Mr Nicholas Wright AgraQuest Inc 1540 Drew Avenue Davis, California 95618

AUG 23 2012

Subject

AgraQuest Inc

QRD 452, EPA Registration No 69592-25

Label Amendment to Add Brand Name and to Clarify Aerial Application Directions

D# 464794, Application Dated 5/10/12

Dear Mr Wright

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(7)(A), is acceptable provided that you

- Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data
- 2 Submit two (2) copies of your final printed labeling before you release the product for shipment Final printed labeling means the label or labeling of the product when distributed or sold Clearly legible reproductions or photo reductions will be accepted for unusual labels, such as those silk-screened directly onto glass or metal containers or large bags or drum labels

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(b) Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions

If you have any questions contact Chris Pfeifer at 703-308-0031 or by email at <a href="mailto:pfeifer chris@epa gov">pfeifer chris@epa gov</a> A stamped copy of the label is enclosed for your records

Sincerely,

Linda A Hollis, Chief

Biochemical Pesticides Branch

Biopesticides and Pollution

Prevention Division (7511P)

Enclosure

	CONCURRENCES						
SYMBOL 🕨	75118						
SURNAME >	PFEIFER						
DATE	8/22/2						

EPA Form 1320-1A (1/90)

Printed on Recycled Paper

# **QRD 452**

## [Alternate Brand Names REQUIEM® EC, METRONOME™ EC]

## Master Label

Sub-Label A Agricultural/Commercial Use

Sub-Label B Greenhouse & Nursery/Commercial Use

## **Active Ingredient**

Terpene Constituents of the Extract of Chenopodium ambrosioides near ambrosioides as Synthetically Manufactured
Other Ingredients
Total

16 75%

83 25%

100 0%

## KEEP OUT OF REACH OF CHILDREN

## **CAUTION**

EPA Reg No 69592 25

EPA Establishment No 69592 MEX 1

Manufactured By AgraQuest, Inc 1540 Drew Avenue Davis, California 95618 (530) 750-0150

**ACCEPTED** 

AUG 232012

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg No 67592-25

# **QRD 452**

(Alternate Brand Name: REQUIEM® EC)

Sub-Label A

For Agricultural / Commercial Use Only Not For Residential Use

# REQUIEM® EC

INSECTICIDE AND ACARICIDE FOR CONTROL OR SUPPRESSION OF APHIDS, THRIPS, WHITEFLIES, PLANT-FEEDING MITES, MEALY BUGS, LEAFMINERS, LYGUS BUGS, SCALE, LEAF HOPPERS, AND LEPIDOPTEROUS INSECTS IN AGRICULTURAL CROPS

NOT FOR RESIDENTIAL USE

## **Active Ingredient**

Terpene Constituents of the Extract of Chenopodium ambrosioides near ambrosioides as Synthetically Manufactured
Other Ingredients
Total

16 75% 83 25%

100 0%

## KEEP OUT OF REACH OF CHILDREN

## **CAUTION**

	FIRST AID		
<ul> <li>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</li> <li>Call a poison control center or doctor for further treatment advice</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 further treatment advice</li> </ul>			
	HOT LINE NUMBER		
Have the product container	CHEMTREC (800) 424-9300 (24 hours) or label with you when calling a poison control center or doctor or going for treatment		

See side/back panels for additional precautionary statements

EPA Reg No 69592 25

EPA Establishment No 69592 MEX 1

Net Contents 2 5 gallon (320 fl oz) (9 46 L) 1 gallon (128 fl oz) (3 78 L)]

USE OF PRODUCT INDICATES ACCEPTANCE OF "CONDITIONS FOR SALE AND WARRANTY"

Manufactured By AgraQuest, Inc 1540 Drew Avenue Davis, California 95618 (530) 750-0150

## PRECAUTIONARY STATEMENTS

#### HAZARD TO HUMANS AND DOMESTIC ANIMALS

CAUTION Avoid contact with skin, eyes or clothing Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco Remove and wash contaminated clothing before reuse Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals Wear the appropriate Personal Protective Equipment (PPE)

## PERSONAL PROTECTIVE EQUIPMENT

Applicators mixers, loaders and other handlers must wear

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- Shoes plus socks
- Protective eyewear
- Coveralls for high-pressure handwand and groundboom applicators
- For overhead exposure wear chemical resistant headgear
- For greenhouse uses, applicators and other handlers must wear a NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE filter

Follow the 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

Engineering Controls When handlers use enclosed cabs in a manner that meets 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 immediately if pesticide gets inside Then wash thoroughly and put on clean clothing
- 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 product is toxic to 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 Do not contaminate water when disposing of equipment washwater or rinsate

Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not apply when weather conditions favor drift or runoff from treated areas. Do not apply when a rain event is expected within 2 hours. Groundboom and air-blast applications must maintain a spray buffer of 15 feet from any water body. Aerial applications must maintain a spray buffer of 400 feet from any water body. See the Directions for Use for details

## **DIRECTIONS FOR USE**

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

READ THE ENTIRE LABEL USE STRICTLY IN ACCORDANCE WITH THE LABEL FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT CONTROL, AND/OR ILLEGAL RESIDUES

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.

## 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, greenhouses and handlers of agricultural insecticides. 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 4 hours

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- Shoes plus socks

#### SHAKE WELL BEFORE USE

#### **GENERAL INFORMATION**

REQUIEM® EC is a contact insecticide/acaricide for use in the control or suppression of many foliage feeding pests including aphids, thrips, plant-feeding mites, whiteflies, mealy bugs, leafminers, lygus bugs, scale, leaf hoppers, and lepidopterous insects infesting labeled crops. The emulsifiable concentrate of REQUIEM EC must be mixed with water and applied as a foliar spray with equipment equipped for conventional insecticide spraying.

REQUIEM EC is toxic to aquatic invertebrates. Users must maintain the buffer zones specified in

the application instruction sections for ground and aerial applications. Do not apply when a rain event is expected within 2 hours

Do not apply this product through any type of irrigation system

## IMPORTANT READ CONDITIONS FOR SALE AND WARRANTY BEFORE USE

#### **APPLICATION INSTRUCTIONS**

General Use REQUIEM EC early in the pest cycle when local thresholds are reached or before insects reach damaging levels REQUIEM EC is a contact insecticide and thorough coverage is necessary for optimum control. Use appropriate nozzles and nozzle configurations, along with sufficient spray volume to achieve thorough coverage. Rates of REQUIEM EC may need to increase with increased insect populations and/or large plant canopies. It is not necessary to use a surfactant with REQUIEM EC.

