

67760-71

09/28/2009

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

9/28/2009

Carrie M. Tackema
P. O. Box 110566
One Park Drive, Suite 150
Research Triangle Park, NC 27709

Subject: Zoro Miticide/Insecticide, EPA Registration # 67760-71
amendment submitted 9/16/2009, D#420388
accepted

Dear Ms. Tackema:

The revised labeling reference to above, submitted in connection with the registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is ACCEPTABLE. This label amendment removes an erroneous 10' vegetative buffer for cotton (correction requested by Agency 9/9/2009) and makes a minor addition to the container disposal text.

Submit two (2) copies of your final printed labeling incorporating the above changes prior to releasing your product for shipment. If the above provisions are not complied with the registration will be subject to cancellation in accordance with FIFRA Section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

A copy of the label stamped "accepted" is enclosed for your records.

Yours truly,

A handwritten signature in black ink, appearing to read "T. Harris".

Thomas C. Harris
Insecticide / Rodenticide Branch
Registration Division (7505C)
Office of Pesticide Programs
(703) 308-9423
harris.thomas@epa.gov

enclosure

2/28

RESTRICTED USE PESTICIDE

Toxic to Fish, Mammals and Aquatic Organisms

For retail sale to and use only by certified applicators or persons under their direct supervision, and only for those uses covered by the certified applicators certification.

Group	6	Insecticide
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**ZORO™
Miticide/Insecticide**

ACTIVE INGREDIENT:

Abamectin 1.9%*

Other Ingredients: 98.1%

Total: 100.0%

*1 gal. contains 0.15 lb. abamectin

EPA Reg. No. 67760-71

EPA EST NO.: 39578-TX-1

**KEEP OUT OF REACH OF CHILDREN
WARNING AVISO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

**IN CASE OF A MEDICAL EMERGENCY INVOLVING THIS PRODUCT, CALL TOLL FREE,
DAY OR NIGHT, 1-866-303-6950**

See additional precautionary statements directions for use in booklet.

Notice: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

Manufactured For
CHEMINOVA INC.
One Park Drive, Suite 150
P.O. Box 110566
Research Triangle Park, NC 27709
www.cheminova.us.com

ZORO™ is a trademark of Cheminova

ACCEPTED
SEP 28 2009
Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended, for the
pesticide registered under:

EPA. Reg. No: 67760-71

FIRST AID	
IF IN EYES:	<ul style="list-style-type: none"> -Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. -Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none"> -Call a poison control center or doctor immediately for treatment advice. -Do not give any liquid to the person. -Do not induce vomiting unless told to do so by a poison control center or doctor. -Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> -Take off contaminated clothing. -Rinse skin immediately with plenty of water for 15-20 minutes. -Call a poison control center or doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none"> -Move person to fresh air. -If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. -Call a poison control center or doctor for further treatment advice.
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-866-303-6950 for emergency medical treatment information.</p>	

NOTE TO PHYSICIAN
<p>Early signs of intoxication include dilation of pupils, muscular incoordination, and muscular tremors. Toxicity following accidental ingestion of this product can be minimized by early administration of chemical adsorbents (e.g., activated charcoal).</p> <p>If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parental fluid replacement therapy should be given, along with other required supportive measures (such as maintenance of blood pressure levels and proper respiratory functionality) as indicated by clinical signs, symptoms, and measurements.</p> <p>In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since abamectin is believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic abamectin exposure.</p>

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
WARNING/AVISO

Causes substantial but temporary eye injury. Do not get in eyes. Harmful if absorbed through skin or if swallowed. Avoid contact with skin 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.

Personal Protective Equipment

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category E on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- Long sleeved shirt and long pants.
- Socks and shoes.
- Chemical resistant gloves (such as barrier laminate, nitrile rubber, neoprene rubber, viton).
- Protective eyewear.

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

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from target areas. Do not contaminate water when disposing of equipment wash water or rinsate.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

Use of this product may pose a risk to threatened and endangered species of fish, amphibians, crustaceans (including fresh water shrimp), and insects. All use of this product in the state of California should comply with the recommendations of the California Endangered Species Project. Before using this product in California, consult with your county agriculture commissioner to determine use limitations that apply in your area.

PHYSICAL OR CHEMICAL HAZARDS

Combustible: Do not use or store near heat or open flame.

ATTENTION

This product contains a chemical (N-methyl pyrrolidone) known to the state of California to cause birth defects or other reproductive harm.

DIRECTIONS FOR USE RESTRICTED USE PESTICIDE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the 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, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

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:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves – EPA chemical-resistance category E (e.g., barrier laminate, nitrile rubber, neoprene rubber, viton)
- Chemical resistant shoes and socks
- Protective eyewear

FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT CONTROL, AND/OR ILLEGAL RESIDUES.

GENERAL INFORMATION

ZORO is an emulsifiable concentrate that will control certain pests on the crops listed on this label when the product is applied according to the Directions for Use. Thorough coverage of foliage is essential for good mite and insect control.

NOTE:

- **Phytotoxicity:** **ZORO** has been tested for phytotoxicity and has a wide margin of safety on a variety of crops. **ZORO** has also been shown to be compatible with many commonly used pesticides, crop oils, and nutritional sprays. However, since it is not possible to test a large number of possible mixtures, the user should pre-test any proposed mixtures with **ZORO** to ensure the physical compatibility and lack of phytotoxic effects.
- **New York State Restriction:** Do not apply **ZORO** with aircraft in New York State.

Chemigation

Do not apply this product through any type of irrigation system.

Spray Drift Precautions for **ZORO** use on Celeriac, Curcubits, Fruiting Vegetables, Grapes, Leafy Vegetables, Potatoes, and Strawberries:

- Do not apply with ground application equipment within 25 ft., or with aircraft within 150 ft. of lakes, reservoirs, rivers, permanent streams, marshes, potholes, natural ponds, estuaries, or commercial fish farm ponds.
- All aerial and ground application equipment must be properly calibrated, using appropriate carriers, and maintained. For aerial applications, mount the spray boom on the aircraft in a manner that minimizes drift caused by wing tip vortices. Use the minimum practical boom length but do not exceed 75% of wingspan or rotor diameter.
- Use the largest droplet size consistent with pest control. Minimize the formation of very small droplets by selecting appropriate nozzles, orienting nozzles away from the air stream

as much as possible, and avoiding excessive spray boom pressure. Release the spray at the lowest height consistent with pest control and flight safety. Avoid application more than 10 ft. above the crop canopy.

