



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505T)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

91234-414

Date of Issuance:

1/27/26

NOTICE OF PESTICIDE:

☒ Registration
☐ Reregistration
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

A1104.01

Name and Address of Registrant (include ZIP Code):

Kristen Cianni
Atticus, LLC
940 NW Cary Parkway, Suite 200
Cary, NC 27513

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

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).

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.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

Continues page 2

Signature of Approving Official:

Elizabeth Fertich, Product Manager 04
Invertebrate-Vertebrate Branch 1,
Registration Division (7505T)

Date:

1/27/26

2. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 91234-414."
3. 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 these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. 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 06/14/2024

If you have any questions, please contact Kaitlin Saunders at 202-566-2890 or at Saunders.Kaitlin@epa.gov.

Enclosure

01/27/2026

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No. 91234-414

{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}

FENPYROXIMATE GROUP 21A INSECTICIDE

A1104.01 [™]

[Alternate Brand Name: Kurzel 5 EC, Crendell]

[Contains fenpyroximate, the active ingredient used in [Fujimite® 5EC] [and] [Portal®].].

ACTIVE INGREDIENT:

(% by weight)

Fenpyroximate: Benzoic acid, 4-[[[(E)-[(1,3-dimethyl-5-phenoxy-1H-pyrazol-4-yl)methylene] amino]oxy]methyl]-
1,1-dimethylethyl ester.....5.0%

OTHER INGREDIENTS*:95.0%

TOTAL 100.0%

Contains 0.4 lb. active ingredient per gallon

*Contains petroleum distillates.

KEEP OUT OF REACH OF CHILDREN

WARNING - AVISO

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 [additional] Precautionary Statements, and Directions for Use.]

[See below for additional Precautionary Statements]

FIRST AID	
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further advice.
NOTE TO PHYSICIAN	
Contains petroleum distillates. Vomiting may cause aspiration pneumonia.	
HOT LINE NUMBER	
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)

[A1104.01 is not manufactured, or distributed by Nichino America, Inc., seller of [Portal®] [and] [Fujimite® 5EC].]

{Note to reviewer: The Contains Statement and corresponding disclaimer will appear on the front panel in close proximity to each other, if used on the final product packaging.}

EPA Reg. No.: 91234-XX

EPA Est. No.:

Net Contents: [1, 2.5, 265 gal]

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

{LANGUAGE INSIDE BOOKLET}

PRECAUTIONARY STATEMENTS **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

WARNING - AVISO

Causes substantial but temporary eye injury. Harmful if swallowed. Harmful if inhaled. Do not get in eyes or on clothing. Avoid breathing spray mist. Avoid contact with skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of barrier laminate or Viton \geq 14 mils
- Shoes plus socks
- Protective eyewear

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Engineering Controls

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water.
- Remove PPE 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 very highly toxic to fish and aquatic invertebrates. For terrestrial uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having medium to high potential for reaching both surface water and aquatic sediment via runoff for several weeks 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 this chemical from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

Minimum Honey Bee Toxicity
Fenpyroximate is practically nontoxic to bees through acute contact and acute oral exposure when applied to listed crops according to the label directions.

PHYSICAL OR CHEMICAL HAZARDS

Do not mix or allow to come into contact with any oxidizing agent. 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.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

ENDANGERED SPECIES PROTECTION REQUIREMENTS

This product may have effects on endangered species. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. To obtain Bulletins, no more than six months before using this product, consult <http://www.epa.gov/espp/> or call 1-844-447-3813. You must use the Bulletin valid for the month in which you will apply the 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.

For early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, wear:

- Coveralls
- Chemical-resistant gloves made of barrier laminate or Viton ≥ 14 mils
- Shoes and socks
- Protective eyewear

PRODUCT INFORMATION

A1104.01 is used for the control of leafhoppers, mealybugs, mites, psylla, psyllids, and whiteflies. **A1104.01** stops mite feeding immediately after application. **A1104.01** controls all motile stages of mites by inhibiting cellular respiration in the mitochondrion of cells which results in rapid cessation of all biological activities including feeding and reproduction. Mortality of mites can be observed within 3-7 days after intoxication.

A1104.01 works primarily through contact action, so thorough spray coverage is necessary. Mix with sufficient water and apply as a foliar spray to obtain uniform coverage. Dense foliage or excessive growth will often prevent adequate coverage; adjust spray volumes accordingly. Treat plants when pests are immature or at a susceptible stage and populations are building before crop damage occurs.

