U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Biopesticides and Pollution Prevention Division (7511P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:
_X_ Registration
___ Reregistration
(under FIFRA, as amended)

| **EPA Reg. Number:** | **Date of Issuance:** |
|---|---|
| 264-1185 | 2/22/2016 |

**Term of Issuance:**
Unconditional

**Name of Pesticide Product:**
Terpenoid Blend QRD 460 EC

**Name and Address of Registrant (include ZIP Code):**

Bayer CropScience LP
2 TW Alexander Drive
P.O. Box 12014
Research Triangle Park, NC 27709

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention 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 or the Act).

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency (EPA). In order to protect health and the environment, the Administrator, on his or her 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 the 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 or registration review of your product when the EPA requires all registrants of similar products to submit such data.

2. Make the following labeling change before you release this product for shipment:

    - Revise the EPA Registration Number to read, “EPA Reg. No. 264-1185.”

**Signature of Approving Official:**

Andrew Bryceland, Team Leader
Biochemical Pesticides Branch
Biopesticides and Pollution Prevention Division (7511P)
Office of Pesticide Programs

**Date:**

2/22/2016

3. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the 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 EPA 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 Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statement of Formula (CSF).

- Basic CSF dated 02/04/2016

If you have any questions, please contact Andrew Reighart of my team by phone at (703) 347-0469 or via email at reighart.andrew@epa.gov.

Sincerely,

Andrew Bryceland, Team Leader
Biochemical Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)
Office of Pesticide Programs

Enclosure

# Terpenoid Blend QRD 460 **EC**

## [Alternate Brand Names: REQUIEM® PRIME]

**For:** The Control or Suppression of Insects in Agricultural Crops. NOT FOR RESIDENTIAL USE.

| | |
|---|---|
| **ACTIVE INGREDIENT:** | |
| **Terpene Constituents of the Extract of *Chenopodium ambrosioides* near *ambrosioides* as Synthetically Manufactured:** | **16.20%** |
| **OTHER INGREDIENTS:** | **83.80%** |
| **TOTAL:** | 100.00% |

**EPA Reg. No. 264-XXXX** **EPA Est. _____**

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

**For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours a Day 1-800-334-7577**
**For PRODUCT USE Information Call 1-866-99BAYER (1-866-922-2937)**

**Net Contents:**

ACCEPTED
02/22/2016
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 264-1185

**PRODUCED FOR**

Bayer CropScience

Bayer CropScience LP
P.O. Box 12014, 2 T.W. Alexander Drive
Research Triangle Park, North Carolina 27709
1-866-99BAYER (1-866-992-2937)

M-537862-01-1

| FIRST AID | |
|---|---|
| **If in eyes:** | • 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.<br>• Call a poison control center or doctor for further treatment advice. |
| **If on skin or clothing:** | • Take off contaminated clothing.<br>• Rinse skin immediately with plenty of water for 15-20 minutes.<br>• Call a poison control center or doctor for further treatment advice. |
| **In case of emergency, call the toll-free Bayer CropScience Emergency Response telephone number: 1-800-334-7577. Have a product container or label with you when calling a poison control center or doctor, or going for treatment.** | |

# PRECAUTIONARY STATEMENTS

## HAZARDS 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 (PPE)

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### Applicators and other handlers must wear the following:

- 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
- Chemical resistant headgear for overhead exposure
- A NIOSH-approved respirator, with an organic vapor (OV) cartridge or canister with any R, P, or HE filter, for greenhouse use

## 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/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.<br>• Users should 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

**For Terrestrial Use:** This product is toxic to aquatic invertebrates. 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. See the Directions for Use for details.

# CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product at once for a refund of the purchase price.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability. These terms may only be modified by a written document signed by a duly authorized representative of Bayer CropScience LP.

**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. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer. 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, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

**LIMITATIONS OF LIABILITY:** 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 OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

# 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 before using this product.**

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 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 pesticides. It contains requirements for training, decontamination, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval **(REI) of 4 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 the following PPE:**

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

## PRODUCT INFORMATION

TERPENOID BLEND QRD 460 EC is a contact insecticide for use in the control or suppression of many foliage feeding insects infesting labeled crops.