- Make aerial or ground applications when wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid applications when wind gusts approach 15 mph. Avoiding applications when wind direction is toward the aquatic area can reduce risk of exposure to aquatic areas. Do not cultivate within 25 ft. of the aquatic area to allow growth of a vegetative filter strip.
- Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore increase the likelihood of spray drifting to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature.
- Do not make aerial or ground applications during temperature inversions. Inversions are characterized by stable air and temperatures that increase with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

Resistance Management

ZORO is a Group 6 insecticide (contains the active ingredient abamectin). Because of the inherent risks of pests developing resistance to any product, it is strongly advised that **ZORO** be used in a sound resistance management program. Treatment may not be effective against labeled pests if insect or mite-tolerant strains develop. When applying **ZORO** to plants that are hosts of labeled pests with multiple generations per crop per year, use resistance management practices.

Resistance management practices may include, but are not limited to:

- rotating **ZORO** with other products with different modes of action,
- avoiding treatment of successive generations with products based on abamectin or other Group 6 insecticides,
- using labeled rates at the specified spray intervals,
- using non-chemical alternatives such as beneficial arthropods,
- rotating susceptible to non-susceptible plants, and
- using various cultural practices

For additional information regarding the implementation of these or other resistance management practices, consult your local agricultural advisor or company representative.

CROP USE DIRECTIONS

Almonds and Walnuts

For control of European red mite, Pacific spider mite, Strawberry spider mite, and Twospotted spider mite

ZORO may be applied using conventional dilute or concentrate sprayers calibrated to deliver sufficient water for thorough coverage. Gallons of spray will vary with size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good spider mite and insect control.

Almonds and Walnuts

Pest	For Dilute Sprays^a fl. oz./ 100 gals.	For Concentrate Sprays^b fl. oz./A	Instructions
European red mite Pacific spider mite Strawberry spider mite Twospotted spider mite	2.5-5.0	10-20	<ul style="list-style-type: none"> • Always use ZORO in combination with a horticultural spray oil (not a dormant oil) approved for use on almonds/walnuts. • Apply ZORO when spider mites first appear. Residual spider mite control is greater from spray deposits on newer leaves compared to older leaves. • A second application may be made, if needed, to maintain control. (See Use Restrictions)
Horticultural Spray Oil (not a dormant oil)	0.25% or 1 gal./A	Minimum of 1 gal./A	

^aThe rate of **ZORO** per 100 gals. is based on a volume of 400 gals./A dilute spray.

^bTo determine the amount of product per acre for concentrate sprays, first determine the amount that would be required in a full cover dilute spray. Use the same amount of product per acre in concentrate sprays that would be required for the dilute sprays to the same orchard/grove. This may result in use of less than 10 fl. oz./A on small trees.

Use Restrictions – Almonds and Walnuts

- **PHI:** Do not apply within 21 days of harvest.
- **Application Method:** Ground application only. Do not apply with aircraft.
- **Amount of Water:** Do not apply in less than 40 gals. of water/A.
- **Buffer Zone:** To reduce the risk to aquatic organisms, maintain a 25-yard buffer zone around all water bodies containing aquatic life (streams, ponds, lakes, rivers, springs, irrigation canals containing water year-round, swamps, bogs and marshes).
- **Application Interval:** If a second application is necessary, wait at least 21 days before repeating application.
- **Maximum Amount per Application:** Do not apply more than 20 fl. oz. of **ZORO** per application.
- **Applications per Season:** Do not make more than 2 applications per growing season.
- **Maximum Amount per Season:** Do not apply more than 40 fl. oz./A in a growing season.
- **Grazing:** Do not allow livestock to graze in treated orchards.

Apples

For control of European red mite, McDaniel spider mite, Tentiform leafminer, Twospotted spider mite, and White apple leafhopper

ZORO may be applied using conventional dilute or concentrated ground application sprayers calibrated to deliver sufficient water for thorough coverage. Gallons of spray will vary with size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good spider mite and insect control.

NOTE:

- For best results, apply in combination with horticultural spray oil (not a dormant oil) as directed. Applications without horticultural spray oil may result in reduced efficacy and/or residual control.

- When used alone or when other products are applied sequentially, **ZORO** in combination with horticultural spray oil may injure the fruit of certain apple varieties (e.g. russetting on light-skinned varieties such as Golden Delicious).
- When using **ZORO** plus horticultural spray oil, carefully follow the **Directions for Use** and **Precautions** on the horticultural spray oil label as well as the precautions in official spray guides or on product labels. For example, applying **ZORO** plus horticultural spray oil in less than 14 days before or after applying Captan® can result in phytotoxicity and crop loss.

Apples

Pest	For Dilute Sprays ^a fl. oz./ 100 gals.	For Concentrate Sprays ^b fl. oz./A	Instructions
European red mite McDaniel spider mite Tentiform leafminer Twospotted spider mite White apple leafhopper	2.5-5.0	10-20	<ul style="list-style-type: none"> • Apply ZORO when spider mite or insect thresholds are reached. • A second application may be made if needed to maintain control. (See Use Restrictions) • Spider Mites: For best results, apply before a threshold of 5 spider mites per leaf is reached. Residual spider mite control with ZORO in combination with horticultural spray oil (not a dormant oil) is greater from spray deposits on newer leaves compared to older. Applications of ZORO for spider mite control should be limited to a period extending from petal fall through 6 weeks following petal fall. • Tentiform leafminer: For best results, apply onto eggs (to control new hatch) and early sap feeder stages of first and second-generation tentiform leafminers when locally established thresholds have been reached. Do not apply during bloom. • White Apple Leafhopper (Not for use west of the Rocky Mountains): Application of ZORO is limited only to first generation white apple leafhoppers. Apply soon after petal fall in combination with horticultural spray oil (not a dormant oil).
Horticultural Spray Oil (not a dormant oil)	0.25% or 1 gal./A	Minimum of 1 gal./A	

^aThe rate of **ZORO** per 100 gals. is based on a volume of 400 gals./A dilute spray.