When using REQUIEM EC with a new crop, test on a small area before applying to the entire field Do not apply REQUIEM EC more than 10 times per crop production cycle

**Spray Drift** Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower/treatment coordinator are responsible for considering all of these factors when making decisions. Where states have more stringent regulations, they should be observed. Refer to the Aerial Drift Reduction Information section of this label for additional directions and precautions applicable to both ground and aerial applications.

Ground This product can be applied by commonly used ground equipment, such as groundboom, hose-end, pressurized, air-blast, greenhouse and hand-held sprayers. Consult spray nozzle and accessory catalogues for specific information on proper equipment calibration. Maintain agitation during mixing and application to assure uniform product suspension. Thorough coverage of all foliage is essential for effective pest control or suppression. Use the application rate, indicated for the appropriate crop in the Application Rate tables of this label, in sufficient water to achieve thorough coverage. Overall, to achieve good coverage, use proper spray pressure, gallonage per acre, nozzles, nozzle spacing and ground speed.

Groundboom and air-blast spray applicators must not apply within 15 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds) Groundboom and air-blast applicators must also account for wind direction and speed Only apply this product if the wind direction favors on-target deposition Do not apply when the wind velocity exceeds 10 mph

Use of air-blast spray equipment may result in overhead exposure and requires the use of chemical-resistant headgear

**Aerial** This product can be applied by aerial application. Use the application rate indicated for the appropriate crop in the Application Rate tables of this label in sufficient water to achieve thorough coverage, typically between 2-20 gallons of water per acre depending upon the crop. Aerial

applicators must not apply within 400 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds)

#### MIXING INSTRUCTIONS

Shake container well before use REQUIEM EC must be diluted with water for spray applications. Partially fill the spray tank with clean water and begin agitation. Add the specified amount of REQUIEM EC to the tank. Finish filling the tank to the proper volume to obtain the desired application rate per acre as specified in the crop and pest tables listed below. It is critical that the spray solution be agitated during mixing and application to ensure a uniform suspension. Do not allow spray mixture to stand overnight or for prolonged periods. When applying REQUIEM EC via ground application, use dilutions no more concentrated than 2% v/v.

Compatibility Do not combine REQUIEM EC in the spray tank with other pesticides, surfactants, adjuvants, or fertilizers if there has been no previous experience or use of the combination to show it is physically compatible, and non-injurious under your use conditions

Do not use REQUIEM EC in tank mixes or in a program or in rotation with products containing captan (with REQUIEM EC either preceding or following captan applications) in any crop Use of REQUIEM EC with captan-containing products may result in phytotoxicity

Do not use REQUIEM EC in tank mixture combinations or in rotation with any product containing a label warning against using surfactants, methylated seed oils, oils or other adjuvants

As with many Emulsifiable Concentrate (EC) formulations, certain combinations can exacerbate phytotoxicity problems. Products which are phytotoxic when used alone may be more phytotoxic when used with an EC formulation such as REQUIEM EC. AgraQuest has not tested all varieties and cultivars of all crops and potential tank-mix or rotational combinations.

To ensure crop safety, test REQUIEM EC in combination and in rotation with other products on a small portion of the crop. Wait at least 24-72 hours to evaluate results before applying to the entire field. If phytotoxicity is noted, and if it is determined that the level of phytotoxicity will result in economic losses to the crop, do not make the application to the crop.

To ensure physical compatibility of tank-mix combinations they must be evaluated prior to use When products are physically compatible, a homogeneous solution is formed. To determine the physical compatibility of this product with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to approximately one quart of water with agitation. Add dry formulations first, then flowables, then emulsifiable concentrates last. After thorough mixing, allow this mixture to stand for 15 minutes. If the mixture in the test jar remains uniform for 15 minutes, the combination is compatible and can be used. If separation occurs (e.g. oils float to top, clumps of solids form, etc.), the combination is incompatible and do not use the mixture. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

Use of Adjuvants The use of adjuvants with REQUIEM EC is not required

**Biological Control Agents** This product is compatible with the following biological control agents *Encarsia formosa*, *Amblyseius fallacis*, *Phytoseiulus persimilis*, *Orius insidiosus Aphidius colemani* 

Zetzellia mali Neoseiulus fallacies Typhlodromus pyri Stethorus punctum lacewings, syrphid fly larvae, phytoseiid mite predators, aphid midges, lady beetles, and other predacious mites Wait at least 2 hours after application before introducing new biological agents, or spray the evening before the day of introduction of new biological control agents

AgraQuest is committed to the practice of sound resistance management programs that include rotation and tank mixing with other treatments having a variety of modes of actions

#### PREHARVEST INTERVAL

REQUIEM EC can be applied up to and including the day of harvest. However, note that the restricted entry interval (REI) is 4 hours

## **AERIAL DRIFT REDUCTION INFORMATION**

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather—related factors determine the potential for spray drift. The applicator and the grower/treatment coordinator are responsible for considering all of these factors when making decisions. Where states have more stringent regulations, they should be observed. Note This section is advisory in nature and does not supersede the mandatory label requirements.

All application equipment must be properly maintained and calibrated using appropriate carriers

Information on Droplet Size When used for aerial applications, the best drift management strategy is to apply the largest droplets that provide sufficient coverage and control Applying larger droplets will reduce drift potential but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions)

Controlling Droplet Size Volume - Use high flow rate nozzles to apply the highest practical spray volume Nozzles with higher rated flows produce larger droplets Pressure - Do not exceed the nozzle manufacturer's specified pressures. For many nozzle types, lower pressure produces larger droplets. When high flow rates are needed, use higher flow rate nozzles instead of increasing pressure. Number of Nozzles - Use the minimum number of nozzles that provide uniform coverage. Nozzle Orientation - Orienting nozzles, so that the spray is released parallel to the airstream, produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential. Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid-stream nozzles that are oriented straight back produce the largest droplets and the lowest drift. Use medium or coarser spray according to the ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles.