- The emulsifiable concentrate of TERPENOID BLEND QRD 460 EC must be mixed with water and applied as a foliar spray with equipment equipped for conventional insecticide spraying.
- Use TERPENOID BLEND QRD 460 EC early in the pest cycle when local thresholds are reached or before insects reach damaging levels.
- Thorough coverage is necessary for optimum control. Use appropriate nozzles and nozzle configurations, along with sufficient spray volume to achieve thorough coverage.
- Rates of TERPENOID BLEND QRD 460 EC may need to increase with increased insect populations and/or large plant canopies.
- TERPENOID BLEND QRD 460 EC does not require the use of a surfactant or adjuvant.

## APPLICATION INSTRUCTIONS

### SHAKE WELL BEFORE USE

### 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 RESTRICTIONS

- TERPENOID BLEND QRD 460 EC is toxic to aquatic invertebrates. Users must maintain the buffer zones specified in the application instruction sections for ground applications.
- Do not apply when a rain event is expected within 2 hours.
- Do not apply this product through any type of irrigation system.
- Do not apply TERPENOID BLEND QRD 460 EC more than 10 times per crop production cycle.
- Do not use TERPENOID BLEND QRD 460 EC in tank mixes or in a program or in rotation with products containing captan (with TERPENOID BLEND QRD 460 EC either preceding or following captan applications) in any crop. Use of TERPENOID BLEND QRD 460 EC with captan-containing products, strobilurins, or chlorothalonil may result in phytotoxicity.
- Do not use TERPENOID BLEND QRD 460 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.
- Use of TERPENOID BLEND QRD 460 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 TERPENOID BLEND QRD 460 EC.
- Do not apply TERPENOID BLEND QRD 460 EC for 30 days following an application of chlorothalonil.
- When applying TERPENOID BLEND QRD 460 EC via ground application, use dilutions no more concentrated than 2% v/v.

Refer to the specific use directions and restrictions in each Crop, Crop Group or Crop Subgroup table.

## SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Consult the local Cooperative Extension for additional information. Avoiding spray drift is the responsibility of the applicator.

**Droplet Size**
Use the largest droplet size which provides sufficient control and coverage. Higher flow nozzles and lower pressures will produce larger droplets and minimize drift. Low drift and air induction nozzles will provide lower drift potential. Use larger droplet size when applying in hot, dry conditions (droplet evaporation is higher under these conditions, thus reducing the effective droplet size and increasing drift potential).

**Wind Speed**
Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. Applications during gusty or calm wind conditions should be avoided. However, many factors, including droplet size, canopy, and equipment specifications, determine drift potential at any given wind speed. For applications made in-furrow or below soil-level, wind speed restrictions are not applicable.

**Temperature Inversions**
Drift potential is high during temperature inversions and applications should be avoided under these conditions. Temperature inversions 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. If fog is not present, inversions can also be identified by the movement of smoke from a ground source -- smoke or dust that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion.

**Sensitive Areas**
When applying adjacent to residential areas, water bodies, habitats known to have threatened or endangered species, or non-target crops, drift can be minimized to these areas by making application when the wind direction is away from these areas.

Where states or local authorities have more stringent regulations, they should be observed.

**Airblast (Air Assist) Applications for Tree Crops and Vineyards**
Airblast sprayers carry droplets into the canopy of trees/vines via a radially, or laterally directed air stream. Follow the following specific drift management practices:

- Adjust 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 the spray to go beyond the edge of the cultivated area (i.e., turn off sprayer when turning at end rows).
- Only spray inward, toward the orchard or vineyard, for applications to the outside rows.

## COMPATIBILITY TESTING AND TANK MIX PARTNERS

### Compatibility

TERPENOID BLEND QRD 460 EC is compatible when used with the following biological control agents: *Amblyseius swirskii*, *Cyrtopeltis tenuis*, *Orius laevigatus*, *Typhlodromus pyri*, *Encarsia formosa*, *Eretmocerus sp*. 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.

Bayer CropScience 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.

Do not combine TERPENOID BLEND QRD 460 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.

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 TERPENOID BLEND QRD 460 EC. Bayer CropScience has not tested all varieties and cultivars of all crops and potential tank-mix or rotational combinations.