^bTo determine the amount of product per acre for concentrate sprays, first determine the amount that would be required in a full cover dilute spray. Use the same amount of product/A in concentrate sprays as would be required for the dilute sprays to the same orchard/grove. This may result in use of less than 10 fl. oz./A on small trees.

Use Restrictions – Apples

- **PHI:** Do not apply within 28 days of harvest.
- **Application Method:** Ground application only. Do not apply with aircraft.
- **Amount of Water:** Do not apply in less than 40 gals. of water/A.
- **Maximum Amount per Application:** Do not apply more than 20 fl. oz. of **ZORO** per application.
- **Application Interval:** If a second application is necessary, wait at least 21 days before repeating application.
- **Number of Applications:** Do not make more than 2 applications per growing season.
- **Maximum Amount per Season:** Do not apply more than 40 fl. oz./A in a growing season.
- **Grazing:** Do not allow livestock to graze in treated orchards.
- **Spray Drift:** Observe the following precautions when spraying in the vicinity of aquatic areas such as lakes, reservoirs, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds:
 - Spray last 3 rows upwind of aquatic areas using nozzles on one side only, with spray directed away from aquatic areas.
 - Avoid spray going over tops of trees by adjusting or turning off top nozzles. Shut off nozzles on the side away from the grove/orchard when spraying the outside row. Shut off nozzles when turning at ends of row and passing tree gaps in rows.
 - Do not apply **ZORO** when weather conditions favor drift to aquatic areas.
 - Do not apply within 110 ft. upwind of aquatic areas or when wind speed is above 8 mph.
 - Do not apply during a temperature inversion.

Avocados

For Control of Avocado thrips

NOTE: **ZORO** may be applied using ground application equipment or aircraft. Aerial application is permitted because of its importance to the avocado growing industry. However, aerial application is not the preferred method of application for the best control of thrips. With aerial application, spray coverage and the resulting control of thrips is less than with ground application. For this reason, the user accepts all liability for the level and duration of control of thrips when **ZORO** is aerially applied.

Gallonage of spray will vary with size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good mite and insect control.

Avocados

Avocados		
Pest	fl. oz./A	Instructions
Avocado Thrips (<i>Scirtothrips perseae</i>) Persea Mite (<i>Oligonychus perseae</i>)	10.0-20.0 Do not use less than 10 fl. oz. of product/A	<ul style="list-style-type: none">• For best results, apply when immature thrips are first observed but before numbers exceed 5 immature thrips per leaf/fruit.• Use 10-15 fl. oz. of product/A for low* to moderate* infestations and 15-20 fl. oz. of product/A for severe* infestations. Add a 1.0%-4.0% NR (narrow range) 415 oil in combination with a horticultural spray oil (not a dormant oil) approved for use on avocados.• Make a second application, if needed, to maintain control, but wait at least 30 days after the first application to retreat. (See Use Restrictions)• For Ground Application: If spray volume is greater than 400 gals./A apply ZORO at a rate of 2.5 fl. oz. per 100 gals. of water plus 1.0%-4.0% of an NR 415 oil.• Note: To prevent crop injury, observe all precautions and restrictions on the oil label. When using oil concentrations above 2.0% treat a small test area before making a large-scale application.
Horticultural Oil (not a dormant oil)	Minimum 1 to 4% v/v	
*Thrips Infestation Level	Number of immature thrips per leaf/fruit	
Low	1-2	
Moderate	3-4	
Severe	More than 5	

Use Restrictions – Avocados

- PHI:** Do not apply within 14 days of harvest.
- Application Method:** Ground and aerial application permitted.
- Amount of Water:** Do not apply in less than 100 gals. of water with ground equipment or 50 gals. of water with aircraft.
- Maximum Amount Per Application:** Do not apply more than 20 fl. oz./A per application.
- Application Interval:** Wait at least 30 days before repeating application.
- Number of Applications:** Do not make more than 2 applications per season.
- Maximum Amount Per Season:** Do not apply more than 40 fl. oz./A per season.
- Grazing:** Do not allow livestock to graze in treated orchards.

Celeriac (*Apium graveollens*)

For control of Twospotted spider mite

ZORO may be applied using conventional dilute or concentrate sprayers. Thorough coverage of the crop canopy is essential for optimum results. Inadequate crop coverage may result in reduced control. Calibrate sprayer to deliver sufficient water for thorough coverage of the foliage.

Celeriac

Pest	fl. oz./A	Instructions
Twospotted spider mite	16.0	<ul style="list-style-type: none"> • For best results, use in combination with a non-ionic surfactant. • Apply when mites first appear and repeat as necessary to maintain control. (See Use Restrictions.)

Use Restrictions - Celeriac

- **PHI:** Do not apply within 7 days of harvest.
- **Application Method:** Apply with ground application equipment.
- **Amount of water:** Do not apply in less than 20 gals. of water/A.
- **Application Interval:** Wait at least 7 days before repeating application.
- **Number of Applications:** For resistance management, do not make more than 2 sequential applications.
- **Maximum Amount per Season:** Do not apply more than 48 fl. oz./A after transplanting.

Citrus Fruit Crop Group

Some of the crops in this group are: Citrus citron, Citrus hybrids, *Citrus* species (includes chironja, tangelo, tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Sour orange, and Sweet orange.

For control of Asian citrus psylla, Broad mite, Citrus bud mite, Citrus leafminer, Citrus rust mite, Citrus thrips, and Twospotted spider mite

Apply using conventional dilute or concentrate ground application sprayers calibrated to deliver sufficient water for thorough coverage (or outside coverage for Asian citrus psylla, citrus leafminer, or citrus thrips). Gallons of spray will vary with size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good mite and insect control.

