UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

July 28, 2014

Tammy Tyler Regulatory Product Manager Syngenta Crop Protection, LLC PO Box 18300 Greensboro, NC 27419

Subject: Label Amendment – Drop CA citrus aerial restriction, add pests, update resistance text

Product Name: Epi-Mek SC

EPA Registration Number: 100-1408

Application Date: 3/21/2014 Decision Number: D489452

Dear Ms. Tyler:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). If you have any questions, please contact Tom Harris by phone at (703) 308-9423, or via email at harris.thomas@epa.gov.

Sincerely,

Meredith F. Laws, Chief Insecticide-Rodenticide Branch Registration Division (7505P) Office of Pesticide Programs

(BOOKLET)

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 APPLICATOR'S CERTIFICATION.

Epi-Mek™ SC

Miticide/Insecticide

GROUP 6 INSECTICIDE

Active Ingredient:

Abamectin¹.....8.0%*

Other Ingredients: 92.0%

Total: 100.0%

KEEP OUT OF REACH OF CHILDREN.

WARNING/AVISO

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

See additional precautionary statements and directions for use in booklet.

EPA Reg. No. 100-1408

EPA Est. XXXX

Product of XXXXX Formulated in XXXXX

SCP 1408 MAS 0413

Net Contents

ACCEPTED

07/28/2014

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 100-1408

¹CAS No. 71751-41-2

^{*1} gallon contains 0.7 lb. abamectin formulated as a suspension concentrate.

	FIRST AID
If swallowed	Call poison control center or doctor immediately for treatment advice.
	Have a person sip a glass of water if able to swallow.
	Do not induce vomiting unless told to do so by the poison control
	center or doctor.
	Do not give anything by mouth to an unconscious person.
If inhaled	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.
If on skin or	Take off contaminated clothing.
clothing	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
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.
	Call a poison control center or doctor for treatment advice.

NOTE TO PHYSICIAN

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).

If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral 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.

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. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

HOT LINE NUMBER

For 24-Hour Medical Emergency Assistance (Human or Animal)
Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident),
Call

1-800-888-8372

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING/AVISO

May be fatal if swallowed or inhaled. Do not breathe vapor or spray mist. Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

Personal Protective Equipment (PPE)

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

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material Category A (e.g., natural rubber ≥ 14mils)
- Shoes plus socks

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.

Engineering Controls

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

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

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 on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are foraging in/or adjacent to 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.

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a medium potential for reaching both surface water and aquatic sediment via runoff for several weeks to months after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of abamectin from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours.

Attention: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

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 are allowed 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. Exception: For grape girdling, cane turning, and tying in grapes, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 days.

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 pants and short-sleeved shirt
- Chemical-resistant gloves made of any waterproof material Category A (e.g., natural rubber ≥ 14mils)
- Shoes plus socks

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

USE INFORMATION

Epi-Mek SC is an aqueous-based soluble concentrate that will control specified 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:

- Adjuvant Requirement: To avoid illegal crop residues, Epi-Mek SC must always be mixed with a non-phytotoxic, non-ionic activator type wetting, spreading and/or penetrating spray adjuvant or horticultural oil (not a dormant oil) as specified in the **Directions for Use** for each crop on this label. Non-ionic activator type wetting, spreading and/or penetrating spray adjuvants include nonionic surfactants (NIS) with at least 75% surface active agent and crop oil concentrates (COC), vegetable oil concentrates (VOC), methylated seed/vegetable oils (MSO) and organosilicones (OS) with at least 15% emulsifiers/surfactants and include blends of these non-ionic activator type spray adjuvants. Spray adjuvants must be compatible with Epi-Mek SC and must be used at concentrations specified on the **spray adjuvant product label** directions for use for the targeted crop unless more specific directions are provided in the Directions for Use for individual crops on this label. Do not use binder or sticker type adjuvants because these type adjuvants may reduce translaminar movement of the active ingredient into the plant. SYNGENTA recommends the use of a Chemical Producers and Distributors Associationcertified spray adjuvant.
- Phytotoxicity and Tank Mix Compatibility: Epi-Mek SC has been tested for phytotoxicity and has a wide margin of safety on a variety of crops. Epi-Mek SC has also been tested and shown to have broad physical, biological, and non-phytotoxic compatibility with many commonly used pesticides, spray adjuvants, and nutritional products. However, since it is not possible to test all potential mixtures, it is recommended that the user contact the supplier of all desired tank mix products for advice and/or pre-test, prior to commercial application, any previously unproven proposed mixtures with Epi-Mek SC. Conduct a jar test for physical compatibility of all components of the proposed mixture using proper concentrations of each mixture component. Pre-test the proposed mixture on a small area of the target crop under environmental and application conditions similar to the intended commercial application to ensure physical, biological, and non-phytotoxic compatibility. Agricultural products formulated with binder or sticker type components may reduce performance of Epi-Mek SC.
- Adjuvant Phytotoxicity Precaution: Since Epi-Mek SC must always be mixed
 with a spray adjuvant as instructed in the directions above, and spray adjuvants
 alone are known to cause Phytotoxicity to certain crops under certain
 environmental conditions, do not use Epi-Mek SC on a spray-adjuvant-sensitive

crop unless the spray adjuvant supplier can confirm a known non-phytotoxic labeled use rate for the intended spray adjuvant on the target crop.