Target Species	
Apple Rust Mite**	Mint Bud Mite
Asian Citrus Psyllid	Pacific Spider Mite
Avocado Brown Mite	Pear Psylla
Banks Grass Mite	Pear Rust Mite
Broad Mite	Pecan Leaf Scorch Mite
Carmine Mite	Persea Mite
Citricola Scale	Plum Nursery Mite
Citrus Bud Mite	Potato Leafhopper
Citrus Flat Mite[*]	Powdery Mildew**
Citrus Leafminer**	Six Spotted Mite
Citrus Red Mite	Strawberry Spider Mite
Citrus Rust Mite	Texas Citrus Mite
Citrus Thrips**	Tomato (Potato) Psyllid
Cyclamen Mite	Tomato Russet Mite
European Red Mite	Two-Spotted Spider Mite
Glassy-Winged Sharpshooter**	Variegated Leafhopper
Grape Leafhopper	White Apple Leafhopper
Hazelnut-Filbert Bud Mite[*]	Whiteflies**
Mcdaniel Mite	Willamette Spider Mite
Mealybug Species	

[*Not Registered for use by California]

**Suppression

APPLICATION DIRECTIONS

- Make applications immediately after the spray solution is prepared.
- Apply with properly calibrated spray equipment.
- Apply by ground or air using the water spray volume found in the **DIRECTIONS FOR USE** section of this label.
- Do not apply **A1104.01** through any type of irrigation system except those described in the **CHEMIGATION** section.
- For aerial equipment, use larger droplet size (greater than 200 microns).
- Thorough spray coverage is essential for mite and insect control.
- For best results, apply when pest populations are beginning to build, before reaching economic thresholds. Consult your local agricultural advisor or state cooperative extension service for further information.

CHEMIGATION

For Chemigation Use on Field Corn, Popcorn, Silage Corn, Seed Corn; Potato[*]

Apply this product alone or in combination with other products which are registered for application through irrigation systems.

- Apply this product only through center pivot, solid set, hand move, or moving wheel irrigation systems. Do not apply this product through any other type of irrigation system.
- Crop injury, lack of performance, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers, or other experts.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

- A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

[*Not Registered for use by California]

Chemigation Systems Connected to Public Water Systems

- Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

Sprinkler Chemigation

- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

Chemigation Calibration and Application Instructions

Apply **A1104.01** under the schedule specified in **the Field Corn, Popcorn, Silage Corn, Seed Corn; and Potato Use Directions**, not according to the irrigation schedule unless the events coincide.

The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler irrigation equipment. Check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler irrigation equipment.

Center Pivot Irrigation Equipment

Notes: (1)Use only drive systems which provide uniform water distribution. (2)Do not use end guns when chemigating with **A1104.01** to avoid non-uniform application. (3)Plug the first nozzle closest to the well head to protect the water source.

1. Determine the size of the area to be treated.
2. Determine the time required to apply $\frac{1}{4}$ - $\frac{1}{2}$ inch water over the area to be treated when the system and injection equipment are operated at normal pressures as specified by the equipment manufacturer. Run the system at 80 - 95% of the manufacturer's rated maximum travel speed.
3. Using water, determine the injection pump output when operated at normal line pressure.
4. Determine the amount of **A1104.01**, and any tank mix partners, required to treat the area covered by the irrigation system.
5. Add the required amount of **A1104.01**, any tank mix partners, and sufficient water to meet the injection time requirements to the solution tank. (See **MIXING DIRECTIONS** section of this label).
6. Make sure the system is fully charged with water before starting injection of the **A1104.01** solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
7. Maintain constant agitation in the solution tank during the injection period.
8. Inject the specified amount of **A1104.01** per acre continuously for one complete revolution of the system.
9. Stop the injection equipment after treatment is completed. Continue to operate the system until the **A1104.01** solution has cleared all the sprinkler heads.
10. Allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water.

Solid Set, Hand Move, and Moving Wheel Irrigation Equipment

1. Determine the acreage covered by the sprinklers.
2. Fill injector solution tank with plain water and calibrate the flow rate of the system to deliver the contents of the tank over a continuous 20-40 minute time interval.
3. Determine the amount of **A1104.01** required to treat the area covered by the irrigation system.
4. Add the required amount of **A1104.01**, and any other tank mix partners, into the same quantity of water used to calibrate the injection period. (See **MIXING DIRECTIONS** section of this label).
5. Operate the system at the same pressure and time interval established during the calibration.
6. Inject specified amount of **A1104.01** per acre for: (1) a continuous 20-40 minute period at the end of a regular irrigation set, or (2) as a continuous 20-40 minute injection as a separate application not associated with a regular irrigation to maximize retention of the pesticide by the foliage.
7. Maintain constant agitation in the solution tank during the injection period.
8. Stop injection equipment after treatment is completed. Continue to operate the system until the **A1104.01** solution has cleared the last sprinkler head. To ensure lines are flushed and free from remaining pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

USE OF ADJUVANTS

When thorough coverage is a concern, use a spray adjuvant to maximize uniformity of coverage and performance of **A1104.01**. Use a non-ionic activator type wetting, spreading or penetrating adjuvant or horticultural spray oil adjuvant. Do not use a dormant oil, or binder or sticker-type adjuvant. Use non-ionic adjuvants (NIS) containing at least 75% surfactant. Use crop oil concentrates (COC), methylated seed or vegetable oils (MSO), organosilicone

products (OS), or blends of these adjuvants containing at least 15% emulsifier/surfactant. Check compatibility of any adjuvant used with **A1104.01** before using. Follow the Directions for Use on each adjuvant product label for rates of use and use restrictions.