**Boom Width** For aerial applications using fixed-wing aircraft, the boom width must not exceed 75% of the wingspan. For aerial applications using helicopters, the boom width must not exceed 90% of the rotary blade

**Application Height** Do not release spray at a height greater than 10 feet above the top of the ground or the crop canopy unless a greater height is required for aircraft safety. Making applications

at the lowest height that is safe reduces exposure of droplets to evaporation and wind. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above ground or canopy

**Swath Adjustment** Use upwind swath displacement When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the upwind and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.)

Wind Apply only when wind speed is 3 - 10 miles per hour as measured by an anemometer Drift potential is lowest between wind speeds of 3 - 10 miles per hour Many factors, however, including droplet size and equipment type, determine drift potential at any given speed NOTE Local terrain can influence wind patterns Every applicator should be familiar with local wind patterns and how they affect spray drift

**Temperature and Humidity** When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry

Temperature Inversions Do not apply during a temperature inversion because drift potential is high Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light, variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog, however, if fog is not present, inversions can also be identified 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 The pesticide should only be applied when the potential for drift to adjacent, sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas). Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals. Applicator must maintain the buffer zones specified in the application instruction sections for ground and aerial applications.

## FOR USE ON THE FOLLOWING CROPS

(REQUIEM EC has a 0-Day PreHarvest Interval (PHI) for all crops contained on this label However, note that the restricted entry interval (REI) is 4 hours)

## **Asparagus**

Pests and Application Rates

Pests	REQUIEM EC (qts/acre)	Remarks
Aphids Thrips	2 - 4	Begin applications when thresholds have been reached The rate of REQUIEM EC will depend on plant size and pest pressure. Use a lower rate for light infestation and/or small plant canopy and a higher rate for heavy infestations and/or large plants.

## Brassica (Cole) Leafy Vegetables

Including Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage, Chinese Cabbage (Bok Choy and Napa), Cauliflower, Cavalo, Collards, Kale, Kohlrabi, Mustard Greens, Rape Greens, and other Brassica leafy vegetable crops

Pests	REQUIEM EC (qts/acre)	Remarks
Aphids  Cabbage aphid  Green peach aphid  Turnip aphid	2 - 4	Begin treatments when thresholds have been reached
Thrips		Begin applications as soon as thrips are seen in the crop Continue applications as needed Thrips will seek shelter in hard-to-reach parts of the plant. Use insecticide nozzles with sufficient water volume and spray pressure for thorough coverage.
Whiteflies • Silverleaf whitefly		Apply before pests reach damaging levels Repeat applications as needed to maintain control Do not wait until heavy populations have become
Leafminers		established Use the high rate when conditions are favorable for heavy pressure  For Suppression Begin treatments before thresholds have been reached

## **Bulb Vegetables**

Including Garlic, Leek, Onion (dry bulb, green, and Welch), and Shallot and other bulb vegetable crops

**Pests and Application Rates** 

Pests	REQUIEM EC (qts/acre)	Remarks
Leafminer Maggots Mites	15-4	Apply before pests reach damaging levels Repeat applications as needed to maintain control. The amount of REQUIEM EC per acre will depend on plant size, leaf canopy and pest pressure. Choose lower rates for light infestations and/or small plants and higher rates for heavy infestations and/or larger plants.
Thrips Onion thrips Western flower thrips Tobacco thrips		Begin applications as soon as thrips are seen in the crop Continue applications as needed Thrips will seek shelter hard-to-reach parts of the plant Use insecticide nozzles with sufficient water volume and spray pressure for thorough coverage

## **Bush Berries**

Including Blueberry, Currant, Gooseberry, Huckleberry, Elderberry, and other bush berry crops

Pests	REQUIEM EC (qts/acre)	Remarks
Aphids Leafhoppers Leafrollers Loopers	2 - 4	Apply before pests reach damaging levels Repeat applications as needed to maintain control The amount of REQUIEM EC per acre will depend on plant size, leaf canopy and pest pressure Choose
Lygus Maggots Mites		lower rates for light infestations and/or small plants and higher rates for heavy infestations and/or larger
Plum curculio Thrips  • Western flower thrips	:	plants Adjust equipment, water volume, and spray pressure to ensure thorough coverage of infested parts of the crop

## **Cranberry**

Do not apply to flooded fields

**Pests and Application Rates** 

Pests	REQUIEM EC (qts/acre)	Remarks
Aphids	2 - 4	Begin applications when thresholds have been
Leafhoppers	1	reached The rate of REQUIEM EC will depend on
Leafrollers		plant size and pest pressure Use a lower rate for
Loopers		light infestation and/or small plant canopy and a
Thrips		higher rate for heavy infestations and/or large
Wireworms		plants

## Cane Berries

Including Blackberry (including varieties, cultivars, and/or hybrids), Loganberry, Raspberry, and other cane berry crops

Pests	REQUIEM EC (qts/acre)	Remarks
Aphids Leafhoppers	2 - 4	Apply before pests reach damaging levels Repeat applications as needed to maintain control The
Leafrollers		amount of REQUIEM EC per acre will depend on
Loopers		plant size, leaf canopy and pest pressure Choose
Sawfly		lower rates for light infestations and/or small plants
Whiteflies		and higher rates for heavy infestations and/or larger
Thrips		plants Adjust equipment, water volume, and spray
Western flower thrips		pressure to ensure thorough coverage of infested parts of the crop

## **Citrus Fruits**

Including Grapefruit, Lemon, Lime, Orange, Tangerine, Citrus hybrids, Pummelo, and other citrus fruit crops

Pests	REQUIEM EC	Remarks
	(qts/acre)	
Asıan cıtrus psyllıd	2 - 4	Treat when pests appear or in accordance with local
Lepidoptera larvae		economic thresholds Repeat applications as needed
<ul> <li>Avocado leafroller</li> </ul>		to maintain control The rate of REQUIEM EC will
• Citrus peelminer		depend on tree size and pest pressure Use a lower
• Cıtrus Leafmıner		rate for light infestation and/or small trees and a
• Cutworms		higher rate for heavy infestations and/or large trees
• Fruit tree leafroller		When applying to large trees, use higher water
• Orange tortrix		volumes to ensure thorough coverage
Mites		
Broad mite		
• Citrus flat mite		
• Citrus bud mite		
• Citrus red mite		
• Citrus rust mite		
• Six-spotted spider mite		
• Texas citrus mite		
• Yuma spider mite		
• Two-spotted spider mite		
• Rust mite		
Thrips		
• Citrus thrips		
• Franklınıella spp		
• Bean thrips		
Scale		Begin applications when thresholds are reached
		Treat for scale when crawlers are present in the
		spring and fall