- **New York State Restriction:** Do not apply Epi-Mek SC with aircraft in New York State.
- **Chemigation:** Do not apply this product through any type of irrigation system.

SPRAY DRIFT

Responsibility

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions.

NOTE: When states have more stringent regulations, they must be observed.

Spray Drift Precautions for Application with Aircraft or Ground Application Equipment

- Apply Epi-Mek SC only when wind velocity favors on-target product deposition (approximately 3 to 10 mph).
- Do not apply with ground application equipment within 25 ft. of or with aircraft within 150 ft. of lakes, reservoirs, rivers, permanent streams, marshes, pot holes, natural ponds, estuaries, or commercial fish farm ponds.
- Do not cultivate within 25 ft. of the aquatic area to allow growth of a vegetative filter strip.
- Do not allow this product to drift onto non-target areas. Drift may result in illegal residues or injury to non-target species. Risk of exposure to sensitive areas can be reduced by applying this product when the wind direction is away from the sensitive area.
- Do not apply when the weather conditions may cause drift.
- Avoid application when the temperature is high and/or the humidity is low. These
 conditions increase the evaporation of spray droplets and the likelihood of drift to
 aquatic areas.
- Do not apply when wind speed or wind gusts are greater than 15 mph.

- Do not apply when wind speed is below 2 mph because wind direction will vary and there is a high potential for inversion.
- Observe the following precautions when using ground application to spray tree crops or hops in the vicinity of aquatic areas such as lakes, reservoirs, permanent streams, marshes, potholes, natural ponds, estuaries, or commercial fish ponds:
 - Do not apply Epi-Mek SC 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.
 - Spray last 3 rows windward of aquatic areas using nozzles on one side only, with spray directed away from the 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.

Spray Drift Precautions for Aerial Application

Drift Management Requirements

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops.

Outermost Nozzle Distance

The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.

Nozzle Direction

Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Maximum Wind Speed

Do not apply when wind speed is greater than 15 mph.

Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions. (See **Wind**, **Temperature and Humidity**, and **Temperature Inversions**.)

Controlling Droplet Size

Volume

Use high flow-rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

Pressure

Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Number of Nozzles

Use the minimum number of nozzles that provide uniform coverage.

Nozzle Orientation

Orienting nozzles so that the spray is released parallel to the air stream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

Nozzle Type

Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid-stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height

Applications should not be made at a height greater than 10 ft. above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a cross wind, the swath will be displaced downwind. Therefore, on the up- and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind.

Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application must be avoided below 2 mph due to variable wind direction and high inversion potential.

NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

To compensate for evaporation when applying Epi-Mek SC in low relative humidity, set up equipment to produce larger droplets. Evaporation of droplets is most severe when conditions are both hot and dry.

• Temperature Inversions

Epi-Mek SC must not be applied during a temperature inversion because the potential for drift is high. Temperature inversions restrict vertical air mixing, and this causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds that are common during inversions. Temperature inversions are characterized by temperatures that increase with altitude and are common on nights with limited cloud cover and light to no wind. Inversions begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, the movement of smoke from a ground source or an aircraft smoke generator can also identify inversions. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Resistance Management

GROUP 6 INSECTICIDE

Some insect or mite pests are known to develop resistance to products after repeated use. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies established for the crop and use area. Syngenta encourages responsible product stewardship to ensure effective long-term control of the insects or mites on this label.

Epi-Mek SC contains a Group 6 miticide/insecticide (abamectin). Insect or mite biotypes with acquired or inherent resistance to Group 6 miticides/insecticides may eventually dominate the pest population if Group 6 miticides/insecticides are used repeatedly as the predominant method of control for targeted species. This may result in

partial or total loss of control of those species by Epi-Mek SC or other Group 6 miticides/insecticides.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect or mite may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area.

In order to maintain susceptibility to this class of chemistry:

- Avoid using Group 6 miticides/insecticides exclusively for season long control of insect or mite species with more than one generation per crop season.
- For insect or mite species with successive or overlapping generations, apply Epi-Mek SC or other Group 6 miticides/insecticides using a "treatment window" approach. A treatment window is a period of time as defined by the stage of crop development and/or the biology of the pests of concern. Within the treatment window, depending on the length of residual activity, there may either be single or consecutive applications (seed treatment, soil, foliar, unless otherwise stated) of the Group 6 miticides/insecticides. Do not exceed the maximum Epi-Mek SC allowed per growing season.
- Following a treatment window of Group 6 miticides/insecticides, rotate to a treatment window of effective products with a different mode of action before making additional applications of Group 6 miticides/insecticides.
- A treatment window rotation, along with other IPM practices for the crop and use area, is considered an effective strategy for preventing or delaying a pest's ability to develop resistance to these classes of chemistry.
- If resistance is suspected, do not reapply Epi-Mek SC or other Group 6 miticides/insecticides.