To ensure crop safety, test TERPENOID BLEND QRD 460 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, do not use the mixture. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

### Order of Mixing

TERPENOID BLEND QRD 460 EC must be diluted with water for spray applications and may be used with other recommended registered pesticides, fertilizers, and micronutrients. Use the following mixing procedure for TERPENOID BLEND QRD 460 EC alone or in tank mix combinations with other registered pesticides, fertilizers, and micronutrients:

1. Shake container well before use.
2. Fill the spray tank 1/4 to 1/3 full with clean water.
3. While recirculating and with the agitator running, add any products in PVA bags **(See Note)**. Allow time for thorough mixing.
4. Continue to fill spray tank with water until 1/2 full.
5. Add any wettable powder (WP), water dispersible granule (WG/WDG) products, or “flowable” (FL/SC) type products.
6. Allow enough time for thorough mixing of each product added to tank.
7. Add required amount of TERPENOID BLEND QRD 460 EC.
8. If applicable, add any remaining tank mix components: emulsifiable concentrates (EC), fertilizers and micronutrients.
9. Fill spray tank to desired level and maintain constant agitation to ensure uniformity of spray mixture.

**NOTES**:
Do not use PVA packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic that is not soluble in water or solvents.

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.

Do not use TERPENOID BLEND QRD 460 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.

# SPECIFIC CROP DIRECTIONS

## CROP USE DIRECTIONS

- TERPENOID BLEND QRD 460 EC has a 0-Day Pre-Harvest Interval (PHI) for all crops contained on this label, and can be applied up to and including the day of harvest.
- TERPENOID BLEND QRD 460 EC must be mixed with water and applied as a foliar spray using conventional insecticide spraying equipment.
- Begin application as soon as pests are seen in the crop.
- Continue applications as needed.
- Do not wait until heavy populations have become established. For Suppression of pests: begin treatments before thresholds have been reached.
- The rate of TERPENOID BLEND QRD 460 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.
- Use the high rate when conditions are favorable for heavy pressure.
- Adjust equipment, spray volume, and spray pressure to ensure thorough coverage of infested parts of the crop.
- 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.

**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 cultivars, varieties, and/or other hybrids of these commodities

| Target Pests | Rate (qt/acre) |
|---|---|
| **THRIPS** – *Thysanoptera*<br>**WHITEFLIES –** *Aleyrodidae*<br>• **SILVERLEAF WHITEFLY –** *Bemisia tabaci* | 2 - 4 |

**BULB VEGETABLES**
Including Garlic, Leek, Onion (dry bulb, green, and Welch), and Shallot and cultivars, varieties, and/or other hybrids of these commodities

| Target Pests | Rate (qt/acre) |
|---|---|
| **MITES –** *Acari*<br>**THRIPS** – *Thysanoptera*<br>• **ONION THRIPS** – *Thrips tabaci (Lindeman)*<br>• **WESTERN FLOWER THRIPS** – *Frankliniella occidentalis*<br>• **TOBACCO THRIPS** – *Frankliniella fusca (Hinds)* | 1.5 - 4 |

**BUSH BERRIES – FOLIAR APPLICATION**
Including Blueberry, Currant, Gooseberry, Huckleberry, Elderberry, and cultivars, varieties, and/or other hybrids of these commodities

| Target Pests | Rate (qt/acre) |
|---|---|
| **MITES –** *Acari*<br>**THRIPS** – *Thysanoptera*<br>• **WESTERN FLOWER THRIPS** – *Frankliniella occidentalis* | 2 - 4 |

| **CEREAL GRAINS (Corn) – FOLIAR APPLICATION**<br>Includes cultivars, varieties, and/or other hybrids of these commodities | |
|---|---|
| **Target Pests** | **Rate (qt/acre)** |
| **CORNSILK FLY –** *Euxesta stigmatias* Loew | 1.5 - 4 |