Application Restrictions

- Do not apply within 75 feet of fish-bearing waters.
- Use by air on citrus is limited to the states of Florida and Texas.
- For aerial use on citrus in Florida, do not apply within 150 feet of all aquatic areas.
- Do not use products with the same mode of action in consecutive applications.
- Do not plant rotational crops other than those listed on this label for 30 days following the last application of this product.
- Do not apply by Alternate Row Middle (ARM) spray method.

RESISTANCE MANAGEMENT

For resistance management, **A1104.01** contains a Group 21A insecticide/miticide. Any insect/mite population may contain individuals naturally resistant to **A1104.01** and other Group 21A insecticides/miticides. The resistant individuals may dominate the insect/mite population if this group of insecticides/miticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide/acaricides resistance, take the following steps:

- Rotate the use of **A1104.01** or other Group 21A insecticides/miticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides/acaricides 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/acaricide 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 resistance management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Atticus, LLC at 984-465-4800.

MIXING DIRECTIONS

A1104.01 Alone: Shake well before using. Begin with clean equipment. Fill spray tank with $\frac{3}{4}$ of the amount of water needed for the intended application and then turn on agitation. Pour the product on the surface of water in the spray tank. Add the balance of the water to the spray tank with agitation running. Keep agitation running during filling and spraying operations. If spraying must be stopped before emptying the sprayer, resume agitation before spraying the remainder of the load. When using a closed loading system, rinse the extraction probe within the pesticide container prior to removal of the probe.

A1104.01 Tank Mixtures: Shake well before using. Read and follow all label directions for each tank mix product prior to any tank mixing with **A1104.01**. This product can be mixed with other registered pesticides for use on labeled crops or sites, in accordance with the most restrictive use directions and precautions. Follow all use directions as listed above under **A1104.01** alone with the following exception: after the **A1104.01** is thoroughly mixed and the tank is $\frac{3}{4}$ full, add wettable powder, soluble powder, flowable, emulsifiable concentrate, or soluble liquid product as specified on their labels while maintaining agitation. Then continue adding water to the tank to achieve the desired level, while maintaining agitation. When using a closed loading system, rinse the extraction probe within the pesticide container prior to removal of the probe.

If you have no experience with the combination you are considering, conduct a test to determine physical compatibility. To determine physical compatibility, add the proportions of each chemical with the proportion of water specified on the label 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.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

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. For all applications, applicators are required to use a medium or coarser droplet size (ASABE S572.1 standard). 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.

Controlling Droplet Size - Ground Boom

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size - Aircraft

- Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

BOOM HEIGHT – Ground Boom

Apply with the nozzle height recommended by the manufacturer but no more than 3 feet above the ground or crop canopy. For ground equipment, the boom needs to be level with the crop and have minimal bounce.

NOZZLE ORIENTATION - Aircraft

Nozzles must be oriented, so the spray is directed toward the back of the aircraft. Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.

RELEASE HEIGHT - Aircraft

Do not release spray at a height greater than 10 feet above the vegetative canopy unless a greater application height is necessary for pilot safety. Applications more than 10 feet above the vegetative canopy increases the potential for spray drift.

BOOM LENGTH - Aircraft

The boom length must not exceed 75% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters. Using shorter booms decreases drift potential. Applicators must use ½ swath displacement upwind at the downwind edge of the field for aerial applications and apply only when wind speed is 3 to 10 mph.

SHIELDED SPRAYERS

Shielding the boom or 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.

WIND

To avoid spray drift, DO NOT apply when wind speed is greater than 10 mph. Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

TEMPERATURE AND HUMIDITY

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

TEMPERATURE INVERSIONS

To avoid spray drift, DO NOT apply during periods of temperature inversions. Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperatures 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.

SENSITIVE AREAS

Only apply the pesticide when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

Note: Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment manual to determine if use of an air assisted sprayer is required.

AIR ASSISTED (AIR BLAST) TREE AND VINE SPRAYERS

Air assisted tree and vine sprayers carry droplets into the canopy of trees and vines via a radially or laterally directed air stream. These sprayers are not suitable for applying herbicides. In addition to the general drift management practices already described, the following specific practices will further reduce the potential for drift:

- Adjust the deflectors and aiming devices so that spray is only directed into the canopy.
- Block off upward pointed nozzles when there is no overhanging canopy.
- Use only enough air volume to penetrate the canopy and provide good coverage.
- Do not allow spray to go beyond the edge of the cultivated area. Spray the outside row only from outside the planting.