Other Insect or Mite Resistance Management (IRM) practices include:

- Incorporating IPM techniques into your insect or mite control program.
- Monitoring treated insect or mite populations for loss of field efficacy.
- Using tank-mixtures or premixes with miticides/insecticides from a different target site of action group as long as the involved products are all registered for the same crop outlet and effective rates are applied.

For additional information on Insect or Mite Resistance Management:

- Contact your local extension specialist, certified crop advisor and/or product manufacturer for additional insect resistance management recommendations.
- Visit the Insecticide Resistance Action Committee (IRAC) on the web at http://www.irac-online.org/.

CROP USE DIRECTIONS

APPLES

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

Apply Epi-Mek SC using conventional dilute or concentrate ground application sprayers calibrated to deliver sufficient water for thorough coverage. Adjust gallons of spray per acre based on 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.

Apples

Apples	For Dilute Sprays ¹ fl. oz./ 100 gal.	For Concentrate Sprays ² fl. oz./A	Instructions
European red mite McDaniel spider mite Tentiform leafminer Twospotted spider mite White apple leafhopper	0.5-1.0	2.25-4.25	To avoid illegal residues, Epi-Mek SC must be mixed with a spray adjuvant. Horticultural spray oil (not a dormant oil) is recommended. Do not use binder or sticker type adjuvants. (See Use Information section found at the beginning of this Epi-Mek SC label and Use Restrictions below.) Apply Epi-Mek SC when spider mite or insect thresholds are reached.
Recommended Rate When Using Horticultural Spray Oil (not a dormant oil)	0.25% or 1 gal./A	Minimum of 1 gal./A	 Make a second application, if needed, to maintain control. (See Use Restrictions below.) Spider Mites: For best results, apply before a threshold of 5 spider mites per leaf is reached. Residual spider mite control is greater from spray deposits on newer leaves compared to older. For best results, apply Epi-Mek SC for spider mite control in the tree development period extending from petal fall through 6 weeks following petal fall. Tentiform Leafminer: For best results, apply against egg (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 Epi-Mek SC is limited only to first generation white apple leafhoppers. Apply soon after petal fall.

¹The rate of Epi-Mek SC per 100 gallons is based on a volume of 400 gal./A dilute spray.

²To 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 can result in use of less than 2.25 fl. oz./A on small trees.

Use Restrictions – Apples

- PHI: Do not apply within 28 days of harvest.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with
 a spray adjuvant as instructed in the Use Information section found at the
 beginning of this Epi-Mek SC label. The spray adjuvant must be approved for use
 on the targeted apple variety. Carefully follow the Directions for Use and
 Precautions on the spray adjuvant label as well as the precautions in official local
 spray guides.
 - When used alone or when other products are applied sequentially, the combination of Epi-Mek SC with horticultural spray oil can injure the fruit of certain apple varieties (e.g., russetting on light-skinned varieties such as Golden Delicious).
 - Applying the combination of Epi-Mek SC and horticultural spray oil fewer than 14 days before or after applying Captan® or other sulfur-containing products can result in phytotoxicity and crop loss.
- Application Method: Ground application only. Do not apply with aircraft.
- Amount of Water: Do not apply in less than 40 gallons of water/A.
- Maximum Amount per Application: Do not apply more than 4.25 fl. oz./A (or 0.023 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per application.
- Application Interval: If a second application is necessary, wait at least 21 days before repeating application of Epi-Mek SC or any other foliar-applied abamectincontaining product.
- **Number of Applications:** Do not make more than 2 applications of Epi-Mek SC or any other foliar-applied abamectin-containing product per growing season.
- Maximum Amount per Season: Do not apply more than 8.5 fl. oz./A (or 0.047 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product in a growing season.
- **Grazing:** Do not allow livestock to graze in treated orchards.

AVOCADOS

For control of Avocado thrips and Persea mite

NOTE: Aerial vs. Ground Application: Apply Epi-Mek SC 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, the resulting level and duration of control of thrips could be less than with ground application.

Adjust gallons of spray per acre based on 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

Pest	fl. oz./A	Instructions
Avocado Thrips (Scirtothrips perseae) Persea mite (Oligonychus perseae)	2.25-4.25 Do not use less than 2.25 fl. oz. of product/A.	 To avoid illegal residues, Epi-Mek SC must be mixed with a spray adjuvant. 1.0% to 4.0% v/v of a horticultural spray oil (not a dormant oil) approved for use on avocados is recommended. Do not use binder or sticker type adjuvants. (See Use Information section found at the beginning of this Epi-Mek SC label and Use Restrictions below.) For best results, apply when immature thrips are first
Recommended Rate When Using Horticultural Spray Oil (not a dormant oil)	Minimum 1 to 4% v/v	 observed but before numbers exceed 5 immature thrips per leaf/fruit. Use 2.25-3.25 fl. oz. of product /A for low* to moderate* infestations and 3.25-4.25 fl. oz. of product/A for severe* infestations. Make a second application if needed to maintain control, but wait at least 30 days after the first application to retreat. (See Use Restrictions below.) For Ground Application: If spray volume is greater than 400 gal./A, apply Epi-Mek SC at a rate of 0.5 fl. oz. per 100 gallons of water.