Citrus Fruit Crop Group

Pest	For Dilute Sprays^a fl. oz./ 100 gals.	For Concentrate Sprays^b fl. oz./A	Instructions
Asian citrus psylla	--	10-20 ^c	<ul style="list-style-type: none"> Applications should be made with a minimum of 0.20% horticultural spray oil (not a dormant oil) in the spray mixture or not less than 1.0 gal. of oil/A (except when specified differently below). Asian Citrus Psylla: Apply to protect newly expanding foliage flush during the spring, summer or fall. ZORO will only control adults and nymphs present at the time of application. Mites: Apply when mites first appear during spring, summer, and/or fall. <p>(See Use Restrictions)</p> <ul style="list-style-type: none"> Citrus Bud Mite: For best results, time the spray at "bud swell". Citrus Leafminer: Apply to protect new growth during spring, summer, or fall. (See Use Restrictions) Citrus Thrips: Application targeted for citrus thrips will only control the current generation and must be correctly timed. Apply when economic thresholds have been reached (after egg hatch has begun – preferably early to mid-hatch). (See Use Restrictions.)
Broad mite	1.0-2.0	10-20 ^c	
Citrus bud mite	1.0-2.0	10-20 ^d	
Citrus rust mite	0.5-2.0	5-20 ^c	
Twospotted spider mite	1.0-2.0	10-20	
Citrus leafminer	-	5-20 ^c	
Citrus thrips	-	10-20 ^e	

^aThe rate of **ZORO** per 100 gals. is based on a volume of 1,000 gals./A dilute spray.

^bFor concentrate sprays, adjust the dosage to apply an amount/A equal to that used in full cover dilute spray.

^cFor best results, use 150-300 gals./A of spray mix with a minimum of 3 gal./A of horticultural oil (not a dormant oil) and apply at a ground speed of 1 to 1.5 MPH.

^dFor best results, use a minimum of 500 gals./A of spray mix with a minimum of 0.5% of finished spray horticultural oil (not a dormant oil).

^eFor best results, use 100-250 gals./A of spray mix applied to achieve outside coverage.

Use Restrictions – Citrus Fruit Crop Group

- PHI:** Do not apply within 7 days of harvest.
- Application Method:** Ground application only. Do not apply with aircraft.
- Prohibited Use:** To manage resistance do not use in citrus nurseries.
- Application Interval:** Do not apply **ZORO**, or any other abamectin containing product within 30 days of the last treatment.
- Maximum Amount per Season:** Do not apply more than 40 fl. oz./A (0.047 lb a.i./A) of **ZORO** or any other abamectin containing product, in any growing season. Do not make more than 3 applications of **ZORO** or any other abamectin containing product in any growing season.

- **Grazing:** Do not allow livestock to graze in treated orchards.
- **Spray Drift:** Observe the following precautions when spraying in the vicinity of aquatic areas such as lakes, reservoirs, permanent streams, marshes, natural ponds, estuaries, or commercial fish farm ponds.
 - Spray last 3 rows upwind of aquatic areas using nozzles on 1 side only, with spray directed away from aquatic areas.
 - Avoid spray going over tops of trees by adjusting or turning off top nozzles. Shut off nozzles on the side away from the grove/orchard when spraying the outside row. Shut off nozzles when turning at ends of row and passing tree gaps in rows.
 - Do not apply **ZORO** when weather conditions favor drift to aquatic areas.
 - Do not apply within 110 ft. upwind of aquatic areas or when wind speed is above 8 mph.
 - Do not apply during a temperature inversion.

COTTON

For control of spider mites.

Mix with water as indicated below. Thorough coverage of the crop is essential for optimum results. Inadequate coverage may result in reduced control. For best coverage and control apply ZORO with ground application equipment.

Spider Mites		
	Fl. oz./A	Instructions
Carmine spider mite Pacific spider mite Strawberry spider mite Twospotted spider mite	4-6 (Early Season Cotton – See Instructions) 8-16	<p>Apply when mites first appear. The use rate depends on the size of the plant and density of the foliage. Repeat application if needed to maintain control. See Use Restrictions below.</p> <p>The lower use rates of 4-6 fl. oz./A are only recommended if cotton is early season and under 10 inches in height. Do not use less than 4 fl. oz./A.</p> <p>West of the Rocky Mountains – the lower use rates may only be used on cotton less than 10 inches in height and applied only with ground equipment.</p> <p>Note: ZORO may be used without a wetting agent. Spreading and penetrating surfactants can improve mite control. When necessary to improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant is recommended. Do not use binder or sticker type surfactants.</p>

Use Restrictions

- **PHI:** Do not apply within 20 days of harvest.
- **Application Method:** Ground or aerial application is permitted.
- **Minimum Amount of Water:** Do not apply in fewer than 5 gallons of water per acre. Use sufficient volume to insure thorough coverage.
- **Maximum Amount per Application:** Do not apply more than 16 fl. oz./A per application.
- **Application Interval:** Wait at least 21 days before repeating application.
- **Maximum Amount per Season:** Do not apply more than 32 fl. oz./A per season.
- **Grazing Restriction:** Do not feed or allow livestock to graze treated cotton.

Cucurbits Crop Group

Some of the crops in this group are: Citron Melon, Cucumbers, Gherkin, Edible Gourds (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica* spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); Muskmelon, Cantaloupe, Pumpkin, Summer Squash, Winter Squash (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); Watermelon.

For Control of Spider Mites and Leafminers

Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

Note: ZORO may be applied with ground application equipment or aircraft. For best control of mites, apply ZORO with ground application equipment. With aerial application, spray coverage and the resulting control of mites is less than with ground application. For this reason, the user accepts all liability for the level and duration of control of mites when ZORO is aerially applied.

Cucurbits Crop Group

Pest	fl. oz./A	Instructions
Leafminers Spider mites	8.0-16.0	<ul style="list-style-type: none"> • Use 8-12 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations. • Apply when adult leafminer flies or spider mites are first observed. Repeat applications as needed to maintain control within constraints of a sound resistance management program. (See Use Restrictions).

Use Restrictions – Cucurbit Crop Group

- **PHI:** Do not apply within 7 days of harvest.
- **Application Method:** Ground or aerial application is permitted; however, do not apply with aircraft in New York State.
- **Amount of Water:** Do not apply in less than 20 gals. of water/A with ground application equipment. Do not apply in less than 5 gals. of water/A with aircraft. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures) use a greater volume of water to insure adequate coverage.
- **Application Interval:** Wait at least 7 days before repeating application.
- **Number of Applications:** Do not make more than 2 sequential applications.
- **Maximum Amount Per Season:** Do not apply more than 48 fl. oz./A in a growing season.

