contaminated clothing and wash clothing before reuse.

**ENVIRONMENTAL HAZARDS:** This pesticide is toxic to fish and aquatic invertebrates. Avoid contamination of surface water through runoff or spray drift. 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 cleaning equipment or disposing of equipment washwater.

**SURFACE WATER ADVISORY:** This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application. 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 loading of spiromesifen from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff. **GROUNDWATER ADVIOSRY:** Degradates of spiromesifen have properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

**PHYSICAL OR CHEMICAL HAZARDS:** Do not mix or allow to come in contact with oxidizing or reducing agents. Hazardous chemical reaction may occur.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area. **PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, 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.

CONTAINER HANDLING:

**[For containers ≤ 5 gallons: Nonrefillable Container.** Do not reuse or refill this container. Triple 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 ¼ 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. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

[For containers > 5 gallons: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

See inside label booklet for additional Precautionary Statements and Directions for Use.

{Note to reviewer: If applicable commercially, the statement for use and disclaimer will appear on the base label of the final product packaging.}

Manufactured for: Atticus, LLC 940 NW Cary Parkway, Suite 200 Cary, NC 27513 EPA Reg. No.: 91234-XX EPA Est. No.: \_\_\_\_\_ NET CONTENTS: \_\_\_\_\_

# Sublabel B

{Note to reviewer: [Text] in brackets denotes optional or explanatory language} {Note to reviewer: {Text} in braces denotes where in the final label text will appear}

**{BOOKLET FRONT PANEL LANGUAGE}** 

SPIROMESIFEN GROUP 23 INSECTICIDE/MITICIDE

# A1100.03<sup>[TM]</sup>

[Alternate Brand Name: Refuse 4 F]

Contains spiromesifen, the active ingredient used in Forbid<sup>®</sup> 4F. **A1100.03** is not manufactured, or distributed by Bayer Environmental Science, seller of Forbid<sup>®</sup> [4F].

ACTIVE INGREDIENT:	(% by weight)
Spiromesifen: 2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-4-yl	
3,3-dimethylbutanoate	45.2%
OTHER INGREDIENTS:	<u>54.8%</u>
TOTAL	
A1100.03 contains 4 pounds of spiromesifen per US gallon (480 grams ai per liter).	

# STOP – Read the label before use KEEP OUT OF REACH OF CHILDREN CAUTION

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 label booklet for First Aid, [additional] Precautionary Statements, and Directions for Use.] [See below for additional Precautionary Statements]

{Note to reviewer: If applicable commercially, the statement for use and disclaimer will appear on the front panel of the final product packaging.}

EPA Reg. No.: 91234-XX

EPA Est. No.:

Net Contents:

Manufactured for: Atticus, LLC 940 NW Cary Parkway, Suite 200 Cary, NC 27513

# {LANGUAGE INSIDE BOOKLET}

	FIRST AID
If inhaled:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
If swallowed:	<ul> <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 a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
	<ul> <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> <li>ian: No specific antidote is known. Treat symptomatically. Have a product container or when calling a poison control center or doctor, or going for treatment.</li> </ul>
-	HOT LINE NUMBER act container or label with you when calling a poison control center or doctor, or going You may also contact SafetyCall at <b>1-844-685-9173</b> for emergency medical treatment

For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

# PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# CAUTION

Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

# Mixers, loaders and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material: Barrier Laminate, Butyl Rubber ≥ 14 mils, Nitrile Rubber ≥ 14 mils, Neoprene Rubber ≥ 14 mils, Natural Rubber ≥ 14 mils, Polyethylene, Polyvinyl chloride (PVC) ≥14 mils, Viton ≥ 14 mils.
- Shoes plus socks

# Applicators must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

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 the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove Personal Protective Equipment immediately after handling this product.
- Wash the outside of gloves before removing.
- As soon as possible, wash thoroughly and change into clean clothing.

# ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Avoid contamination of surface water through runoff or spray drift. 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 cleaning equipment or disposing of equipment washwater.

**SURFACE WATER ADVISORY:** This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application. 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 loading of spiromesifen from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

**GROUNDWATER ADVIOSRY:** Degradates of spiromesifen have properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

# PHYSICAL OR CHEMICAL HAZARDS:

Do not mix or allow to come in contact with oxidizing or reducing agents. Hazardous chemical reaction may occur.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. IMPORTANT: Read entire label and Conditions of Sale before using this product.