APPLICATION RATE CHART FOR A1104.01

Almond; Pistachio (Use Permitted West of the Mississippi River Only)

PEST	RATE (pt/ACRE)	USE DIRECTIONS
Mites (See Target Species)	1.5 to 4.0 (0.08 to 0.20 lb. ai)	WEST OF THE MISSISSIPPI RIVER Apply by ground using a minimum of 100 gallons of water per acre. [*]Apply by air using a minimum of 10 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> • Do not apply through any type of irrigation system. • Do not apply more than 8.0 pints (0.40 lb. ai) per acre per year. • Do not make more than 2 applications per year. • Allow 14 days between applications. • Preharvest Interval (PHI): 14 days. [*Not Registered for use by California]		

Banana[*]

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species) Whiteflies (Suppression)	1.0 to 2.0 (0.05 to 0.10 lb. ai)	Apply by ground using a minimum of 70 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. • Do not make more than 2 applications per year. • Allow 7 days between applications. • Preharvest Interval (PHI): 7 days. [*Not Registered for use by California]		

Bean, Succulent

bean, snap; blackeyed pea, succulent shelled; broad bean, succulent shelled; chickpea, succulent shelled; cowpea, succulent shelled; crowder pea, succulent shelled; goa bean, succulent shelled; lablab bean, succulent shelled; lima bean, succulent shelled; succulent bean, succulent shelled; southern pea, succulent shelled; soybean, edible, succulent shelled; and velvet bean, succulent shelled.

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species)	2.0 (0.10 lb. ai)	Apply by ground using a minimum of 30 gallons of water per acre.
Whiteflies (Suppression)		Apply by air using a minimum of 5 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply through any type of irrigation system. Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. Do not make more than 2 applications per year. Allow 14 days between applications. Preharvest Interval (PHI): 1 day. 		

Berry Subgroup, Low-Growing (Crop Subgroup 13-07G) excluding Cranberry

bearberry; bilberry; blueberry, lowbush; cloudberry; lingonberry; muntries; partridgeberry; strawberry; cultivars, varieties, and/or hybrids of these

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species)	1.0 to 2.0 (0.05 to 0.10 lb. ai)	Apply by ground using a minimum of 25 gallons of water per acre.
Whiteflies (Suppression)		When using an electro-static sprayer, less than 25 gallons of water per acre may be used; however, do not use less than 10 gallons of water per acre. Temporary pinking of immature green berries may be observed after an A1104.01 application on certain strawberry varieties. This effect is transient and does not affect fruit sizing, color or quality. Avoid puddling of spray solution on plastic mulch as this can potentially result in underside scarring of fruit in direct contact with the plastic.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply by air. Do not apply through any type of irrigation system. Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. Do not make more than 2 applications per year. Allow 14 days between applications. Preharvest Interval (PHI): 1 day 		

Bushberry Subgroup (Crop Subgroup 13-07B) excluding Highbush Cranberry

Aronia berry; blueberry, highbush; blueberry, lowbush; buffalo currant; Chilean guava; currant, black; currant, red; elderberry; European barberry; gooseberry; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); lingonberry; native currant; salal; sea buckthorn; cultivars, varieties, and/or hybrids of these

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species) Whiteflies (Suppression)	1.0 to 2.0 (0.05 to 0.10 lb. ai)	Apply by ground using a minimum of 25 gallons of water per acre. When using an electro-static sprayer, less than 25 gallons of water per acre may be used; however, do not use less than 10 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply by air. Do not apply through any type of irrigation system. Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. Do not make more than 2 applications per year. Allow 14 days between applications. Preharvest Interval (PHI): 1 day 		

Caneberry Subgroup (Crop Subgroup 13-07A)

Blackberry (including Andean blackberry, arctic blackberry, bingleberry, black satin berry, boysenberry, brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyenne blackberry, common blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, evergreen blackberry, Himalayaberry, hullberry, lavacaberry, loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, mora, mures deronce, nectarberry, Northern dewberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, Southern dewberry, tayberry, youngberry, zarzamora); raspberry, black and red; wild raspberry; cultivars, varieties, and/or hybrids of these.

PEST	RATE (pt/A)	USE DIRECTIONS
Willamette spider mite	1.5 to 2.0 (0.08 to 0.10 lb. ai)	Apply by ground using a minimum of 30 gallons of water per acre.
Mites (See Target Species) Mealybugs Powdery Mildew (Suppression)	2.0 (0.10 lb. ai)	For vines with a heavy canopy, or in high pressure situations, higher water volumes are recommended.
Leafhopper	1.0 to 2.0 ¹ (0.05 to 0.10 lb. ai)	
Whiteflies	1.0 to 2.0 (0.05 to 0.10 lb. ai)	
USE RESTRICTIONS <ul style="list-style-type: none">• Do not apply by air.• Do not apply through any type of irrigation system.• Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year.• Do not make more than 2 applications per year.• Allow 14 days between applications.• Pre-harvest Interval (PHI): 1 day.		

¹Use higher rate for dense foliage. Best control of leafhoppers is achieved by applications when majority of the population is in an immature development stage.

Citrus Fruit Group (Crop Group 10-10)

Australian desert lime; Australian finger lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin, clementine); tangor; trifoliate orange; uniq fruit; cultivars, varieties, and/or hybrids of these

PEST	RATE (pt/A)	USE DIRECTIONS
Citrus Rust Mite ^[1]	4.0 (0.20 lb. ai)	Apply by ground using a minimum of 100 gallons of water per acre. For full size trees, use a minimum of 200 gallons of water per acre.
Asian Citrus Psyllid ² Citrus Leafminer (Suppression) Citrus Thrips (Suppression) Leafhoppers Mealybugs Other Mites (See Target Species)	2.0 to 4.0 (0.10 to 0.20 lb. ai)	In Florida and Texas, apply by air using a minimum of 10 gallons of water per acre.