| **CITRUS FRUITS**<br>Including Grapefruit, Lemon, Lime, Orange, Tangerine, Citrus hybrids, Pummelo, and cultivars, varieties, and/or other hybrids of these commodities | |
|---|---|
| **Target Pests** | **Rate (qt/acre)** |
| **ASIAN CITRUS PSYLLID* –** *Diaphorina citri*<br>**MITES –** *Acari*<br>• **BROAD MITE** – *Polyphagotarsonemus latus*<br>• **CITRUS FLAT MITE** – *Brevipalpus lewisi*<br>• **CITRUS BUD MITE** – *Eriophyes sheldoni*<br>• **CITRUS RED MITE** – *Panonychus citri*<br>• **CITRUS RUST MITE** – *Phyllocoptruta oleivora*<br>• **SIX-SPOTTED SPIDER MITE** – *Eotetranychus sexmaculatus*<br>• **TEXAS CITRUS MITE** – *Eutetranychus banksi*<br>• **YUMA SPIDER MITE** – *Eotetranychus yumensis*<br>• **TWO-SPOTTED SPIDER MITE** – *Tetranychus urticae*<br>• **RUST MITE** – *Aceria anthocoptes*<br>**SCALE –** *Homoptera*<br>**THRIPS** – *Thysanoptera*<br>• **CITRUS THRIPS** – *Scirtothrips citri* | 2 - 4 |
| The rate of Terpenoid Blend QRD 460 EC will depend on tree size and pest pressure. Use a lower rate for light infestation and/or small trees and a higher rate for heavy infestations and/or large trees. When applying to large trees, use higher water volumes to ensure thorough coverage.<br>[*NOT FOR USE ON ASIAN CITRUS PSYLLID IN CALIFORNIA] | |

| **COTTON**<br>Including cultivars, varieties, and/or other hybrids of these commodities | |
|---|---|
| **Target Pests** | **Rate (qt/acre)** |
| **MITES –** *Acari*<br>• **TWO-SPOTTED SPIDER MITE** – *Tetranychus urticae*<br>**WHITEFLIES –** *Aleyrodidae*<br>• **SILVERLEAF WHITEFLY –** *Bemisia tabaci* | 1.5 - 4 |

**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 cultivars, varieties, and/or other hybrids of these commodities

| Target Pests | Rate (qt/acre) |
|---|---|
| **MITES –** *Acari*<br>**THRIPS** – *Thysanoptera*<br>• **MELON THRIPS** – *Thrips palmi*<br>• **WESTERN FLOWER THRIPS** – *Frankliniella occidentalis*<br>**WHITEFLIES –** *Aleyrodidae*<br>• **GREENHOUSE WHITEFLY –** *Trialeurodes vaporariorum*<br>• **SWEETPOTATO WHITEFLY –** *Bemisia tabaci*<br>• **SILVERLEAF WHITEFLY –** *Bemisia tabaci* | 2 - 4 |

**FRUITING VEGETABLES**
Including Eggplant, Ground Cherry, Okra, Pepino, Pepper, Tomatillo, Tomato, and cultivars, varieties, and/or other hybrids of these commodities

| Target Pests | Rate (qt/acre) |
|---|---|
| **MITES –** *Acari*<br>**THRIPS** – *Thysanoptera*<br>• **WESTERN FLOWER THRIPS** – *Frankliniella occidentalis*<br>• **ONION THRIPS** – *Thrips tabaci (Lindeman)*<br>• **CHILLI THRIPS** – *Scirtothrips dorsalis*<br>• **MELON THRIPS** – *Thrips palmi*<br>• **FLORIDA FLOWER THRIPS** – *Thrips palmi*<br>• **EASTERN FLOWER THRIPS** – *Frankliniella tritici*<br>**WHITEFLIES –** *Aleyrodidae*<br>**SILVERLEAF**<br>• **WHITEFLY –** *Bemisia tabaci*<br>• **GREENHOUSE WHITEFLY –** *Trialeurodes vaporariorum*<br>• **BANDEDWINGED WHITEFLY –** *Trialeurodes abutilonea*<br>• **SWEETPOTATO WHITEFLY –** *Bemisia tabaci* | 2 - 4 |
| **LEAFMINERS* –** *Liriomyza spp.* | 3 - 4 |
| *For suppression only; begin treatments before thresholds have been reached. | |