# 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 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 worker entry into treated areas during the restricted entry interval (REI) of 12 hours following application. 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, are:

- Coveralls worn over short sleeved shirt and short pants
- Chemical resistant gloves made of any waterproof material: Barrier Laminate, Butyl Rubber ≥ 14 mils, Nitrile Rubber ≥ 14 mils, Neoprene Rubber ≥ 14 mils, Natural Rubber ≥ 14 mils, Polyethylene, Polyvinyl chloride (PVC) ≥14 mils, Viton ≥ 14 mils.
- Shoes plus socks

#### **GENERAL INFORMATION**

**A1100.03** is a Flowable (Suspension Concentrate) formulation that is intended for control of mites and whiteflies on ornamental plants, flowers and foliage plants in the greenhouse and field and container nurseries. The active ingredient contained in **A1100.03** is active on all mite development stages. However, mite juvenile stages are often more susceptible than adults. Application should be timed to coincide with early threshold levels in a developing mite population.

**A1100.03** is also highly effective against whitefly nymphs, plus it has a significant effect on the otherwise difficult to control pupal stage. For best results against whitefly, applications should target these life stages.

**A1100.03** can be applied by ground equipment. Thorough coverage of all plant parts is required for optimum performance. Performance evaluations should be made 4 – 10 days after application.

Apply specific dosage of **A1100.03** as needed for control. For best results good coverage of the upper and lower leaf surfaces is recommended. An adjuvant may be used to improve coverage on hard to wet foliage. For best results the treatment should be made when whitefly or mite population begins to build and before a damaging population becomes established. Rate range is provided and is generally dependent on size of the plant and density of the foliage. Apply with ground application equipment in adequate water for uniform coverage.

## **SPRAY DRIFT ADVISORIES**

## THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### SHIELDED SPRAYERS

Shielding the individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### WIND

Drift potential generally increases with wind speed. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

#### **Boomless Ground Applications:**

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

## Handheld Technology Applications:

• Take precautions to minimize spray drift.

# **RESISTANCE MANAGEMENT**

For resistance management, **A1100.03** contains a Group 23 insecticide. Any insect population may contain individuals naturally resistant to **A1100.03** and other Group 23 insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of **A1100.03** or other Group 23 insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues for the targeted pests between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
  - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
  - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
  - Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistancemanagement and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact Atticus, LLC at 984-465-4800.

# PRODUCT FEATURES

- Controls all stages of whitefly (nymphs, pupae, and adults).
- Provides knockdown and residual control of all developmental stages of mites

PESTS CONTROLLED	USE RATE
Spider mites (including twospotted spider mite, Southern red mite, lewis mite, tumid mite maple spider mite, spruce spider mite, honeylocust spider mite, euonymus mite,	1 to 4 fl oz (30 – 120 mL)/100 gallons of spray solution
boxwood spider mite)	or
Tarsonemid mites (including broad mite, cyclamen mites)	1.5 – 6 mL/5 gallons of spray solution

Tenuipalpid mites (including false spider mite)	
Rust and blister mites (family <i>Eriophyidae</i> )	
Whiteflies (Including greenhouse, silverleaf and sweetpotato whitefly)	2 to 4 fl oz (60-120 mL)/100 gallons of spray solution or
	3-6 mL/5 gallons of spray solution
WHERE TO APPLY	<ul> <li>To shrubs, trees (including non-bearing fruit and nut trees), flowers and foliage plants in greenhouses, shade houses and plants grown in field and container nurseries.</li> </ul>
HOW TO APPLY	<ul> <li>Apply specific dosage of A1100.03 as needed for control. For best results, apply to achieve uniform coverage of the upper and lower leaf surfaces but avoid excess application that results in runoff from plant foliage.</li> <li>An adjuvant may be used to improve coverage on hard-towet foliage. For best results the treatment should be made when the whitefly or mite population begins to build and before a damaging population becomes established.</li> <li>A1100.03 is very effective against the egg and nymphal stages of whiteflies and mites. Control should be directed at these stages.</li> <li>Apply as a full coverage spray to the foliage using a minimum volume of 1 - 2 qts of final solution per 100 sq ft (or 100 to 200 gal per acre). Actual spray volume will vary depending on the size of plants.</li> <li>For maximum efficacy against adult whiteflies, use the 4 fl oz rate of A1100.03.</li> <li>For heavy infestations, two applications may be necessary to control adult whiteflies.</li> <li>Rate range is provided and is generally dependent on size of the plant and density of the foliage. Apply when pests first appear and prior to leaf damage or discoloration. Apply with ground application equipment in adequate water for uniform coverage.</li> </ul>
	• Do not apply via chemigation.
PLANT TOLERANCE	<ul> <li>Do not apply A1100.03 more than three times per season.</li> <li>A1100.03 has been evaluated for phytotoxicity on a wide range of ornamental plants. However, due to the large number of species and varieties of ornamental plants, it is impossible to test every one for tolerance to A1100.03. The professional user should determine if A1100.03 can be used safely prior to commercial use. In a small area, test the recommended rates on a small number of plants for phytotoxicity prior to widespread use. Before using A1100.03 in tank mixture with other products and adjuvants, test the mixture on a small number of plants for phytotoxicity prior to widespread use.</li> <li>Do not use A1100.03 on geraniums (<i>Pelargonium</i> sp.), <i>Peperomia, Dracaena,</i> and 'Classy', 'Attache', or 'Vogue'</li> </ul>