## **Cucurbit Vegetables**

Including Cucumber, Citron melon, Edible Gourds, Gherkin, Muskmelons (including hybrids and/or cultivars of *Cucumis melo*), Pumpkin, Summer and Winter Squash, Watermelon, Cantaloupe, and other cucurbit vegetable crops

Use of REQUIEM EC in tank mixes with some products including, but not limited to, those containing strobilurins or chlorothalonil may result in phytotoxicity. Do not apply products containing chlorothalonil within 4 days after application of REQUIEM EC. Do not apply REQUIEM EC for 30 days following an application of chlorothalonil

**Pests and Application Rates** 

Pests	REQUIEM EC (qts/acre)	Remarks
Aphids  • Green peach aphid  • Melon aphid  Leafminers  Mites	2 - 4	Begin treatments when thresholds have been reached
Thrips  • Melon thrips  • Western flower thrips		Begin applications as soon as thrips are seen in the crop Continue applications as needed Thrips will seek shelter in hard-to-reach parts of the plant. Use appropriate nozzles with sufficient water volume and spray pressure for thorough coverage.
Whiteflies • Greenhouse whitefly • Sweetpotato whitefly • Silverleaf whitefly		Apply before pests reach damaging levels Repeat applications as needed to maintain control Do not wait until heavy populations have become established Use the high rate when conditions are favorable for heavy pressure

## Figs.

Pests	REQUIEM EC (qts/acre)	Remarks
Mites Navel orangeworm Scale Vinegar flies	2 - 4	Begin applications when thresholds have been reached The rate of REQUIEM EC will depend on plant size and pest pressure. Use a lower rate for light infestation and/or small plant canopy and a higher rate for heavy infestations and/or large plants.

## Globe Artichoke

Pests and Application Rates

Pests	REQUIEM EC (qts/acre)	Remarks
Aphids Leafhoppers Plume moth	2 - 4	Begin applications when thresholds have been reached The rate of REQUIEM EC will depend on plant size and pest pressure. Use a lower rate for light infestation and/or small plant canopy and a higher rate for heavy infestations and/or large plants.

<u>Fruiting Vegetables</u> <u>Including Eggplant, Ground Cherry, Pepino, Pepper, Tomatillo, Tomato, and other fruiting</u> vegetable crops

Pests	REQUIEM EC	Remarks
	(qts/acre)	
Aphids	2 - 4	Begin treatments when thresholds have been
<ul> <li>Green peach aphid</li> </ul>		reached
Potato aphid		
Leafhoppers	}	
Mites		
Tomato pinworm		
Thrips		Begin applications as soon as thrips are seen in the
<ul> <li>Western flower thrips</li> </ul>		crop Continue applications as needed Thrips will
• Onion thrips		seek shelter in hard-to-reach parts of the plant Use
• Chili thrips		appropriate nozzles with sufficient water volume
• Melon thrips		and spray pressure for thorough coverage
• Florida flower thrips		
• Eastern flower thrips		
Whiteflies		Apply before pests reach damaging levels Repeat
<ul> <li>Silverleaf whitefly</li> </ul>		applications as needed to maintain control Do not
• Greenhouse whitefly		wait until heavy populations have become
Bandedwinged whitefly		established Use the high rate when conditions are
• Sweetpotato whitefly		favorable for heavy pressure
- Sweepourto mineral		- <del>-</del>
Leafminers (Liriomyza spp)	3-4	For Suppression Begin treatments before
		thresholds have been reached

## **Grape**

Do not use REQUIEM EC on grapes east of the Rockies Use of REQUIEM EC on grapes after fruit set can diminish waxy bloom

**Pests and Application Rates** 

Pests	REQUIEM EC (qts/acre)	Remarks
Leafhoppers  • Grape leafhopper  • Variegated leafhopper	2 - 4	For Suppression Begin treatments before thresholds have been reached
Grape berry moth Western grape skeletonizer Mealy bug Mites • Pacific spider mites • Willamette spider mite • Two-spotted spider mite		Begin applications when thresholds have been reached The rate of REQUIEM EC will depend on plant size and pest pressure. Use a lower rate for light infestation and/or small plant canopy and a higher rate for heavy infestations and/or large plants. Adjust equipment, spray volume, and spray pressure to ensure thorough coverage of infested parts of the crop

## **Herbs and Spices**

Including Allspice, Anise, Basil, Borage, Cardamom, Chive, Dill, Fennel (common), Juniper berry, Marjoram, Nutmeg, Pepper, Saffron, Sage, Tarragon, Vanilla, and other herb and spice crops

**Pests and Application Rates** 

Pests	REQUIEM EC (qts/acre)	Remarks
Aphids Fleahoppers Leafhoppers Grasshoppers	2 - 4	Begin applications when thresholds have been reached The rate of REQUIEM EC will depend on plant size and pest pressure. Use a lower rate for light infestation and/or small plant canopy and a higher rate for heavy infestations and/or large plants.
Leafminers (Liriomyza spp)		For Suppression Begin treatments before thresholds have been reached

## **Hops**

Pests	REQUIEM EC (qts/acre)	Remarks
Mites	2 - 4	Begin applications when thresholds have been
Aphids		reached The rate of REQUIEM EC will depend on plant size and pest pressure. Use a lower rate for light infestation and/or small plant canopy and a higher rate for heavy infestations and/or large plants.