Fruiting Vegetable Crop Group

Some of the crops in this group are: Tomato; eggplant; peppers (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper); Tomatillo.

For control of Broad mite, Colorado potato beetle, *Liriomyza* leafminers, Spider mites, *Thrips palmi*, Tomato pinworm, and Tomato russet mite

Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

Note: ZORO may be applied with ground application equipment or aircraft. For best control of mites, apply ZORO with ground application equipment. With aerial application, spray coverage and the resulting control of mites is less than with ground application. For this reason, the user accepts all liability for the level and duration of control of mites when ZORO is aerially applied.

Fruiting Vegetables Crop Group

Pest	fl. oz./A	Instructions
Broad mite Colorado potato beetle <i>Liriomyza</i> leafminers Spider mites Thrips palmi Tomato Russet mite	8.0-16.0	<ul style="list-style-type: none"> • Broad, Russet, and spider mites: Apply when mites first appear. • Thrips palmi: Apply when thrips are first observed. • Tomato pinworm: Application may be made from the time moth activity is detected up to, but no later than, the time when newly emerged larvae are present.
Tomato pinworm	16.0	<ul style="list-style-type: none"> • Mites, leafminers, Thrips palmi, and Colorado potato beetle: Use 8 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations. • Repeat application as necessary to maintain control. (See Use Restrictions). • Note: ZORO may be used without a wetting agent. Spreading and penetrating surfactants can improve insect control. When necessary to improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant is recommended. Do not use binder or sticker-type surfactants.

Peppers

Pest	fl. oz./A	Instructions
Potato psyllid	8.0-16.0	<ul style="list-style-type: none"> • For suppression of potato psyllid. • Scout fields and begin applications when psyllid first appears. • Use 8-12 fluid ounces per acre for low to moderate infestations and 16 fluid ounces per acre for heavy infestations. Sequential applications 10-14 days apart may be needed for infestations with heavy egg and nymph populations. • Applications may be made by ground or air. use sufficient water volumes to achieve thorough coverage. A spreading or penetrating adjuvant or horticultural oil should be added at recommended rates.

Use Restrictions –Fruiting Vegetables Crop Group

- **PHI:** Do not apply within 7 days of harvest.
- **Application Method:** Ground or aerial application permitted; however, do not apply with aircraft in New York State.
- **Prohibited Use:** For resistance management, do not use on fruiting vegetables grown for transplanting.
- **Amount of Water:** Do not apply in less than 20 gals. of water/A with ground application equipment. Do not apply in less than 5 gals. of water/A with aircraft. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures) use a greater volume of water to insure adequate coverage.
- **Application Interval:** Wait at least 7 days before repeating application, but do not make more than 2 sequential applications.
- **Maximum Amount per Season:** Do not apply more than 48 fl. oz./A in a growing season.

Grapes

For control of Pacific spider mite, Twospotted spider mite, Western grapeleaf skeletonizer, and Willamette spider mite

ZORO may be applied using ground sprayers calibrated to deliver sufficient water for thorough coverage. Thorough coverage is essential for good spider mite and insect control. Do not spray alternate rows. **ZORO** must be applied to both sides of each row for maximum coverage.

Grapes

Pest	fl. oz./A	Instructions
Pacific spider mite Twospotted spider mite Willamette spider mite Western grapeleaf skeletonizer Western grape leaf-hopper Varigated leafhopper	8.0-16.0 Plus a nonionic surfactant	<ul style="list-style-type: none"> • Use a 8-12 fl. oz./A for low to moderate infestations and 16 fl. oz. for severe infestations. • Repeat application, if needed. (See Use Restrictions) • Note: ZORO must be applied in combination with a nonionic surfactant to improve wetting of foliage and to smooth out spray deposits. Spreading and penetrating surfactants can improve insect control. Do not use binder or sticker-type surfactants. Although ZORO has been tested in combination with a nonionic surfactant for safety to grapes, it is impossible to test on all grape varieties under the variety of conditions that may cause crop injury. Therefore, when using ZORO in combination with a nonionic surfactant, carefully follow the Directions for Use and Precautions on the nonionic surfactant label and in official spray guides. • Spider mites: Apply when mites first appear but before motiles exceed 5 per leaf. • Western grapeleaf skeletonizer: Apply ZORO plus a nonionic surfactant when larvae are first observed. For optimum control, apply shortly after egg hatch. • Western grape leaf-hopper and Varigated leafhopper: Apply ZORO plus nonionic surfactant when pest first observed. Provides contact knock-down control only.

Use Restrictions – Grapes

- **PHI:** Do not apply within 28 days of harvest
- **Application Method:** Ground application only.
- **Amount of Water:** Do not apply in less than 50 gals. of water/A with conventional ground application equipment.
- When using an electro-static sprayer, less than 50 gals. of water/A may be used; however, do not use less than 5 gals. of water/A.
- **Maximum Amount per Application:** Do not apply more than 16 fl. oz./A per application.
- **Application Interval:** If a second application is necessary, wait at least 21 days before repeating application.
- **Number of Applications:** Do not make more than 2 applications per growing season.
- **Maximum Amount per Season:** Do not apply more than 32 fl. oz./A in a growing season.
- **Grazing:** Do not allow livestock to graze in treated vineyards.

Herb Crop Subgroup (Except Chives)

Some of the crops in this subgroup are: basil; camomile; catnip; coriander (leaf); dill weed; lavender; marigold; marjoram (*Oiganum* species); nasturtium; parsley (dried); rosemary; sage; summer and winter savory; tarragon; thyme; and wintergreen.

For control of *Liriomyza* leafminers

Mix with water as indicated below. Apply thoroughly with ground application equipment as a foliar spray and ensure good upper and lower leaf coverage.