	<ul> <li>varieties of rose.</li> <li>Insufficient information on tolerance is available for the following ornamentals: lily-of-the-Incas (<i>Alstromoeria</i>), New Guinea impatiens, <i>Bacopa</i>, ferns, phlox, English ivy (Hedera helix), cyclamen, orchids[*], hoya[*], <i>Agyranthemum</i>, hydrangea, schefflera, <i>Matthiola</i> (stock), Mexican heather, <i>Lobelia</i>, fuschia, <i>Cordyline</i>, croton, neanthebella palm, and primula. It is recommended that A1100.03 not be used on these plants.</li> <li>Do not apply more than 2 fl oz per 100 gal per application or 4 fl oz per cropping cycle to chrysanthemum, Shasta daisy, snapdragon, impatiens, verbena, lantana, gerbera daisy, or marigolds.</li> <li>[*Not for Use in California]</li> </ul>
IRRIGATION TIMING	<ul> <li>If irrigation is used, conduct irrigation efficiently to prevent excessive loss of irrigation water through runoff. Time applications to allow sprays to dry prior to rain or sprinkler irrigation. Allow at least 24 hours between applications of product and any irrigation that results in surface water runoff into lakes, reservoirs, rivers, permanent streams, marshes, potholes, vernal pools, natural ponds, estuaries, or commercial fish farm ponds.</li> </ul>
ENDANGERED SPECIES	• The use of any pesticide in a manner that may kill or otherwise harm endangered species or adversely modify their habitat is a violation of Federal law.
RESTRICTIONS	<ul> <li>Do not use through irrigation systems.</li> <li>Do not use on vegetable gardens.</li> <li>Do not use on plants intended for use as feed or forage.</li> <li>Do not use on bearing fruit or nut trees.</li> <li>Maximum Application Rate for ornamentals for commercial production, residential trees and greenhouses: 0.125 lbs. ai/A per calendar year.</li> <li>For all crops and use sites do not use more than 0.35 lbs. spiromesifen per acre per year.</li> </ul>
PACKAGE HANDLING	A1100.03 is packaged in polyethylene containers. Do not allow product or containers to freeze.
	Y / MIXING / ORDER-OF-MIXING
	compatible with many registered pesticides and fertilizers or

- Allou.03 is physically and biologically compatible with many registered pesticides and fertilizers or micronutrients. When considering mixing All00.03 with other pesticides, or other additives, first contact your supplier for advice. For further information, contact your local Atticus, LLC representative. If your supplier and Atticus, LLC representative have no experience with the combination you are considering, you should conduct a test to determine physical compatibility. To determine physical compatibility, add the recommended proportions of each chemical with the same proportion of water as will be present in the chemical supply tank, into a suitable container, mix thoroughly and allow to stand for five minutes. If the combination remains mixed, or can be readily re-mixed, the mixture is considered physically compatible.
- A1100.03 may be used with other recommended pesticides, fertilizers and micronutrients. The proper mixing procedure for A1100.03 alone or in tank mix combinations with other pesticides is:
  - 1. Fill the spray tank 1/4 to 1/3 full with clean water;
  - 2. While recirculating and with the agitator running, add any products in PVA bags. Allow time for thorough mixing;

- 3. Continue to fill spray tank with water until 1/2 full;
- 4. Add any other wettable powder (WP) or wettable granules (WG) products;
- 5. Add the required amount of A1100.03, and any other "flowable" (FL or SC) type products;
- 6. Allow enough time for thorough mixing of each product added to tank;
- 7. If applicable, add any remaining tank mix components: emulsifiable concentrates (EC), fertilizers and micronutrients.
- 8. Fill spray tank to desired level and maintain constant agitation to ensure uniformity of spray mixture.
- Mix pesticides in areas not prone to runoff such as concrete mixing/loading pads, disked soil in flat terrain or graveled mix pads, or use a suitable method to contain spills and/or rinsate. Properly empty and triple-rinse pesticide containers at time of use.