## Legume Vegetables (Succulent or Dried)

Including Beans, Green beans, Snap beans, Shell beans, Garbanzo beans, Lima beans, Peas, Chick peas, Split peas, Lentils and other legume vegetable crops

**Pests and Application Rates** 

Pests	REQUIEM EC	Remarks
	(qts/acre)	
Aphids	2 - 4	Begin applications when thresholds have been
Leafhoppers		reached The rate of REQUIEM EC will depend on
Lygus bugs		plant size and pest pressure Use a lower rate for
Mites		light infestation and/or small plant canopy and a
		higher rate for heavy infestations and/or large plant canopy
Thrips		Begin applications as soon as thrips are seen in the
• Western Flower Thrips		crop Continue applications as needed Thrips will
Melon Thrips		seek shelter in hard-to-reach parts of the plant. Use insecticide nozzles with sufficient water volume and spray pressure for thorough coverage.
Whiteflies		Apply before pests reach damaging levels Repeat
		applications as needed to maintain control Do not
		wait until heavy populations have become
		established Use the high rate when conditions are
		favorable for heavy pressure
Leafminers (Liriomyza spp)		For suppression Begin treatments when leafminers
		are seen in the crop Continue applications as
		needed

## **Mint**

Pests	REQUIEM EC (qts/acre)	Remarks
Mites Aphids Thrips	2 - 4	Begin applications when thresholds have been reached The rate of REQUIEM EC will depend on plant size and pest pressure. Use a lower rate for light infestation and/or small plant canopy and a higher rate for heavy infestations and/or large plants.

## **Leafy Vegetables**

Including Lettuce, Arugula, Celery, Spinach, Parsley, Radicchio, Florence Fennel, Romaine, Swiss Chard, and other leafy vegetable crops

**Pests and Application Rates** 

Pests	REQUIEM EC (qts/acre)	Remarks
Aphids	2 - 4	Begin treatments when thresholds have been
• Foxglove aphid		reached
• Lettuce aphid		
• Lettuce root aphid		
Cabbage aphid		
Turnip aphid		
Potato aphid		
• Green peach aphid		
Leafhoppers		
Lygus bugs		
Mites (except bulb mite)		
Psyllid		
Thrips		Begin applications as soon as thrips are seen in the
		crop Continue applications as needed Thrips will
		seek shelter in hard-to-reach parts of the plant Use
		appropriate nozzles with sufficient water volume
		and spray pressure for thorough coverage
Whiteflies		Apply before pests reach damaging levels Repeat
<ul> <li>Silverleaf whitefly</li> </ul>		applications as needed to maintain control Do not
		wait until heavy populations have become
		established Use the high rate when conditions are
		favorable for heavy pressure
Leafminers ( <i>Liriomyza spp</i> )	3-4	For Suppression Begin treatments before
		thresholds have been reached

## **Olives**

Pests	REQUIEM EC (qts/acre)	Remarks
Mites Scale Thrips	2 - 4	Begin applications when thresholds have been reached. The rate of REQUIEM EC will depend on plant size and pest pressure. Use a lower rate for light infestation and/or small plant canopy and a higher rate for heavy infestations and/or large plants.

## <u>Okra</u>

Pests and Application Rates

Pests	REQUIEM EC	Remarks
	(qts/acre)	
Aphids	2 - 4	Begin treatments when thresholds have been
Leafhoppers		reached
Mites		
Tomato pinworm		
Thrips		Begin applications as soon as thrips are seen in the
<ul> <li>Melon thrips</li> </ul>		crop Continue applications as needed Thrips will
<ul> <li>Western Flower thrips</li> </ul>		seek shelter in hard-to-reach parts of the plant Use
• Chili thrips		insecticide nozzles with sufficient water volume
• Florida Flower thrips		and spray pressure for thorough coverage
Whiteflies		Apply before pests reach damaging levels Repeat
		applications as needed to maintain control Do not
		wait until heavy populations have become
		established Use the high rate when conditions are
		favorable for heavy pressure
Leafminers (Liriomyza spp)	3-4	For Suppression Begin treatments before
		thresholds have been reached

## **Leaves of Root and Tuber Vegetables**

Including Carrot, Sweet Potato, Cassava, Beets, Celeriac, Radish, Turnip, Parsnip, and other leaves of root and tuber crops

Pests	REQUIEM EC (qts/acre)	Remarks
Aphids Leafhoppers Mites Psylla	2 - 4	Begin treatments when thresholds have been reached
Thrips		Begin applications as soon as thrips are seen in the crop Continue applications as needed Thrips will seek shelter in hard-to-reach parts of the plant. Use appropriate nozzles with sufficient water volume and spray pressure for thorough coverage.
Whiteflies		Apply before pests reach damaging levels Repeat applications as needed to maintain control Do not wait until heavy populations have become established Use the high rate when conditions are favorable for heavy pressure
Leafminers (Liriomyza spp)		For Suppression Begin treatments before thresholds have been reached

**Pome Fruits** 

Including Apple, Crabapple, Loquat, Mayhaw, Pear, Quince, and other pome fruit crops

Pests	REQUIEM EC	Remarks
	(qts/acre)	
Aphids	2 - 4	Begin applications when thresholds have been
<ul> <li>Green apple aphid</li> </ul>		reached The rate of REQUIEM EC will depend on
<ul> <li>Wooly apple aphid</li> </ul>		plant size and pest pressure Use a lower rate for
<ul> <li>Cotton aphid</li> </ul>		light infestation and/or small plant canopy and a
Bean aphid		higher rate for heavy infestations and/or large plant
Rosy apple aphid		canopy
Spirea aphid		
• Green peach aphid		
Mites		
Brown mite		
• Pear rust mite		
<ul> <li>Pear leaf blister mite</li> </ul>		
• European red mite		
• Two-spotted spider mite		
Pacific spider mite		
<ul> <li>McDaniel spider mite</li> </ul>		
Leafhoppers		
Mealy bugs		
Pear psyllid		
Plum curculio		
Scale		
Thrips	_	
Codling moth		Monitor the moth flights and the infestation
Oriental fruit moth		densities of the larval stages Repeat applications as
Tufted apple moth		necessary to maintain control
Leafminers (lepidopteran)		
• Spotted tentiform		
• Western tentiform		
Leafrollers		
Oblique-banded		
• Pandernis	<u> </u>	

## Root / Tuber and Corm Vegetables

Including Carrot, Potato, Sweet Potato, Cassava, Beets, Ginger, Horseradish, Radish, Ginseng, Turnip, True Yam, and other root/tuber and corm crops