*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.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with
 a spray adjuvant as instructed in the Use Information section found at the
 beginning of this Epi-Mek SC label. The spray adjuvant must be approved for use
 on avocados. Carefully follow the Directions for Use and Precautions on the
 spray adjuvant label as well as the precautions in official local spray guides.

Note: To prevent crop injury, observe all precautions and restrictions on the horticultural spray oil label. When using horticultural spray oil concentrations above 2.0%, treat a small test area before making a large-scale application.

- Application Method: Ground and aerial application are permitted.
- **Amount of Water:** Do not apply in less than 100 gallons of water with ground application equipment or 50 gallons of water with aircraft.
- Maximum Amount per Application: Do not apply more than 4.25 fl. oz./A (or 0.023 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per application.
- **Application Interval:** Wait at least 30 days before repeating application of Epi-Mek SC or any other foliar-applied abamectin-containing product.

- **Number of Applications:** Do not make more than 2 applications of Epi-Mek SC or any other foliar-applied abamectin-containing product per season.
- Maximum Amount per Season: Do not apply more than 8.5 fl. oz./A (or 0.047 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per season.
- **Grazing:** Do not allow livestock to graze in treated orchards.

CELERIAC (Apium graveollens)

For control of Twospotted spider mite

Apply Epi-Mek SC using conventional dilute or concentrate sprayers. Thorough coverage of the crop canopy is essential for optimum results. Inadequate crop coverage can result in reduced control.

Celeriac

Pest	fl. oz./A	Instructions
Twospotted spider mite	3.5	 To avoid illegal residues, Epi-Mek SC must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant. Do not use binder or sticker type adjuvants. (See Use Information section found at the beginning of this Epi-Mek SC label and Use Restrictions below.) Apply when mites first appear and repeat as necessary to maintain control. (See Use Restrictions below.)

Use Restrictions – Celeriac

- **PHI:** Do not apply within **7 days** of harvest.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with
 a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant as
 instructed in the Use Information section found at the beginning of this Epi-Mek SC
 label. The spray adjuvant must be approved for use on celeriac. Carefully follow the
 Directions for Use and Precautions on the adjuvant label as well as the
 precautions in official local spray guides. Do not use binder or sticker type
 adjuvants.
- **Application Method:** Apply with ground application equipment only.
- Amount of Water: Do not apply in less than 20 gallons of water/A.
- **Application Interval:** Wait at least 7 days before repeating application of Epi-Mek SC or any other foliar-applied abamectin-containing product.
- **Number of Applications:** For resistance management, do not make more than 2 sequential applications of Epi-Mek SC or any other foliar-applied abamectin-containing product.

• Maximum Amount per Season: After transplanting the celeriac, do not apply more than 10.25 fl. oz./A (or 0.056 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per season.

CITRUS FRUIT CROP GROUP (Crop Group 10)

Crops in this group are: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Sour orange, Sweet orange, Pummelo, and Satsuma mandarin.

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

Thorough spray coverage is essential for good mite and insect control. Adjust spray gallons of spray per acre based on size and number of trees per acre as well as density of foliage.

Ground Application

Apply using conventional dilute or concentrate ground application sprayers calibrated to deliver sufficient water for thorough coverage (or outside coverage for Asian citrus psyllid, citrus leafminer, or citrus thrips).

Aerial Application

Aerial application is permitted **only** for control of citrus leafminer and Asian citrus psyllid. When using aerial application, the resulting level and duration of control of these pests could be reduced compared to ground application. It is recommended to use the higher end of the rate range (3.75 to 4.25 fl. oz. per acre for concentrated sprays) when applying this product by air.

Citrus Fruit Crop Group

Pest	For Dilute Sprays ¹ fl. oz./100 gal.	For Concentrate Sprays ² fl. oz./A	Instructions
Asian citrus psyllid		2.25-4.25 ³	To avoid illegal residues, Epi-Mek SC
Broad mite	0.25-0.4	2.25-4.25 ³	must be mixed with a spray adjuvant. It is recommended for best results that a
Citrus bud mite	0.25-0.4	2.25-4.25 ⁴	minimum of 0.20% horticultural spray oil (not a dormant oil) be used in the spray
Citrus leafminer		1.0-4.25 ³	mixture or not less than 1.0 gallon of horticultural spray oil/A (except when
Citrus rust mite	0.125-0.4	1.0-4.25 ³	specified differently in footnotes below). Do not use binder or sticker type adjuvants. (See Use Information
Citrus thrips		2.25-4.25 ⁵	section found at the beginning of this Epi-Mek SC label and Use Restrictions below.)
Twospotted spider mite	0.25-0.4	2.25-4.25	Asian Citrus Psyllid: Apply Epi-Mek SC to protect newly expanding foliage
			flush during the spring, summer, or fall. Epi-Mek SC will only control adults and nymphs present at the time of application. Use 3.75 to 4.25 fl. oz. per acre with aerial application. • Mites: Apply when mites first appear during spring, summer, and/or fall. • Citrus Bud Mite: For best results, time the spray at "bud swell." • Citrus Leafminer: Apply to protect new growth during spring, summer, or fall. Use 3.75 to 4.25 fl. oz. per acre with aerial application. • 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).