USE RESTRICTIONS

- Do not apply by air except in Florida and Texas.
- For aerial application to citrus in Florida, do not apply within 150 feet of all aquatic areas.
- Do not apply through any type of irrigation system.
- Do not apply to citrus nurseries or citrus in greenhouses.
- Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year.
- Do not make more than 2 applications per year.
- Allow 14 days between applications.
- **Preharvest Interval (PHI):** 3 days.

^[1] Control on citrus fruit limited up to 14 days.]

² For best results, use for control of adults and nymphs present at time of application when newly expanding foliage flush is present.

Cottonseed Subgroup (Crop Subgroup 20C)

Cottonseed; cultivars, varieties, and/or hybrids of these

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species)	Early Season ¹ (When cotton is less than 10- inches in height) 0.4 to 1.0 ^[2] (0.02 to 0.05 lb. ai)	Apply by ground using a minimum of 10 gallons of water per acre. Apply by air using a minimum of 3 gallons of water per acre. As canopy density increases use of higher water volume will assure better coverage.
	Mid-Season (When cotton is more than 10- inches in height) 1.0 to 2.0 (0.05 to 0.10 lb. ai)	
Whiteflies (Suppression)	2.0 (0.10 lb. ai)	

USE RESTRICTIONS

- Do not apply through any type of irrigation system.
- Do not apply more than 2.0 pints (0.10 lb. ai) per acre per year.
- Do not make more than 2 applications per year.
- Allow 14 days between applications.
- **Preharvest Interval (PHI):** 14 days.

¹ For early season use, when cotton is less than 10 inches in height, A1104.01 may also be applied as a directed spray using ground spray equipment.

[² When applying by ground equipment apply as a directed spray for best results.]

Field Corn, Popcorn, Silage Corn, Seed Corn [*]

(Limited to the states of Arizona, California, Colorado, Hawaii, Kansas, New Mexico, Oklahoma, and Texas)

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species)	1.0 to 2.0 (0.05 to 0.10 lb. ai)	Apply by ground using a minimum of 10 gallons of water per acre. Apply by air using a minimum of 3 gallons of water per acre. Apply by chemigation using a minimum of 0.10 to 0.25 acre-inches of water (see CHEMIGATION for additional information).
USE RESTRICTIONS <ul style="list-style-type: none"> • Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. • Do not make more than 2 applications per year. • Allow 14 days between applications. • Preharvest Interval (PHI): 14 days for forage, silage, stover, and grain. 		

Fruiting Vegetable Group (Crop Group 8-10)

African eggplant; bush tomato; cocona; currant tomato; eggplant; garden huckleberry; goji berry; groundcherry; martynia; naranjilla; okra; pea eggplant; pepino; pepper, bell; pepper, nonbell; roselle; scarlet eggplant; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species) Tomato (Potato) psyllid Whiteflies*	2.0 (0.10 lb. ai)	Apply by ground using a minimum of 20 gallons of water per acre. Apply by air using a minimum of 5 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> • Do not apply through any type of irrigation system. • Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. • Do not make more than 2 applications per year. • Allow 14 days between applications. • Preharvest Interval (PHI): 1 day 		

*Control on tomato in Florida only. Suppression only on all other crops.

Hops

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species)	2.0 to 3.0 (0.10 to 0.15 lb. ai)	<p>Apply by ground using a minimum of 100 gallons of water per acre.</p> <p>For best results, apply before mite populations exceed 5 mites per leaf.</p> <p>NOTE: Leaf yellowing may occur when A1104.01 is combined with spray oil in excess of 1% of the spray volume. If this symptom occurs, it is usually more pronounced on newly expanding leaves. This symptom may occur in plants under stress and is worsened by certain conditions including the following:</p> <ul style="list-style-type: none"> • High Temperatures (air temperatures exceeding 90°F at the time of application or within a few days after application). • Wet soil conditions and high humidity (rainy, misty, or foggy weather within a few days after application). • Storm damage (including hail and wind).
USE RESTRICTIONS <ul style="list-style-type: none"> • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply more than 6.0 pints (0.30 lb. ai) per acre per year. • Do not make more than 2 applications per year. • Allow 14 days between applications. • Preharvest Interval (PHI): 14 days 		

Leaf Petiole Vegetable Subgroup (Crop Subgroup 22B)[*]

Cardoon; celery; celery, Chinese; fuki; rhubarb; udo; zuiki; cultivars, varieties, and hybrids of these commodities

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species) Whiteflies (Suppression)	1.0 to 2.0 (0.05 to 0.10 lb. ai)	Apply by ground using a minimum of 25 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. • Do not make more than 2 applications per year. • Allow 14 days between applications. • Preharvest Interval (PHI): 1 day 		

[*Not Registered for use by California]

Mamey Sapote; Sapodilla[*]

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species) Whiteflies (Suppression)	1.0 to 2.0 (0.05 to 0.10 lb. ai)	Apply by ground using a minimum of 95 gallons of water per acre. Apply by air using a minimum of 50 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply through any type of irrigation system. Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. Do not make more than 2 applications per year. Allow 14 days between applications. Preharvest Interval (PHI): 1 day [*Not Registered for use by California]		