Pests	REQUIEM EC	Remarks
	(qts/acre)	
Aphids	1 - 4	Begin treatments when thresholds have been
Potato aphid		reached
<ul> <li>Green peach aphid</li> </ul>		
Leafhoppers		
Mites		
Psylla		
Potato psyllid		
Thrips		Begin applications as soon as thrips are seen in the
		crop Continue applications as needed Thrips will
		seek shelter in hard-to-reach parts of the plant. Use
		appropriate nozzles with sufficient water volume and
		spray pressure for thorough coverage
Whiteflies		Apply before pests reach damaging levels Repeat
<ul> <li>Silverleaf whitefly</li> </ul>		applications as needed to maintain control Do not
		wait until heavy populations have become
		established Use the high rate when conditions are
	_	favorable for heavy pressure
Leafminers ( <i>Liriomyza</i> spp )		For Suppression Begin treatments before thresholds
		have been reached

## **Stone Fruits**

Including Apricot, Cherry, Nectarine, Peach, Plum, Plumcot, Prune, and other stone fruit crops

Do not use of REQUIEM in tank mixes with chlorothalonil Do not apply products containing chlorothalonil or captan within 30 days after application of REQUIEM Do not apply REQUIEM for 30 days following an application of chlorothalonil or captan

**Pests and Application Rates** 

Pests	REQUIEM EC	Remarks
	(qts/acre)	
Aphids	2 - 4	Begin applications when thresholds have been
Cherry fruit fly		reached The rate of REQUIEM EC will depend on
Leafhoppers		plant size and pest pressure Use a lower rate for
Leafminers		light infestation and/or small plant canopy and a
Mites		higher rate for heavy infestations and/or large plant
• Two-spotted spider mite		canopy Adjust equipment, spray pressure, and spray
• Pacific spider mite		volumes to ensure thorough coverage
Plum curculio		
Scale		
Western cherry fruit fly		
Thrips		
Leafrollers		Monitor the moth flights and the infestation
Leafminers		densities of the larval stages Repeat applications as
Peach twig borer		necessary to maintain control

## **Tropical Fruits**

Including Avocado, Banana, Kiwi, Mango, Papaya, Plantains, Pineapple, and other tropical fruits

Pests	REQUIEM EC	Remarks
_	(qts/acre)	
Avocado leafroller	2 - 4	Begin applications when thresholds have been
Citrus peelminer		reached The rate of REQUIEM EC will depend on
Cutworms		plant size and pest pressure Use a lower rate for
Fruit tree leafroller		light infestation and/or small plant canopy and a
Naval orange worm		higher rate for heavy infestations and/or large plants
Orange tortrix		
Western tussock moth		
Mites		
Thrips		
Scale		

## Strawberry

Pests	REQUIEM EC	Remarks
	(qts/acre)	
Aphids	1 - 4	Begin applications when thresholds have been
Green peach aphid		reached The rate of REQUIEM EC will depend on
Melon aphid		plant size and pest pressure Use a lower rate for
Potato aphid		light infestation and/or small plant canopy and a
Strawberry aphid		higher rate for heavy infestations and/or large plants
Leafhoppers		
Lygus bug		
Mites		
• Two-spotted spider mite		
Carmine spider mite		
Cyclamen mite		
Pacific spider mite		
Thrips		
Western flower thrips		
Whiteflies		Apply before pests reach damaging levels Repeat
Silverleaf whitefly	ļ	applications as needed to maintain control Do not
Greenhouse whitefly		wait until heavy populations have become
Strawberry whitefly		established Use the high rate when conditions are favorable for heavy pressure

## **Tree Nuts**

Including Almond, Beech nut, Cashew, Chestnut, Filbert, Hickory nut, Pecan, Pistachio, Walnut, and other tree nut crops

Do not use of REQUIEM EC in tank mixes with chlorothalonil Do not apply products containing chlorothalonil within 30 days after application of REQUIEM EC Do not apply REQUIEM EC for 30 days following an application of chlorothalonil

Pests	REQUIEM EC	Remarks
	(qts/acre)	
Aphids	2 - 4	Begin applications when thresholds have been
<ul> <li>Walnut aphid</li> </ul>		reached The rate of REQUIEM EC will depend on
<ul> <li>Dusky-veined aphid</li> </ul>		plant size and pest pressure Use a lower rate for
<ul> <li>Rosy apple aphid</li> </ul>		light infestation and/or small plant canopy and a
<ul> <li>Green peach aphid</li> </ul>		higher rate for heavy infestations and/or large plant
<ul> <li>Spirea aphid</li> </ul>		canopy
<ul> <li>Yellow aphid</li> </ul>		
<ul> <li>Black pecan aphid</li> </ul>		
Black-margined aphid		
• Yellow pecan aphid		
Fall webworm		
Scale		
Walnut husk fly		
Mites		
• Brown mite		
<ul> <li>Peach silver mite</li> </ul>		
• Cıtrus flat mıte		
<ul> <li>Pacific spider mite</li> </ul>		
• European red mite		
• Two-spotted spider mite		
• Strawberry spider mite		
Leafminers		Monitor the moth flights and the infestation
Leafrollers		densities of the larval stages Repeat applications as
Peach twig borer		necessary to maintain control
Pecan nut case bearer		

## **Cereal Grains**

Including Corn (fresh sweet corn and dried field corn)

**Pests and Application Rates** 

Pests	REQUIEM EC (qts/acre)	Remarks
Corn sılk fly	0 5 - 2	Begin applications 4 days before tasselling and repeat on 4-day schedule until silking is completed For ear protection begin applications at time of silking Direct application to the ear zone to obtain thorough coverage of the corn silk Subsequent applications should be made at 4 day intervals until silking is completed

## Oilseed Crops

Including Cotton, cultivars, varieties, and/or hybrids for oil and/or fiber production

Pests	REQUIEM EC (qts/acre)	Remarks
Mites • Two-spotted spider mite	0 5 – 1 5	Begin applications when thresholds have been reached. The rate of REQUIEM EC will depend on plant size and pest pressure. Use a lower rate for light infestation and/or small plant canopy and a higher rate for heavy infestations and/or large plant canopy. Adjust equipment, spray pressure, and spray volumes to ensure thorough coverage.