# For Use in California:

Allow growth of a vegetative filter strip within 25-ft (on which this product should not be applied) along lakes, reservoirs, rivers, permanent streams, marshes, potholes, vernal pools, natural ponds, estuaries or commercial fish farm ponds. This requirement does not apply to retention or holding ponds used to collect and recycle water for irrigation.

[Optional Marketing Claims]

- For Greenhouse and Nursery Use
- Miticide/Insecticide

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Handle and open container in a manner as to prevent spillage.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, 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

#### CONTAINER HANDLING:

**[For containers \leq 5 gallons: Nonrefillable Container.** Do not reuse or refill this container. Triple 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 ¼ 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. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

**[For containers > 5 gallons: Nonrefillable container.** Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Turn the container or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

#### LIMITATION OF WARRANTY AND LIABILITY

**IMPORTANT: READ BEFORE USE.** Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. **CONDITIONS:** 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. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

**A1101.04** is a trademark of Atticus, LLC Forbid<sup>®</sup> [4F] is a registered trademark of Bayer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. **LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, neither ATTICUS, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

# {LANGUAGE ON LABEL AFFIXED TO CONTAINER}

# SPIROMESIFEN GROUP 23 INSECTICIDE/MITICIDE

# A1100.03[<sup>™</sup>]

[Alternate Brand Name: Refuse 4 F]

Contains spiromesifen, the active ingredient used in Forbid<sup>®</sup> 4F. A1100.03 is not manufactured, or distributed by Bayer Environmental Science, seller of Forbid<sup>®</sup> [4F].

ACTIVE INGREDIENT:	(% by weight)
Spiromesifen: 2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspir	o[4.4]non-3-en-4-yl
3, 3-dimethylbutanoate	45.2%
OTHER INGREDIENTS:	<u>54.8%</u>
TOTAL	

Contains 4 pounds of spiromesifen per US gallon (480 grams ai per liter).

# KEEP OUT OF REACH OF CHILDREN

# CAUTION

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.)

FIRST AID	
If inhaled:	<ul> <li>Move person to fresh air.</li> </ul>
	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration.</li> </ul>
	• Call a poison control center or doctor for further treatment advice.
If swallowed:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>
	• Do not induce vomiting unless told to do so by the poison control center or doctor.
	• Do not give anything by mouth to an unconscious person.
If on skin or clothing:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>
	• Call a poison control center or doctor for treatment advice.
<b>Note To Physician:</b> No specific antidote is known. Treat symptomatically. Have a product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER	
Have the pro	duct container or label with you when calling a poison control

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at **1-844-685-9173** for emergency medical treatment information.

#### For Chemical Emergency:

Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

**ENVIRONMENTAL HAZARDS:** This pesticide is toxic to fish and aquatic invertebrates. Avoid contamination of surface water through runoff or spray

drift. 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 cleaning equipment or disposing of equipment washwater.

**SURFACE WATER ADVISORY:** This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application. 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 loading of spiromesifen from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

**GROUNDWATER ADVIOSRY:** Degradates of spiromesifen have properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

PHYSICAL OR CHEMICAL HAZARDS: Do not mix or allow to come in contact with oxidizing or reducing agents. Hazardous chemical reaction may occur.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Handle and open container in a manner as to prevent spillage.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, 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

#### CONTAINER HANDLING:

**[For containers \leq 5 gallons: Nonrefillable Container.** Do not reuse or refill this container. Triple 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  $\frac{1}{2}$  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. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

[For containers > 5 gallons: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

See inside label booklet for additional Precautionary Statements and Directions for Use.

{Note to reviewer: If applicable commercially, the statement for use and disclaimer will appear on the base label of the final product packaging.}

Manufactured for: Atticus, LLC 940 NW Cary Parkway, Suite 200 Cary, NC 27513 EPA Reg. No.: 91234-XX EPA Est. No.: \_\_\_\_\_ NET CONTENTS: \_\_\_\_\_

# {Optional Marketing graphics}