**GRAPE**
Including cultivars, varieties, and/or other hybrids of these commodities

| Target Pests | Rate (qt/acre) |
|---|---|
| **LEAFHOPPERS*** – *Cicadellidae*<br>• **GRAPE LEAFHOPPER –** *Erythroneura elegantula**<br>• **VARIEGATED LEAFHOPPER –** *Erythroneura variabilis**<br>**MITES –** *Acari*<br>• **PACIFIC SPIDER MITE** – *Tetranychus pacificus*<br>• **WILLAMETTE SPIDER MITE** – *Eotetranychus willamettei*<br>• **TWO-SPOTTED SPIDER MITE** – *Tetranychus urticae* | 2 - 4 |
| Do not use TERPENOID BLEND QRD 460 EC on grapes east of the Rockies.<br>Use of TERPENOID BLEND QRD 460 EC on grapes after fruit set can diminish waxy bloom.<br>*For suppression only; begin treatments before thresholds have been reached. | |

**LEAFY VEGETABLES**
Including Lettuce, Arugula, Celery, Spinach, Parsley, Radicchio, Florence Fennel, Romaine, Swiss Chard, and cultivars, varieties, and/or other hybrids of these commodities

| Target Pests | Rate (qt/acre) |
|---|---|
| **THRIPS** – *Thysanoptera*<br>**WHITEFLIES –** *Aleyrodidae*<br>• **SILVERLEAF WHITEFLY –** *Bemisia tabaci* | 2 - 4 |
| **LEAFMINERS* –** *Liriomyza spp.* | 3 - 4 |
| *For Suppression only; begin treatments before thresholds have been reached. | |

**LEAVES OF ROOT AND TUBER VEGETABLES**
Including Carrot, Sweet Potato, Cassava, Beets, Celeriac, Radish, Turnip, Parsnip, and cultivars, varieties, and/or other hybrids of these commodities

| Target Pests | Rate (qt/acre) |
|---|---|
| **LEAFHOPPERS** – *Cicadellidae*<br>**MITES –** *Acari*<br>**PSYLLA –** *Psyllidae*<br>**THRIPS** – *Thysanoptera*<br>**WHITEFLIES –** *Aleyrodidae*<br>**LEAFMINERS –** *Liriomyza spp.* | 2 - 4 |

**LEGUME VEGETABLES (SUCCULENT OR DRIED) – FOLIAR APPLICATION**
Including Beans, Green beans, Snap beans, Shell beans, Garbanzo beans, Lima beans, Peas, Chick peas, Split peas, Lentils, and cultivars, varieties, and/or other hybrids of these commodities

| Target Pests | Rate (qt/acre) |
|---|---|
| **LEAFHOPPERS** – *Cicadellidae*<br>**LYGUS BUGS –** *Lygus Hesperus*<br>**MITES –** *Acari*<br>**THRIPS** – *Thysanoptera*<br>• **WESTERN FLOWER THRIPS** – *Frankliniella occidentalis*<br>• **MELON THRIPS** – *Thrips palmi*<br>**WHITEFLIES –** *Aleyrodidae*<br>**LEAFMINERS –** *Liriomyza spp.* | 2 - 4 |

**OILSEED CROPS**
Including Canola, Castor, Flax, Rapeseed, Safflower, Sesame, Sunflower, and other oilseed crops (including those grown for seed or oil production) and cultivars, varieties, and/or other hybrids of these commodities

| Target Pests | Rate (qt/acre) |
|---|---|
| **MITES –** *Acari*<br>• **TWO-SPOTTED SPIDER MITE** *– Tetranychus urticae*<br>**WHITEFLIES –** *Aleyrodidae*<br>• **SILVERLEAF WHITEFLY –** *Bemisia tabaci* | 1.5 - 4 |

**POME FRUITS – FOLIAR APPLICATION**
Including Apple, Crabapple, Loquat, Mayhaw, Pear, Quince, and other pome fruit crops and cultivars, varieties, and/or other hybrids of these commodities

| Target Pests | Rate (qt/acre) |
|---|---|
| **MITES –** *Acari*<br>• **BROWN MITE** – *Bryobia rubrioculus*<br>• **PEAR RUST MITE** – *Epitrimerus pyri*<br>• **PEAR LEAF BLISTER MITE** – *Phytoptus pyri*<br>• **EUROPEAN RED MITE** – *Panonychus ulmi*<br>• **TWO-SPOTTED SPIDER MITE** – *Tetranychus urticae*<br>• **PACIFIC SPIDER MITE** – *Tetranychus pacificus*<br>• **MCDANIEL SPIDER MITE** – *Tetranychus mcdanieli*<br>**PEAR PSYLLID –** *Cacopsylla pyricola*<br>**THRIPS –** *Thysanoptera* | 2 - 4 |