Herb Crop Subgroup (Except Chives)

Pest	fl. oz./A	Instructions
<i>Liriomyza</i> leafminers	8.0-16.0	<ul style="list-style-type: none"> • Use 8 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations. • Apply when adult flies are first observed and repeat application, as necessary to maintain control. (See Use Restrictions) • ZORO may be used without a wetting agent. When necessary to improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant is recommended. • Note: Although ZORO has been tested in combination with a nonionic surfactant for safety to herbs, it is impossible to test on all herb types and varieties under the variety of conditions that may cause crop injury. Therefore, when using ZORO in combination with a nonionic surfactant, carefully follow the Directions for Use and Precautions on the nonionic surfactant label and in official spray guides.

Use Retrictions – Herb Crop Subgroup (Except Chives)

- **PHI:** Do not apply within 14 days of harvest.
- **Application Method:** Apply with ground application equipment.
- **Amount of Water:** Use a minimum of 30 gals. of water/A.
- **Application Interval:** Wait at least 7 days before repeating application.
- **Number of Applications:** Do not make more than 2 applications per single cutting (harvest).
- **Maximum Amount per Season:** Do not make more than 6 applications per cropping season at the 8 fl. oz./A rate or 3 applications per cropping season at the 16 fl. oz./A rate.

Hops (Not approved for use in California)

For control of Twospotted spider mite

Mix with water an indicated below. Apply with ground application equipment as a foliar spray and ensure good upper and lower leaf coverage. Gallons of spray may vary with the size of plants and density of foliage. In any case, thorough coverage is essential for good control of

Twospotted spider mite. When using concentrate sprays, the amount of water is reduced, but the amount of **ZORO** should remain the same as for dilute sprays.

Hops

Pest	fl. oz./A	Instructions
Twospotted spider mite	8-16.0	<ul style="list-style-type: none"> • Apply ZORO when Twospotted spider mites reach treatment thresholds. • For applications at ½ trellis growth (6-8 ft. height) apply 8-16 fl. oz./A in a minimum of 40 gals. of water/A. • For applications beyond ½ trellis growth, do not use less than 16 fl. oz./A in a minimum of 100 gals. of water/A. • Note: ZORO may be used without a wetting agent. When necessary to improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant is recommended.

Use Restrictions – Hops

- **PHI:** Do not apply within 28 days of harvest.
- **Application Method:** Ground application only. Do not apply with aircraft.
- **Application Interval:** If a second application is necessary to maintain control, wait at least 21 days before repeating application and repeat application only after an alternative miticide with a different mode of action has been used.
- **Number of Applications:** Do not make more than 2 applications (32 fl. oz./A) per growing season.
- **Grazing:** Do not allow livestock to graze in treated hops yards.
- **Spray Drift Precautions:**
 - All ground application equipment must be properly calibrated using appropriate carriers and maintained.
 - Observe the following precautions when spraying in the vicinity of aquatic areas such as lakes, reservoirs, permanent streams, marshes, natural ponds, estuaries, or commercial fish farm ponds.
 - Do not apply with ground application equipment within 25 ft. of the above-mentioned aquatic areas. Avoid application when wind direction is toward these areas.
 - Do not make ground applications during temperature inversions or if heavy rainfall is imminent. Inversions are characterized by stable air and temperatures that increase with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.
 - Use the largest droplet size consistent with good pest control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.
 - Apply with ground application equipment when the wind velocity favors on-target product deposition (approximately 3-10 mph). Do not apply when wind velocity or wind gusts approach 15 mph. Inclusion of a compatible drift reducing agent is encouraged.
 - Low humidity and high temperatures increase the evaporative rate of droplets and

therefore increase spray drift potential. When making applications under these conditions, set up equipment to produce larger droplets to compensate for evaporation.

Leafy Vegetable Crop Group

Some of the crops in this group are: Celery, Lettuce (head and leaf), Amaranth (Chinese spinach), Garden cress, Upland cress, Dandelion, Endive, Fennel, Parsley, Radicchio, Rhubarb, Spinach, and Swiss chard.

For Control of Carmine spider mite, *Liriomyza* leafminers, and Twospotted spider mite

Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

Note: ZORO may be applied with ground application equipment or aircraft. For best control of mites, apply ZORO with ground application equipment. With aerial application, spray coverage and the resulting control of mites is less than with ground application. For this reason, the user accepts all liability for the level and duration of control of mites when ZORO is aurally applied.

Leafy Vegetable Crop Group

Pest	fl. oz./A	Instructions
Carmine spider mite <i>Liriomyza</i> leafminers Twospotted spider mite	8.0-16.0 Plus a nonionic surfactant	<ul style="list-style-type: none"> • Use 8-12 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations. • Spider mites: Apply when mites first appear, and repeat as needed to maintain control. (See Use Restrictions) • Leafminers: Apply when adult flies are first observed and repeat applications as needed to maintain control. (See Use Restrictions) • Note: ZORO may be used without a wetting agent. Spreading and penetrating surfactants can improve insect control. When necessary to improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant is recommended. Do not use binder or sticker-type surfactants.

Use Restrictions – Leafy Vegetable Crop Group

- **PHI:** Do not apply within 7 days of harvest.
- **Application Method:** Ground or aerial application permitted; however, do not apply with aircraft in New York State.
- **Prohibited Use:** For resistance management, do not use on leafy vegetables grown for transplanting.
- **Amount of Water:** Do not apply in less than 20 gals. of water/A with ground application equipment. Do not apply in less than 5 gals. of water per acre with aircraft. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures) use a greater volume of water to insure adequate coverage.
- **Application Interval:** Wait at least 7 days before repeating application.
- **Number of applications:** Do not make more than 2 sequential applications.
- **Maximum Amount per Season:** Do not apply more than 48 fl. oz./A per growing season.

Mint (peppermint and spearmint)

For control of Twospotted spider mite

Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

Mint

Pest	fl. oz./A	Instructions
Twospotted spider mite	8.0-12.0	<ul style="list-style-type: none"> • Treat when mites first appear. • For optimum control, a nonionic surfactant or organosilicone-based surfactant should be used at the manufacturer's recommended rate.