Melon Subgroup (Crop Subgroup 9A)

citron melon; muskmelon (hybrids and/or cultivars of Cucumis melo) (includes true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon); watermelon (includes hybrids and/or varieties of Citrullus lanatus)

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species) Whiteflies (Suppression)	2.0 (0.10 lb. ai)	Apply by ground using a minimum of 20 gallons of water per acre. [*]Apply by air using a minimum of 5 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply through any type of irrigation system. Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. Do not make more than 2 applications per year. Allow 14 days between applications. Preharvest Interval (PHI): 3 days. [*Not Registered for use by California]		

[Nonbearing Deciduous Fruit, Tree Nut, and Vines][*]

PEST	RATE (pt/A)	USE DIRECTIONS
Leafhoppers Mealybugs Mites (See Target Species)	1.0 to 2.0 (0.05 to 0.10 lb. ai)	Apply by ground using a minimum of 75 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply by air. Do not apply to citrus nurseries or citrus in greenhouses. Do not apply through any type of irrigation system. Do not apply more than 2.0 (0.10 lb. ai) pints per acre per year. Do not make more than 2 applications per year. Do not harvest edible crops for 12 months following application unless the crop is listed on the label. Allow 14 days between applications. [*Not Registered for use by California]		

{OR the following use directions for Nonbearing Deciduous Fruit, Tree nut, and Vines, which specifies a single application rate at the top of the range rate. In this case, only one application per year will be permitted to align with maximum dosage allowed per year. Selection of use directions depends on the Alternate Brand Name, FPL, areas of the U.S. where marketed, and specific target species that may affect management requirements.}

[Nonbearing Deciduous Fruit, Tree Nut, and Vines]

PEST	RATE (pt/A)	USE DIRECTIONS
Leafhoppers Mealybugs Mites (See Target Species)	2.0 (0.10 lb. ai)	Apply by ground using a minimum of 75 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply by air. Do not apply to citrus nurseries or citrus in greenhouses. Do not apply through any type of irrigation system. Do not apply more than 2.0 pints (0.10 lb. ai) per acre per year. Do not make more than 1 application per year. Do not harvest edible crops for 12 months following application unless the crop is listed on the label. 		

Peanut[*]

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species) Leafhoppers Whiteflies (Suppression)	1.0 to 2.0 (0.05 to 0.10 lb. ai)	Apply by ground using a minimum of 10 gallons of water per acre. Apply by air using a minimum of 3 gallons of water per acre. As canopy density increases use of higher water volume will assure better coverage.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply through any type of irrigation system. Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. Do not make more than 2 applications per year. Allow 14 days between applications. Preharvest Interval (PHI): 1 day <p>[*Not Registered for use by California]</p>		

Peppermint, tops; Spearmint, tops

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species)	1.0 to 2.0 (0.05 to 0.10 lb. ai)	Apply by ground using a minimum of 25 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply by air. Do not apply through any type of irrigation system. Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. Do not make more than 2 applications per year. Allow 7 days between applications. Preharvest Interval (PHI): 1 day 		

Pome Fruit Group (Crop Group 11-10)

apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these

PEST	RATE (pt/A)	USE DIRECTIONS
Leafhoppers Mealybugs Mites (See Target Species)	1.0 to 2.0 (0.05 to 0.10 lb. ai) [In CA: 2.0 (0.10 lb. ai)]	Apply by ground using a minimum of 100 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply by air. Do not apply through any type of irrigation system. Do not apply by Alternate Row Middle (ARM) spray method. Do not apply more than 2.0 pints (0.10 lb. ai) per acre per year. Do not make more than 2 applications per year. Allow 14 days between applications. Preharvest Interval (PHI): 14 days. 		
PEST	RATE (pt/A)	USE DIRECTIONS
Leafhoppers Mealybugs Mites (See Target Species) Pear psylla	2.0 (0.10 lb. ai)	Apply by ground using a minimum of 100 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply by air. Do not apply through any type of irrigation system. Do not apply by Alternate Row Middle (ARM) spray method. Do not apply more than 2.0 pints (0.10 lb. ai) per acre per year. Do not make more than 1 application per year. Preharvest Interval (PHI): 14 days. 		