¹The rate of Epi-Mek SC per 100 gallons is based on a volume of 1,000 gal./A dilute spray.

Use Restrictions – Citrus Fruit Crop Group

• PHI: Do not apply within 7 days of harvest.

²For concentrate sprays, adjust the dosage to apply an amount/A equal to that used in full cover dilute

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

⁴For best results, use a minimum of 500 gal./A of spray mix with a minimum of 0.5% horticultural spray oil

⁽not a dormant oil). ⁵For best results, use 100-250 gal./A of spray mix applied to achieve outside coverage.

Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with
a spray adjuvant as instructed in the Use Information section found at the
beginning of this Epi-Mek SC label. The spray adjuvant must be approved for use
on the intended target crop in the citrus crop group. Carefully follow the Directions
for Use and Precautions on the spray adjuvant label as well as the precautions in
official local spray guides. Refer to the Directions for Use table above for
additional spray adjuvant instructions.

Application Method:

- o **To control citrus leafminer and Asian citrus psyllid** Ground or aerial application is permitted. For aerial application use a minimum of 10 gallons of finished spray volume per acre. For best results, use at least 25 gallons of finished spray volume per acre. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.
- o **All other pests** Ground application only. Do not apply with aircraft.
- Prohibited Use: To manage resistance, do not use in citrus nurseries.
- **Application Interval:** Wait at least 30 days before repeating application of Epi-Mek SC or any other foliar-applied abamectin-containing product.
- Maximum Amount per Season:
 - o **Do not** apply more than 8.5 fl. oz./A (or 0.047lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product in any growing season.
 - o **Do not** make more than 3 applications of Epi-Mek SC or any other foliar-applied abamectin-containing product in any growing season.
- **Grazing:** Do not allow livestock to graze in treated orchards.

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.

Note:

- Epi-Mek SC may be applied with ground application equipment or aircraft.
- For best control of spider mites, apply Epi-Mek SC with ground application equipment. With aerial application, spray coverage and the resulting level and duration of control of mites may be less than with ground application.

Pest	FI. oz./A	Instructions
Carmine spider mite	1.0-1.25	To avoid illegal residues, Epi-Mek SC must be mixed with a non-
Pacific spider mite	(Early-Season Cotton - See Instructions)	ionic activator type wetting, spreading and/or penetrating
Strawberry spider mite	,	spray adjuvant. Do not use binder or sticker type adjuvants. (See
Twospotted spider mite	1.75-3.5	Use Information section found at the beginning of this Epi-Mek SC label and Use Restrictions below.)
		Apply when mites first appear. The use rate depends on the size of the plant and density of the foliage.
		The lower use rates of 1.0-1.25 fl. oz./A are only recommended if cotton is early season and under 10 inches in height. Do not use less than 1.0 fl. oz./A.
		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.
		Repeat application, if needed, to maintain control. See Use Restrictions below.

Use Restrictions

- PHI: Do not apply within 20 days of harvest.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with a surfactant approved for use on cotton. Do not use binder or sticker type adjuvants. Carefully follow the **Directions for Use** and **Precautions** on the surfactant label as well as the precautions in official spray guides or on product labels.
- 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 ensure thorough coverage.
- Maximum Amount per Application: Do not apply more than 3.5 fl. oz./A (or 0.019 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per application.
- Application interval: Wait at least 21 days before repeating application.
- Maximum Amount per Season: Do not apply more than 7.0 fl. oz./A (or 0.038 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per season.

• Grazing Restriction: Do not feed or allow livestock to graze treated cotton

CUCURBIT VEGETABLES CROP GROUP (Crop Group 9)

Crops in this group are: Chayote, Chinese waxgourd, Citron Melon, Cucumber, Gherkin, Edible Gourd (includes hyotan, cucuzza, hechima, Chinese okra), *Momordica* spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber), Muskmelon (hybrids and/or cultivars of *Cucumis melo*, includes true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon), Pumpkin, Summer Squash (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini), Winter Squash (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash), and Watermelon (includes hybrids and/or varieties of *Citrullus lanatus*).

For Control of Leafminers and Spider Mites

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

Note:

- Apply Epi-Mek SC with ground application equipment or aircraft.
- For best control of leafminers and spider mites, apply Epi-Mek SC with ground application equipment. With aerial application, the resulting level and duration of control of leafminers and spider mites could be less than with ground application.

Cucurbit Vegetables Crop Group

Pest	fl. oz./A	Instructions
Leafminers Spider mites	1.75-3.5	 To avoid illegal residues, Epi-Mek SC must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant. Do not use binder or sticker type adjuvants. (See Use Information section found at the beginning of this Epi-Mek SC label and Use Restrictions below.) Use 1.75-2.5 fl. oz./A for low to moderate infestations and 3.5 fl. oz./A for severe infestations. Apply when adult leafminer flies or spider mites are first observed and repeat application, as needed, to maintain control within constraints of a sound resistance management program. (See Use Restrictions below.)