Use Restrictions – Mint

- **PHI:** Do not apply within 28 days of harvest.
- **Application Method:** Ground or aerial application permitted; however, do not apply with aircraft in New York State.
- **Amount of Water:** Do not apply in less than 20 gals. of water/A with ground application equipment. Do not apply in less than 5 gals. of water/A with aircraft. Under conditions such as high pest populations, dense foliage, or adverse application conditions such as high temperatures, use a greater volume of water to insure adequate coverage.
- **Maximum Amount per Application:** Do not apply more than 12 fl. oz./A per application.
- **Application Interval:** Wait at least 7 days before repeating application.
- **Number of Applications:** Do not make more than 2 sequential applications and do not apply more than 3 applications per season.
- **Maximum Amount per Season:** Do not apply more than 36 fl. oz./A per crop per season.
- **Grazing:** Do not allow livestock to graze or feed treated foliage to livestock.

Pears (including Oriental pear trees)

For control of European red mite, McDaniel spider mite, Pear psylla, Pear rust mite, Twospotted spider mite, and Yellow mite

ZORO may be applied using conventional dilute or concentrated ground application sprayers calibrated to deliver sufficient water for thorough coverage. Gallons of spray will vary with size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good spider mite and insect control.

NOTE:

- For best results, apply in combination with horticultural spray oil (not a dormant oil) as directed. Applications without horticultural spray oil may result in reduced efficacy and/or residual control.
- When using **ZORO** plus horticultural spray oil, carefully follow the **Directions for Use** and **Precautions** on the horticultural spray oil label as well as the precautions in official spray guides or on product labels. For example, applying **ZORO** plus horticultural spray oil in less than 14 days before or after applying Captan® can result in phytotoxicity and crop loss.

Pears

	For Dilute Sprays ^a fl. oz./ 100 gals.	For Concentrate Sprays ^b fl. oz./A	
Pest			Instructions

European red mite McDaniel spider mite Pear psylla Pear rust mite Twospotted spider mite Yellow mite	2.5-5.0	10-20	<ul style="list-style-type: none"> • Apply ZORO when spider mite or insect thresholds are reached. • A second application may be made if needed to maintain control (See Use Restrictions)
Horticultural Spray Oil (not a dormant oil)	0.25% or 1 gal./A	Minimum of 1 gal./A	

^aThe rate of **ZORO** per 100 gals. is based on a volume of 400 gals./A dilute spray.

^bTo determine the amount of product per acre for concentrate sprays, first determine the amount that would be required in a full cover dilute spray. Use the same amount of product/A in concentrate sprays as would be required for the dilute sprays to the same orchard/grove. This may result in use of less than 10 fl. oz./A on small trees.

Use Restrictions – Pears

- **PHI:** Do not apply within 28 days of harvest.
- **Application Method:** Ground application only. Do not apply with aircraft.
- **Amount of Water:** Do not apply in less than 40 gals. of water/A.
- **Maximum Amount per Application:** Do not apply more than 20 fl. oz./A of **ZORO** per application.
- **Application Interval:** If a second application is necessary, wait at least 21 days before repeating application.
- **Number of Applications:** Do not make more than 2 applications per growing season.
- **Maximum Amount per Season:** Do not apply more than 40 fl. oz./A in a growing season.
- **Grazing:** Do not allow livestock to graze in treated orchards.
- **Spray Drift:** Observe the following precautions when spraying in the vicinity of aquatic areas such as lakes, reservoirs, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.
 - Spray last 3 rows upwind of aquatic areas using nozzles on one side only, with spray directed away from aquatic areas.
 - Avoid spray going over tops of trees by adjusting or turning off top nozzles. Shut off nozzles on the side away from the grove/orchard when spraying the outside row. Shut off nozzles when turning at ends of row and passing tree gaps in rows.
 - Do not apply **ZORO** when weather conditions favor drift to aquatic areas.
 - Do not apply within 110 ft. upwind of aquatic areas or when wind speed is above 8 mph.
 - Do not apply during a temperature inversion.

Plums and Prunes

For control of European spider mite, Pacific spider mite, and Twospotted spider mite

ZORO may be applied using conventional dilute or concentrate sprayers calibrated to deliver sufficient water for thorough coverage. Gallons of spray will vary with size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good spider mite control.

Plums and Prunes

Pest	For Dilute Sprays ^a fl. oz./ 100 gals.	For Concentrate Sprays ^b fl. oz./A	Instructions
European red mite Pacific spider mite Twospotted spider mite	2.5-5.0	10-20	<ul style="list-style-type: none"> • Apply when mites first appear. A second application may be made, if needed, to maintain control. (See Use Restrictions) • Always apply ZORO in combination with a nonionic surfactant that spreads on and/or penetrates the leaf cuticle, or apply with horticultural spray oil (not a dormant oil). • NOTE: <ol style="list-style-type: none"> 1) A nonionic surfactant that spreads on and/or penetrates the leaf cuticle can improve insect control. Although ZORO has been tested in combination with nonionic surfactants for safety to stone fruit, it is impossible to test on all plum/prune fruit varieties under the variety of conditions that may cause crop injury. Therefore, when using ZORO in combination with a nonionic surfactant, carefully follow the Directions for Use and Precautions on the surfactant label and in official spray guides. 2) A horticultural oil (not a dormant oil) may improve efficacy and can be used but it may increase the possibility of phytotoxicity to foliage and fruit.
Horticultural Spray Oil (not a dormant oil) OR Nonionic Surfactant	0.25% or 1 gal./A Label Rate	Minimum of 1 gal./A	<ul style="list-style-type: none"> • Use a minimum of 0.25% horticultural spray oil (not a dormant oil) in the dilute spray mixture and not less than 1.0 gal. of horticultural spray oil per acre in the final finished spray. • Use nonionic surfactants at the manufacturer's recommended rate.

^aThe rate of **ZORO** per 100 gals. is based on a volume of 400 gals./A dilute spray.

^bTo determine the amount of product per acre for concentrate sprays, first determine the amount that would be required in a full cover dilute spray. Use the same amount of product per acre in concentrate sprays as would be required for the dilute sprays to the same orchard/grove. This may result in use of less than 10 fl. oz./A on small trees.