Potato

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species) Tomato (Potato) psyllid Potato leafhopper	2.0 (0.10 lb. ai)	Apply by ground using a minimum of 20 gallons of water per acre. Apply by air using a minimum of 5 gallons of water per acre. [*] Apply by chemigation using a minimum of 0.10 to 0.25 acre-inches of water (see CHEMIGATION for additional information).
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. Do not make more than 2 applications per year. Allow 7 days between applications. Preharvest Interval (PHI): 7 days. 		
[*Not Registered for use by California]		

Small Fruit Vine Climbing Subgroup except fuzzy kiwifruit (Crop Subgroup 13-07F)

Amur river grape; gooseberry; grape; kiwifruit, hardy; maypop; schisandra berry; cultivars, varieties, and/or hybrids of these

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species) Mealybugs Powdery Mildew (Suppression)	2.0 (0.10 lb. ai)	Apply by ground using a minimum of 50 gallons of water per acre. When using an electro-static sprayer, less than 50 gallons of water per acre may be used; however, do not use less than 5 gallons of water per acre.
Willamette spider mite	1.5 to 2.0 (0.08 to 0.10 lb. ai)	For vines with a heavy canopy, or in high pressure situations, use higher water volumes. If lower water volume amounts are used, tractor speed must be reduced to ensure complete coverage.
Leafhoppers	1.0 to 2.0 ¹ (0.05 to 0.10 lb. ai)	
USE RESTRICTIONS <ul style="list-style-type: none">• Do not apply by air.• Do not apply through any type of irrigation system.• Do not apply more than 2.0 pints (0.10 lb. ai) per acre per year.• Do not make more than 2 applications per year.• Allow 14 days between applications.• Preharvest Interval (PHI): 14 days.		

¹Use 2.0 pints (0.10 lb. ai) per acre for dense foliage. Best control of leafhoppers is achieved by applications when majority of the population is in an immature development stage.

Squash/Cucumber Subgroup (Crop Subgroup 9B) [*]

Chayote (fruit); Chinese waxgourd (Chinese preserving melon); cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica* spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber); pumpkin; squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash)

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species) Tomato (Potato) psyllid Whiteflies (Suppression)	1.0 to 2.0 (0.05 to 0.10 lb. ai)	Apply by ground using a minimum of 40 gallons of water per acre. Apply by air using a minimum of 10 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply through any type of irrigation system. Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. Do not make more than 2 applications per year. Allow 14 days between applications. Preharvest Interval (PHI): 1 day. [*Not Registered for use by California]		

Stone Fruit Group (Crop Group 12-12)

apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species) Leafhoppers	2.0 (0.10 lb. ai)	Apply by ground using a minimum of 80 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply by air. Do not apply through any type of irrigation system. Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. Do not make more than 2 applications per year. Allow 14 days between applications. Preharvest Interval (PHI): 7 days. 		

Tree Nut Group (Crop Group 14-12)

[(Use Permitted West of the Mississippi River)] (Excluding Almond and Pistachio)

African nut-tree; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species)	1.5 to 4.0 (0.08 to 0.20 lb. ai)	(WEST OF THE MISSISSIPPI RIVER) Apply by ground using a minimum of 100 gallons of water per acre. [*]Apply by air using a minimum of 10 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply through any type of irrigation system. Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. Do not make more than 2 applications per year. Allow 14 days between applications. Preharvest Interval (PHI): 14 days. [*Not Registered for use by California]		

Tree Nut Group (Crop Group 14-12)
[(Use Permitted East of the Mississippi River)]

African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species)	2.0 (0.10 lb. ai)	[EAST OF THE MISSISSIPPI RIVER] Apply by ground using a minimum of 100 gallons of water per acre. [*]Apply by air using a minimum of 10 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply through any type of irrigation system. Do not apply more than 2.0 pints (0.10 lb. ai) per acre per year. Do not make more than 1 application per year. Preharvest Interval (PHI): 14 days. [*Not Registered for Use by California]		

Tropical and Subtropical, Medium to Large Fruit, Smooth, Inedible Peel Subgroup 24B excluding Banana

Abiu; akee apple; avocado; avocado, Guatemalan; avocado, Mexican; avocado, West Indian; bacury; binjai; canistel; cupuacu; etambe; jatoba; kei apple; langsai; lanjui; lucuma; mabolo; mango; mango, horse; mango, Saipan; mangosteen; paho; papaya; pawpaw, common; pelipisan; pequi; pequia; persimmon, American; plantain; pomegranate; poshte; quandong; sapote, black; sapote, green; sapote, white; sataw; screw-pine; star apple; tamarind-of-the-Indies; wild loquat; cultivars, varieties, and hybrids of these commodities

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species) Citrus flat mites Whiteflies (Suppression)	1.0 to 2.0 (0.05 to 0.10 lb. ai)	Apply by ground using a minimum of 95 gallons of water per acre. Apply by air using a minimum of 50 gallons of water per acre. As canopy density increases use of higher water volume will assure better coverage.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply through any type of irrigation system. Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. Do not make more than 2 applications per year. Allow 14 days between applications. Preharvest Interval (PHI): 1 day 		

Tuberous and Corm Vegetable Subgroup (Crop Subgroup 1C) excluding Potato

arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; canna, edible (Queensland arrowroot); cassava, bitter and sweet; chayote (root); chufa; dasheen (taro); ginger; leren; sweet potato; tanier (cocoyam); turmeric; yam bean (jicama, manioc pea); yam, true

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species) Tomato (Potato) psyllid Potato leafhopper	2.0 (0.10 lb. ai)	Apply by ground using a minimum of 20 gallons of water per acre. Apply by air using a minimum of 5 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply through any type of irrigation system. Do not apply more than 4.0 pints (0.20 lb. ai) per acre per year. Do not make more than 2 applications per year. Allow 7 days between applications. Preharvest Interval (PHI): 7 days. 		