Use Restrictions – Cucurbit Vegetables Crop Group

- **PHI:** Do not apply within **7 days** of harvest.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with
 a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant as
 instructed in the Use Information section found at the beginning of this Epi-Mek SC
 label. The spray adjuvant must be approved for use on the intended target crop in
 the cucurbit crop group. Carefully follow the Directions for Use and Precautions
 on the spray adjuvant label as well as the precautions in official local spray guides.
 Do not use binder or sticker type adjuvants.
- **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 gallons of water/A with ground application equipment. Do not apply in less than 5 gallons 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 ensure adequate coverage.
- Maximum Amount per Application: Do not apply more than 3.5 fl oz./A (or 0.019 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per application.
- **Application Interval:** Wait at least 7 days before repeating application of Epi-Mek SC or any other foliar-applied abamectin-containing product.
- **Number of Applications:** For resistance management, do not make more than 2 sequential applications of Epi-Mek SC or any other foliar-applied abamectin-containing product.
- Maximum Amount per Season: Do not apply more than 10.25 fl. oz./A (or 0.056 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product in a growing season.

DRY BEANS

Crops include: *Cicer arietinum* (chickpea, garbanzo bean), *Lupinus* spp. (including sweet lupine, white sweet lupine, white lupine, and grain lupine), *Phaseolus* spp. (including kidney bean, lima bean, mung bean, navy bean, pinto bean, snap bean, and waxbean), *Vicia faba* (broad bean, fava bean), and *Vigna* spp. (including adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea*, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, and yardlong bean)

*For use on cowpeas that are grown only for dry seed. Do not allow livestock to graze cowpea forage and do not harvest cowpea forage or hay for use as livestock feed.

For control of *Liriomyza* leafminers and Spider Mites

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

Note:

- Apply Epi-Mek SC with ground application equipment or aircraft.
- For best control, apply Epi-Mek SC with ground application equipment. With aerial application, the resulting control of leafminers and spider mites could be less than with ground application.

Dry Beans

Pest	fl. oz./A	Instructions
Liriomyza leafminers Spider mites	1.75 3.5	 To avoid illegal residues, Epi-Mek SC must be mixed with a non-ionic activator type wetting, spreading, and/or penetrating spray adjuvant. Do not use binder or sticker type adjuvants. (See Use Information section found at the beginning of this Epi-Mek SC label and Use Restrictions below.) Use 1.75 – 2.5 fl. oz./A for low to moderate infestations and 3.5 fl. oz./A for high infestations. Leafminers and Spider Mites: Apply when adult leafminer flies or spider mites are first observed and repeat application as needed to maintain control within constraints of a sound resistance management program. (See Use Restrictions below.)

Use Restrictions – Dry Beans

- **PHI:** Do not apply within **7 days** of harvest (7-day PHI).
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with
 a non-ionic activator type wetting, spreading, and/or penetrating spray adjuvant as
 instructed in the Use Information section found at the beginning of this Epi-Mek SC
 label. The spray adjuvant must be approved for use on the intended target crop in
 the dry bean crop list above. Carefully follow the Directions for Use and
 Precautions on the spray adjuvant label as well as the precautions in official local
 spray guides. Do not use binder or sticker type adjuvants.
- **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 10 gallons of water/A with ground application equipment. Do not apply in less than 5 gallons 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 ensure adequate coverage.
- Maximum Amount per Application: Do not apply more than 3.5 fl. oz./A (or 0.019 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per application.

- Application Interval: Wait at least 6 days before repeating application.
- **Number of Applications:** For resistance management, do not make more than 2 sequential applications of Epi-Mek SC or any other foliar-applied abamectin-containing product.
- Maximum Amount per Season: Do not apply more than 10.25 fl. oz./A (or 0.056 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product in a growing season.

FRUITING VEGETABLES CROP GROUP (except Cucurbits) (Crop Group 8)

Crops in this group are: Eggplant, Groundcherry, Pepino, Peppers (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper), Tomatillo, and Tomato

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

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

Note:

- Apply Epi-Mek SC with ground application equipment or aircraft.
- For best control of mites and insects, apply Epi-Mek SC with ground application equipment. With aerial application, the resulting level and duration of control of mites and insects could be less than with ground application.

Fruiting Vegetables Crop Group

Pest	fl. oz./A.	Instructions
Broad mite Colorado potato beetle Liriomyza leafminers Spider mites Thrips palmi Tomato psyllid Tomato russet mite	 To avoid illegal residues, Epi-Mek mixed with a non-ionic activator ty spreading and/or penetrating spra not use binder or sticker type adju Information section found at the Epi-Mek SC label and Use Restrice Broad, russet, and spider mites mites first appear. Thrips palmi: Apply when thrips 	mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant. Do not use binder or sticker type adjuvants. (See Use Information section found at the beginning of this Epi-Mek SC label and Use Restrictions below.) • Broad, russet, and spider mites: Apply when mites first appear.
Tomato pinworm	3.5	 Tomato pinworm: Application can be made from the time moth activity is detected up to, but no later than, the time when newly emerged larvae are present. Mites, leafminers, Thrips palmi, and Colorado potato beetle: Use 1.75 fl. oz./A for low to moderate infestations and 3.5 fl. oz./A for severe infestations. Repeat application as necessary to maintain control. (See Use Restrictions below.)