## STORAGE AND DISPOSAL

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

Pesticide Storage Store in a cool dry place Avoid freezing

**Pesticide Disposal** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry)

Do not contaminate water when disposing of equipment washwater or rinsate Pesticide wastes may be toxic Improper disposal of unused pesticide, washwater or rinse water is a violation of federal law

Container Disposal Non-refillable 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 incineration Do not burn unless allowed by state and local ordinances

#### CONDITIONS FOR SALE AND WARRANTY

#### IMPORTANT READ BEFORE USE

Read the Directions for Use, the Conditions, Disclaimer of Warranties, Limitation of Liability, and License set forth below. If the following terms are not acceptable, please return the product immediately for a refund of the purchase price. Otherwise, use by buyer or any other user constitutes acceptance of the following terms.

Conditions The directions for use of this product are believed to be adequate and must be followed carefully. It is impossible, however, to eliminate all risks inherently associated with the use of this product. Weather or crop conditions, the presence of other materials, the manner of use or application, any use, storage or handling that is contrary to the Directions for Use, and other such factors that are beyond the control of AgraQuest may cause ineffectiveness or other unintended consequences. To the extent consistent with applicable law, user assumes all such risks

Disclaimer of Warranties AgraQuest warrants that this product conforms to the biological or chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, AGRAQUEST MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTY, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR NONINFRIGNEMENT

Limitation of Liability To the extent consistent with applicable law, AgraQuest or the seller disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product, and the buyer and user waive any right that they may have to such damages Except to the extent prohibited by applicable law, AgraQuest or seller's exclusive liability

and the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or, at AgraQuest's election, the replacement of product

License and Prohibition of Re-Sale AgraQuest hereby grants buyer or user the right under the patents listed on the label to use this product solely in accordance with the label Directions for Use for applications to plants, including plant parts such as seed, or to soil, where the treated plants or the plants grown in treated soil are intended for sale, in whole or in part, or are intended for public or personal use. The buyer or user does not have the right to de-formulate this product or to isolate and/or culture its active ingredient for any purpose. Unless specifically granted in writing, the buyer or user does not have the right to re-sell this product in any form, e.g., this product may not be re-sold in combination with other products or other active ingredients or in a diluted form, unless combinations are prepared and delivered to the end-user for immediate application to plants, plant parts or soil solely in accordance with the label Directions for Use

AgraQuest and Seller offer this Product and buyer and user accept it subject to the foregoing Conditions, Disclaimer of Warranties, Limitation of Liability and License, which may only be modified by a written document signed by a duly authorized representative of AgraQuest

REQUIEM is a registered trademark of AgraQuest



# **QRD 452**

(Alternate Brand Name: METRONOME<sup>TM</sup> EC)

Sub-Label B

For Greenhouse & Nursery / Commercial Use Only Not For Residential Use

# METRONOME<sup>TM</sup> EC

## Insecticide and Acaricide

FOR USE ON NON-FOOD ORNAMENTALS (TREES, SHRUBS, AND BEDDING PLANTS)
NOT FOR RESIDENTIAL USE

## **Active Ingredient**

Terpene Constituents of the Extract of Chenopodium ambrosioides near ambrosioides as Synthetically Manufactured
Other Ingredients
Total

16 75%

83 25%

100 0%

#### KEEP OUT OF REACH OF CHILDREN

## **CAUTION**

	FIRST AID	
If In Eyes	<ul> <li>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</li> <li>Call a poison control center or doctor for further treatment advice</li> </ul>	
In On Skin Or Clothing	<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 further treatment advice</li> </ul>	
	HOT LINE NUMBER	
	CHEMTREC (800) 424 9300 (24 hours)	
Have the product container	or label with you when calling a poison control center or doctor or going for treatment	

See side/back panels for additional precautionary statements

EPA Reg No 69592 EL

EPA Establishment No 69592 MEX 1

Net Contents 1 gallon (128 fl oz) (3 78 L) [2 5 gallon (320 fl oz) (9 46 L)]

USE OF PRODUCT INDICATES ACCEPTANCE OF "CONDITIONS FOR SALE AND WARRANTY"

Manufactured By AgraQuest, Inc 1540 Drew Avenue Davis, California 95618 (530) 750-0150

## PRECAUTIONARY STATEMENTS

## HAZARD TO HUMANS AND DOMESTIC ANIMALS

CAUTION Avoid contact with skin, eyes or clothing Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco Remove and wash contaminated clothing before reuse Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals Wear the appropriate Personal Protective Equipment (PPE)

## PERSONAL PROTECTIVE EQUIPMENT

Applicators mixers, loaders and other handlers must wear

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Protective eyewear
- Coveralls for high-pressure handwand and groundboom applicators
- For greenhouse uses, applicators and other handlers must wear a NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE filter Follow the 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

- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing
- 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 product is toxic to 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. Do not contaminate water when disposing of equipment washwater or rinsate

Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not apply when weather conditions favor drift or runoff from treated areas. Do not apply when a rain event is expected within 2 hours. Air blast applications must maintain a spray buffer of 15 feet from any waterbody. See the Directions for Use for details

## **DIRECTIONS FOR USE**

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

READ THE ENTIRE LABEL USE STRICTLY IN ACCORDANCE WITH THE LABEL FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT CONTROL, AND/OR ILLEGAL RESIDUES

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.

## 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, greenhouses and handlers of agricultural insecticides. 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 4 hours

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

## NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170) The WPS applies when this product is used to produce agricultural plants on farms, nurseries or green houses

Do not enter treated areas without protective clothing until spray has dried Refer to Personal Protective Equipment section under the Precautionary Statements section

#### SHAKE WELL BEFORE USE

#### **GENERAL INFORMATION**

METRONOME<sup>TM</sup> EC is an Emulsifiable Concentrate (EC) Insecticide and Acaricide for Use on Field and Container-grown Non-Food Ornamental Plants in Commercial Nurseries, Greenhouses, and Lath- and Shade-houses Not For Residential Use

METRONOME EC is a contact insecticide/acaricide for use in the control of aphids, plant-feeding mites, whiteflies, mealy bugs, leafminers, thrips, fungus gnats, and tarnished plant bugs METRONOME EC can be applied to field and container-grown non-food ornamentals – trees, Christmas trees, shrubs, flowers, annual and perennial bedding plants, potted flowers, and tropical plants

IMPORTANT READ CONDITIONS FOR SALE AND WARRANTY BEFORE USE

#### MIXING AND APPLICATION INSTRUCTIONS

Do not apply this product through any type of irrigation system

METRONOME EC is toxic to aquatic invertebrates. Users must maintain the following buffer zones. Airblast spray applicators must not apply within 15 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds). Groundboom and airblast applicators must also account for wind direction and speed. Only apply this product if the wind direction favors on-target deposition. Do not apply when the wind velocity exceeds 10 mph. Do not apply when a rain event is expected within 2 hours.