Greenhouse Cucumber

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species) Tomato (Potato) psyllid Whiteflies (Suppression)	1.0 to 2.0 (0.05 to 0.10 lb. ai)	Apply by ground using a minimum of 100 gallons of water per acre. Apply in sufficient water to obtain complete coverage of all plant parts. Make applications with high volume or low volume ground equipment only. Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator's manual, spray nozzle catalogs and/or your crop advisor for more information.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not use products with the same mode of action in consecutive applications. Do not apply through any type of irrigation system. Do not apply in Ultra Low Volume Equipment. Do not apply more than 2.0 pints (0.10 lb. ai) per acre crop cycle. Do not make more than 1 application per crop cycle. Do not make more than 2 applications per year. Preharvest Interval (PHI): 7 days. 		

Greenhouse Tomato

PEST	RATE (pt/A)	USE DIRECTIONS
Mites (See Target Species) Tomato (Potato) psyllid Whiteflies (Suppression)	2.0 (0.10 lb. ai)	Apply by ground using a minimum of 100 gallons of water per acre. Apply in sufficient water to obtain complete coverage of all plant parts. Make applications with high volume or low volume or ultra-low volume (thermal and non-thermal foggers, misters, etc.) ground equipment only. Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator's manual, spray nozzle catalogs and/or your crop advisor for more information.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not use products with the same mode of action in consecutive applications. Do not apply through any type of irrigation system. Do not apply in Ultra Low Volume Equipment. Do not apply more than 4.0 pints (0.20 lb. ai) per acre per crop cycle. Do not make more than 2 applications per crop cycle. Do not make more than 4 applications per year. Allow 14 days between applications. Preharvest Interval (PHI): 1 day. 		

Ornamental Trees, Vines, Shrubs, Foliage, and Flowering Plants[*]

PEST	RATE (pt/A)	USE DIRECTIONS
Leafhoppers Mealybugs Mites (See Target Species)	1.0 to 2.0 (0.05 to 0.10 lb. ai)	Apply by ground using a minimum of 50 gallons of water per acre.
USE RESTRICTIONS <ul style="list-style-type: none"> Do not apply by air. Do not apply through any type of irrigation system. Do not apply to citrus nurseries or citrus in greenhouses. Do not apply more than 2.0 pints (0.10 lb. ai) per acre per year. Allow 14 days between applications. 		

[*Not Registered for use by California]

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 and pets, preferably in a locked storage area.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the 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 plastic 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 plastic 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.]

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.

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.

[A1104.01 is a trademark of Atticus, LLC.]

[[Fujimite] [and] [Portal] [is a] [are] registered trademark[s] of Nichino America, Inc.]

{LANGUAGE ON LABEL AFFIXED TO CONTAINER}

FENPYROXIMATE	GROUP	21A	INSECTICIDE
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A1104.01[™]

[Alternate Brand Name: Kurzel 5 EC, Crendell]

[Contains fenpyroximate, the active ingredient used in [Fujimite® SEC] [and] [Portal®].]

ACTIVE INGREDIENT: (% by weight)
Fenpyroximate: Benzoic acid, 4-[[[(E)-[(1,3-dimethyl-5-phenoxy-1H-pyrazol-4-yl)methylene] amino]oxy]methyl]-1,1-dimethylethyl ester.....5.0%
OTHER INGREDIENTS:95.0%
TOTAL100.0%
Contains 0.4 lb. active ingredient per U.S. gallon
*Contains petroleum distillates

KEEP OUT OF REACH OF CHILDREN
WARNING - AVISO

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 in eyes:	<ul style="list-style-type: none">Hold eye open and rinse slowly and gently with water for 15-20 minutes.Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none">Immediately call a poison control center or doctor.Do not induce vomiting unless told to do so by the poison control center or doctor.Do not give any liquid to the person.Do not give anything by mouth to an unconscious person.
If on skin or clothing:	<ul style="list-style-type: none">Take off contaminated clothing.Rinse skin immediately with plenty of water for 15-20 minutes.Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none">Move person to fresh air.If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.Call a poison control center or doctor for treatment advice.
NOTE TO PHYSICIAN	
Contains petroleum distillates. Vomiting may cause aspiration pneumonia.	
HOT LINE NUMBER	
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
WARNING - AVISO

Causes substantial but temporary eye injury. Harmful if swallowed. Harmful if inhaled. Do not get in eyes or on clothing. Avoid breathing spray mist. Avoid contact with skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS: This pesticide is very highly toxic to fish and aquatic invertebrates. For terrestrial uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.
This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having medium to high potential for reaching both surface water and aquatic sediment via runoff for several weeks 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 this chemical from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

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

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See inside label booklet for additional Precautionary Statements and Directions for Use.
[A1104.01 is not manufactured, or distributed by Nichino America, Inc., seller of [Portal®] [and] [Fujimite® SEC].]

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

EPA Reg. No.: 91234-XX
EPA Est. No.:
NET CONTENTS: [1, 2.5, 265 gal]

{Optional Marketing graphics}