Use Restrictions – Plums and Prunes

- **PHI:** Do not apply within 21 days of harvest.
- **Application Method:** Ground application only. Do not apply with aircraft.
- **Amount of Water:** Do not apply in less than 40 gals. of water/A.
- **Maximum Amount Per Application:** Do not apply more than 20 fl. oz./A per application.
- **Application Interval:** If a second application is needed, wait at least 21 days before repeating application.
- **Number of Applications:** Do not make more than 2 applications per growing season.
- **Maximum Amount per Season:** Do not apply more than 40 fl. oz./A in a growing season.
- **Grazing:** Do not allow livestock to graze in treated orchards.
- **Spray Drift:** Observe the following precautions when spraying in the vicinity of aquatic areas such as lakes, reservoirs, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds:
 - Spray at least 3 rows upwind of aquatic areas using nozzles on one side only, with spray directed away from aquatic areas.
 - Avoid spray going over tops of trees by adjusting or turning off top nozzles.
 - Shut off nozzles on the side away from the grove/orchard when spraying the outside row.
 - Shut off nozzles when turning at ends of row and passing tree gaps in rows.
 - Do not apply **ZORO** when weather conditions favor drift to aquatic areas. Do not apply within 100 ft. upwind of aquatic areas or when wind speed is above 8 mph.
 - Do not apply during a temperature inversion.

Potatoes

For control of Colorado potato beetle, *Liriomyza* leafminers, and Spider mites

Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

Note: **ZORO** may be applied using ground application equipment or aircraft. For best control of mites, apply **ZORO** with ground application equipment. With aerial application, spray coverage and the resulting control of mites is less than with ground application. For this reason, the user accepts all liability for the level and duration of control of mites when **ZORO** is aerially applied.

Potatoes

Pest	fl. oz./A	Instructions
Colorado potato beetle Spider mites <i>Liriomyza</i> leafminers	8.0-16.0	<ul style="list-style-type: none"> • Use 8-12 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations. • The addition of a nonionic surfactant or organosilicone-based surfactant, at the manufacturer's recommended rate, is suggested for optimum spider mite and insect control. • Insect and spider mite control may be reduced if ZORO is used in combination with a sticker or binder type product such as Bravo® Weather Stik®. • Colorado potato beetle: Make the first application after approximately 50% of the egg masses have hatched and larvae are present. If 2 applications are needed, limit them to a single Colorado potato beetle generation per crop. Do not make more than 2 applications per crop (See Use Restrictions) • <i>Liriomyza</i> leafminers: Make the first application when adult flies are first observed. Repeat applications as needed to maintain control. (See Use Restrictions) • Spider mites: Make the first application when mites first appear. Repeat application as needed to maintain control. (See Use Restrictions)

Use Restrictions – Potatoes

- **PHI:** Do not apply within 14 days of harvest.
- **Application Method:** Ground or aerial application permitted; however, do not apply with aircraft in New York State.
- **Amount of Water:** Do not apply in less than 20 gals. of water/A with ground application equipment. Do not apply in less than 5 gals. of water/A with aircraft. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures) use a greater volume of water to insure adequate coverage.
- **Application Interval:** Wait at least 7 days before repeating application.
- **Number of Applications:** Do not make more than 2 sequential applications.
- **Maximum Amount per Crop:** Do not apply more than 32 fl. oz./A per crop for spider mite or Colorado potato beetle control. Do not apply more than 48 fl. oz./A per crop for leafminer control.
- **Grazing:** Do not allow livestock to graze or feed treated foliage to livestock.

Strawberries

For control of Strawberry spider mite and Twospotted spider mite

Mix with water as indicated below. Apply with ground application equipment as a foliar spray and insure thorough coverage on upper and lower leaf surfaces. Adjust spray volume and nozzle placement to insure maximum coverage of tops and undersides of leaves.

Strawberries

Pest	fl. oz./A	Instructions
Strawberry spider mite Twospotted spider mite Carmine mites* Cyclamen mites* Aphids* Thrips* Whiteflies*	16.0	<ul style="list-style-type: none"> • Make 2 applications 7-10 days apart when mites first appear. Repeat this application sequence, if needed, to maintain control. (See Use Restrictions) • Note: ZORO may be used without a wetting agent. When necessary to improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant is recommended. • Good coverage into the crown of the plant will enhance the results of ZORO application for Cyclamen mites. The addition of surfactant will also aid in suppression of all these pests.

*suppression

Use Restrictions – Strawberries

- **PHI:** Do not apply within 3 days of harvest.
- **Application Method:** Ground application only. Do not apply with aircraft.
- **Prohibited Use:** For resistance management purposes, do not use in strawberry nurseries.
- **Amount of Water:** Do not apply in less than 50 gals. of water/A with conventional ground application equipment. When using electro-static sprayers do not apply in less than 10 gallons of water/A.
- **Maximum Amount per Application:** Do not apply more than 16 fl. oz./A per application.
- **Application Interval:** Wait at least 21 days after the second application before repeating application.
- **Maximum Amount per Season:** Do not apply more than 64 fl. oz./A in a growing season.

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in a tightly closed container in a cool, dry place under lock and key. Post as a pesticide storage area. Always store pesticides in the original container. Store away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Place liquid formulations on lower shelves and dryer formulations above.

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).

Container Disposal**Nonrefillable containers 5 gallons or less:**

Do not reuse or refill this container. 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.

Nonrefillable containers greater than 5 gallons:

Do not reuse or refill this container. Offer for recycling if available. Triple rinse container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank and store rinsate for later use or disposal. Repeat this procedure two more times.

IMPORTANT: READ BEFORE USE

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 container at once. By using this product, user or buyer accepts the following warranty disclaimer, inherent risks of use and limitation of remedies.

WARRANTY DISCLAIMER

Cheminova warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, CHEMINOVA MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

INHERENT RISKS OF USE

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Cheminova or the seller. All such risks shall be assumed by the Buyer.

LIMITATION OF REMEDIES

To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Cheminova's election, one of the following:

- 1) Refund of purchase price paid by buyer or user for product bought, or
- 2) Replacement of amount of product used.

Cheminova shall not be liable for losses or damages resulting from handling or use of this product unless Cheminova is promptly notified of such loss or damage in writing. In no case shall Cheminova be liable for consequential or incidental damages or losses. The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Cheminova or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

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