Shake container well before use METRONOME EC must be diluted with water for spray applications. Partially fill the spray tank with clean water and begin agitation. Add the specified amount of METRONOME EC to the tank (see table below). Finish filling the tank to the desired volume to obtain the proper spray concentration for the desired application rate per acre. It is critical that the spray solution be agitated during mixing and application to ensure a uniform suspension. Do not allow spray mixture to stand overnight or for prolonged periods.

Gallons Water per Acre	METRONOME EC gallons 0 5% solution	METRONOME EC gallons 1% solution	
25	0 12 (16 fl oz)	0 25 (32 fl oz)	
50	0 25 (32 fl oz)	0 5 (64 fl oz)	
75	0 37 (48 fl oz)	0 75 (96 fl oz)	
100	0 5	1	
For smaller quantities, mix at a rate of 0 65 – 1 3 fl oz METRONOME EC			

For smaller quantities, mix at a rate of 0 65 – 1 3 fl oz METRONOME EC per 1 gallon of water

Apply on a 7- to 14-day schedule as necessary Apply METRONOME EC at first sign of insect pressure or plant-feeding mite infestation. Use higher application rate under conditions of heavy pest pressure. Uniform coverage of both upper and lower leaves is critical for effective pest control. Avoid overspraying to the point of excessive runoff. Do not apply METRONOME EC more than 10 times per year.

METRONOME EC can be applied with commonly used ground equipment, hose-end, pressurized, greenhouse, and hand-held sprayers

Biological Control Agents This product is compatible with the following biological control agents Encarsia formosa, Amblyseius fallacis, Phytoseiulus persimilis, Orius insidiosus Aphidius colemani Zetzellia mali Neoseiulus fallacies Typhlodromus pyri Stethorus punctum lacewings, syrphid fly larvae, phytoseiid mite predators, aphid midges, lady beetles, and other predacious mites Wait at least 2 hours after application before introducing new biological agents, or spray the evening before the day of introduction of new biological control agents

AgraQuest is committed to the practice of sound resistance management programs that include rotation and tank mixing with other treatments having a variety of modes of actions

Compatibility Do not combine METRONOME EC in the spray tank with other pesticides, surfactants, adjuvants, or fertilizers if there has been no previous experience or use of the combination to show it is physically compatible, and non-injurious under your use conditions

Do not use METRONOME EC in tank mixes or in a program or in rotation with products containing captan (with METRONOME EC either preceding or following captan applications) in any crop Use of METRONOME EC with captan-containing products may result in phytotoxicity

Do not use METRONOME EC in tank mixes or in a program or in rotation with products containing chlorothalonil in any crop. Do not apply products containing chlorothalonil within 4 days after application of METRONOME EC. Do not apply METRONOME EC for 30 days following an application of chlorothalonil Use of METRONOME EC with chlorothalonil-containing products may result in phytotoxicity

Do not use METRONOME EC in tank mixture combinations or in rotation with any product containing a label warning against using surfactants, methylated seed oils, oils or other adjuvants

As with many Emulsifiable Concentrate (EC) formulations, certain combinations can exacerbate phytotoxicity problems. Products which are phytotoxic when used alone may be more phytotoxic when used with an EC formulation such as METRONOME EC. AgraQuest has not tested all varieties and cultivars of all crops and potential tank-mix or rotational combinations.

To ensure physical compatibility of tank-mix combinations they must be evaluated prior to use

When products are physically compatible, a homogeneous solution is formed. To determine the physical compatibility of this product with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to approximately one quart of water with agitation. Add dry formulations first, then flowables, then emulsifiable concentrates last. After thorough mixing, allow this mixture to stand for 15 minutes. If the mixture in the test jar remains uniform for 15 minutes, the combination is compatible and can be used. If separation occurs (e.g. oils float to top, clumps of solids form, etc.), the combination is incompatible and do not use the mixture. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank. Test the combination on a small number of plants to check for phytotoxicity before treating large areas. Do not use the combination if adverse effects are observed.

## PLANTS EVALUATED FOR PHYTOTOXICITY

METRONOME EC has been evaluated alone in a wide range of crops and ornamentals However, since testing on all varieties of all ornamentals is not feasible, testing a small portion of the area to be treated for phytotoxicity is required before treating the entire area. Further, all possible combinations or sequences of pesticide sprays, including other fertilizers, surfactants, adjuvants and other pesticides, have not been tested, thus testing for compatibility and phytotoxicity of spray mixtures is required. Use the product in accordance with all label use directions. It is further required that spray equipment used to apply METRONOME EC be thoroughly cleaned before use

Phytotoxicity has occasionally been observed following the use of this product on flowers of Cyclamen, Gerbera, Begonia, and Impatiens Do not use METRONOME EC on flowering Cyclamen, Gerbera, Begonia, and Impatiens

#### STORAGE AND DISPOSAL

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

Pesticide Storage Store in a cool dry place Avoid freezing

**Pesticide Disposal** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry)

Do not contaminate water when disposing of equipment washwater or rinsate Pesticide wastes may be toxic Improper disposal of unused pesticide, washwater or rinse water is a violation of federal law

Container Disposal Non-refillable 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 incineration Do not burn unless allowed by state and local ordinances

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Conditions The directions for use of this product are believed to be adequate and must be followed carefully. It is impossible, however, to eliminate all risks inherently associated with the use of this product. Weather or crop conditions, the presence of other materials, the manner of use or application, any use, storage or handling that is contrary to the Directions for Use, and other such factors that are beyond the control of AgraQuest may cause ineffectiveness or other unintended consequences. To the extent consistent with applicable law, user assumes all such risks.

Disclaimer of Warranties AgraQuest warrants that this product conforms to the biological or chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, AGRAQUEST MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTY, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR NONINFRIGNEMENT

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