Use Restrictions – Fruiting Vegetables Crop Group

- **PHI:** Do not apply within **7 days** of harvest.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with
 a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant as
 instructed in the Use Information section found at the beginning of this Epi-Mek SC
 label. The spray adjuvant must be approved for use on the intended target crop in
 the fruiting vegetables crop group. Carefully follow the Directions for Use and
 Precautions on the spray adjuvant label as well as the precautions in official local
 spray guides. Do not use binder or sticker type adjuvants.
- **Application Method:** Ground or aerial application is 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 gallons of water/A with ground application equipment. Do not apply in less than 5 gallons 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 ensure adequate coverage.
- Maximum Amount per Application: Do not apply more than 3.5 fl. oz./A (or 0.019 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per application.

- **Application Interval:** Wait at least 7 days before repeating application of Epi-Mek SC or any other foliar-applied abamectin-containing product.
- **Number of Applications:** For resistance management, do not make more than 2 sequential applications of Epi-Mek SC or any other foliar-applied abamectin-containing product.
- **Maximum Amount per Season:** Do not apply more than 10.25 fl. oz./A (or 0.056 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product in a growing season.

GRAPES

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

Apply Epi-Mek SC using conventional 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. Epi-Mek SC must be applied to both sides of each row for maximum coverage.

Grapes

Pest	fl. oz./A	Instructions
Pacific spider mite Twospotted spider mite Variegated leafhopper Western grape leafhopper Western grapeleaf skeletonizer Willamette spider mite	1.75-3.5	 To avoid illegal residues, Epi-Mek SC must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant. Do not use binder or sticker type adjuvants. (See Use Information section found at the beginning of this Epi-Mek SC label and Use Restrictions below.) Use 1.75-2.5 fl. oz./A for low to moderate infestations and 3.5 fl. oz. for severe infestations. Repeat application if needed. (See Use Restrictions below.) Spider mites: Apply when mites first appear but before motiles exceed 5 per leaf. Western grapeleaf skeletonizer: Apply when larvae are first observed. For optimum control, apply shortly after egg hatch. Leafhoppers: Epi-Mek SC provides contact knock-down only.

Use Restrictions – Grapes

- PHI: Do not apply within 28 days of harvest.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant as instructed in the Use Information section found at the beginning of this Epi-Mek SC label. The spray adjuvant must be approved for use on the targeted grape variety. Although Epi-Mek SC has been tested in combination with a range of non-ionic activator type wetting, spreading and/or penetrating spray adjuvants for safety to grapes, it is impossible to test Epi-Mek SC with all potential spray adjuvants on all grape varieties under the variety of conditions that could cause crop injury. Therefore, when using Epi-Mek SC, carefully follow the Directions for Use and Precautions on the spray adjuvant label and in official local spray guides. Do not use binder or sticker type adjuvants.
- Application Method: Ground application only.
- Amount of Water: Do not apply in less than 50 gallons of water/A with conventional ground application equipment. When using an electro-static sprayer, less than 50 gallons of water/A can be used; however, do not use less than 5 gallons of water/A.
- Maximum Amount per Application: Do not apply more than 3.5 fl. oz./A (or 0.019 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per application.
- Application Interval: If a second application is necessary, wait at least 21 days before repeating application of Epi-Mek SC or any other foliar-applied abamectincontaining product.
- **Number of Applications:** Do not make more than 2 applications of Epi-Mek SC or any other foliar-applied abamectin-containing product per growing season.
- Maximum Amount per Season: Do not apply more than 7.0 fl. oz./A (0.038 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product in a growing season.
- **Grazing:** Do not allow livestock to graze in treated vineyards.

HERB CROP SUBGROUP (Crop Subgroup 19A)

Crops in this subgroup are: Angelica, Balm, Basil, Borage, Burnet, Camomile, Catnip, Chervil (dried), Chives, Chives (Chinese), Clary, Coriander (leaf), Cilantro (leaf), Costmary, Culantro (leaf), Curry (leaf), Dill weed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram (*Origanum* species), Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Summer and Winter savory, Sweet bay, Tansy, Tarragon, Thyme, Wintergreen, Woodruff, and Wormwood.

For control of *Liriomyza* leafminers and Spider Mites

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 (Crop Subgroup 19A)

Pest	fl. oz./A.	Instructions
Liriomyza leafminers Spider Mites	1.75-3.5	 To avoid illegal residues, Epi-Mek SC must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant. Do not use binder or sticker type adjuvants. (See Use Information section found at the beginning of this Epi-Mek SC label and Use Restrictions below.) Use 1.75 fl. oz./A for low to moderate infestations and 3.5 fl. oz./A for severe infestations. Apply when adult leafminer flies or spider mites are first observed and repeat application, as necessary to maintain control. (See Use Restrictions below.)