**ROOT/TUBER AND CORM VEGETABLES**
Including Carrot, Potato, Sweet Potato, Cassava, Beets, Ginger, Horseradish, Radish, Ginseng, Turnip, True Yam, and cultivars, varieties, and/or other hybrids of these commodities

| Target Pests | Rate (qt/acre) |
|---|---|
| **MITES –** *Acari*<br>**PSYLLA –** *Psyllidae*<br>• **POTATO PSYLLID*** – *Bactericera cockerelli*<br>**THRIPS –** *Thysanoptera*<br>**WHITEFLIES –** *Aleyrodidae*<br>• **SILVERLEAF WHITEFLY –** *Bemisia tabaci* | 1 - 4 |
| [*NOT FOR USE ON POTATO PSYLLID IN CALIFORNIA] | |

**STONE FRUITS**
Including Apricot, Cherry, Nectarine, Peach, Plum, Plumcot, Prune, and cultivars, varieties, and/or other hybrids of these commodities

| Target Pests | Rate (qt/acre) |
|---|---|
| **MITES –** *Acari*<br>• **TWO-SPOTTED SPIDER MITE** – *Tetranychus urticae*<br>• **PACIFIC SPIDER MITE** – *Tetranychus pacificus*<br>**THRIPS –** *Thysanoptera* | 2 - 4 |
| The rate of Terpenoid Blend QRD 460 EC will depend on tree size and pest pressure. Use a lower rate for light infestation and/or small trees and a higher rate for heavy infestations and/or large trees. When applying to large trees, use higher water volumes to ensure thorough coverage. | |

**STRAWBERRY – FOLIAR APPLICATION**

| Target Pests | Rate (qt/acre) |
|---|---|
| **MITES –** *Acari*<br>• **TWO-SPOTTED SPIDER MITE** – *Tetranychus urticae*<br>• **CARMINE SPIDER MITE** – *Tetranychus cinnabarinus*<br>• **CYCLAMEN MITE** – *Phytonemus pallidus*<br>• **PACIFIC SPIDER MITE** – *Tetranychus pacificus*<br>**THRIPS** – *Thysanoptera*<br>• **WESTERN FLOWER THRIPS** – *Frankliniella occidentalis*<br>**WHITEFLIES –** *Aleyrodidae*<br>• **SILVERLEAF WHITEFLY –** *Bemisia tabaci*<br>• **GREENHOUSE WHITEFLY –** *Trialeurodes vaporariorum*<br>• **STRAWBERRY WHITEFLY –** *Trialeurodes packardi* | 1 - 4 |

**TREE NUTS**
Including Almond, Beech nut, Cashew, Chestnut, Filbert, Hickory nut, Pecan, Pistachio, Walnut, and cultivars, varieties, and/or other hybrids of these commodities

| Target Pests | Rate (qt/acre) |
|---|---|
| **WALNUT HUSK FLY –** *Rhagoletis completa*<br>**MITES –** *Acari*<br>• **BROWN MITE** – *Bryobia rubrioculus*<br>• **PEACH SILVER MITE** – *Aculus cornutus*<br>• **CITRUS FLAT MITE** – *Brevipalpus lewisi*<br>• **PACIFIC SPIDER MITE** – *Tetranychus pacificus*<br>• **EUROPEAN RED MITE** – *Panonychus ulmi*<br>• **TWO-SPOTTED SPIDER MITE** – *Tetranychus urticae*<br>• **STRAWBERRY SPIDER MITE** – *Tetranychus turkestani* | 2 - 4 |
| The rate of Terpenoid Blend QRD 460 EC will depend on tree size and pest pressure. Use a lower rate for light infestation and/or small trees and a higher rate for heavy infestations and/or large trees. When applying to large trees, use higher water volumes to ensure thorough coverage. | |

| **TROPICAL FRUITS – FOLIAR APPLICATION**<br>Including Avocado, Banana, Kiwi, Mango, Papaya, Plantains, Pineapple, and cultivars, varieties, and/or other hybrids of these commodities | |
|---|---|
| **Target Pests** | **Rate (qt/acre)** |
| **MITES –** *Acari*<br>**THRIPS –** *Thysanoptera* | 2 - 4 |

## 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 handling**
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.