Use Restrictions – Herb Crop Subgroup (Crop Subgroup 19A)

- PHI: Do not apply within 14 days of harvest. For chives, do not apply within 7 days of harvest.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant as instructed in the Use Information section found at the beginning of this Epi-Mek SC label. The spray adjuvant must be approved for use on the intended target crop in the herb crop subgroup 19A. Although Epi-Mek SC has been tested in combination with a range of non-ionic activator type wetting, spreading and/or penetrating spray adjuvants for safety to herbs, it is impossible to test Epi-Mek SC with all potential spray adjuvants on all herb types and varieties under the variety of conditions that could cause crop injury. Therefore, it is important to carefully follow the Directions for Use and Precautions on the spray adjuvant label and in official local spray guides. Do not use binder or sticker type adjuvants.
- **Application Method:** Apply with ground application equipment.
- Amount of Water: Use a minimum of 20 gallons of water/A.
- Maximum Amount per Application: Do not apply more than 3.5 fl. oz./A (or 0.019 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per application.
- **Application Interval:** Wait at least 7 days before repeating application of Epi-Mek SC or any other foliar-applied abamectin-containing product.
- **Number of Applications:** For resistance management, do not make more than 2 applications of Epi-Mek SC or any other foliar-applied abamectin-containing product per single cutting (harvest).
- Maximum Amount per Season: Do not apply more than 10.25 fl. oz./A (or 0.056 lb. a.i./A). of Epi-Mek SC or any other foliar-applied abamectin-containing product per year.

HOPS (Not approved for use in California)

For control of Twospotted spider mite

Mix with water as indicated below. Apply with ground application equipment as a foliar spray and ensure good upper and lower leaf coverage. Adjust gallons of spray per acre based on 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 Epi-Mek SC per acre must remain the same as for dilute sprays.

Hops

Pest	fl. oz./A	Instructions
Twospotted spider mite	1.75-3.5	 To avoid illegal residues, Epi-Mek SC must be mixed with a non-ionic activator type wetting, spreading and/or penetrating adjuvant. Do not use binder or sticker type adjuvants. (See Use Information and Use Restrictions.) Apply Epi-Mek SC when Twospotted spider mites reach treatment thresholds. For applications at ½ trellis growth (6-8 ft. height), apply 1.75-3.5 fl. oz./A in a minimum of 40 gal. of water/A. For applications beyond ½ trellis growth, do not use less than 3.5 fl. oz./A in a minimum of 100 gal. of water/A.

Use Restrictions – Hops

- PHI: Do not apply within 28 days of harvest.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with
 a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant as
 instructed in the Use Information section found at the beginning of this Epi-Mek SC
 label. The spray adjuvant must be approved for use on hops. Carefully follow the
 Directions for Use and Precautions on the spray adjuvant label as well as the
 precautions in official local spray guides. Do not use binder or sticker type
 adjuvants.
- **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 of Epi-Mek SC or any other foliarapplied abamectin-containing product and repeat application of Epi-Mek SC or any
 other foliar-applied abamectin-containing product only after an alternative miticide
 with a different mode of action has been used.
- Maximum Amount per Application: Do not apply more than 3.5 fl. oz./A (or 0.019 lb a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per application.

- **Maximum Number of Applications:** Do not make more than 2 applications of Epi-Mek SC or any other foliar-applied abamectin-containing product per growing season.
- Maximum Amount per Season: Do not apply more than 7.0 fl. oz./A (or 0.038 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product in a growing season.
- Grazing: Do not allow livestock to graze in treated hops yards.

LEAFY VEGETABLES CROP GROUP (except Brassica vegetables) (Crop Group 4)

Crops in this group are: Amaranth (leafy Amaranth, Chinese spinach, tampala); Arugula (Roquette); Cardoon; Celery; Celtuce; Chervil; Chinese celery; Chrysanthemum, edible leaved and garland; Corn salad; Cress, garden and upland (yellow rocket and winter cress); Dandelion; Dock (Sorrel); Endive (escarole); Florence fennel; Lettuce, head and leaf; New Zealand spinach; Orach; Parsley; Purslane, garden and winter; Radicchio (red chicory); Rhubarb; Spinach; Vine 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 can result in reduced control.

Note:

- Apply Epi-Mek SC with ground application equipment or aircraft.
- For best control of leafminers and spider mites, apply Epi-Mek SC with ground application equipment. With aerial application, the resulting level and duration of control of leafminers and spider mites could be less than with ground application.

Leafy Vegetables Crop Group

Pest	fl. oz./A	Instructions
Carmine spider mite Liriomyza leafminers Twospotted spider mite	1.75-3.5	 To avoid illegal residues, Epi-Mek SC must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant. Do not use binder or sticker type adjuvants. (See Use Information section found at the beginning of this Epi-Mek SC label and Use Restrictions below.) Use 1.75-2.5 fl. oz./A for low to moderate infestations and 3.5 fl. oz./A for severe infestations. Spider mites: Apply when mites first appear, and repeat as needed to maintain control. (See Use Restrictions below.) Leafminers: Apply when adult flies are first observed and repeat applications as needed to maintain control. (See Use Restrictions below.)

Use Restrictions – Leafy Vegetables Crop Group

- **PHI:** Do not apply within **7 days** of harvest.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant as instructed in the Use Information section found at the beginning of this Epi-Mek SC label. The spray adjuvant must be approved for use on the intended target crop in the leafy vegetables crop group. Although Epi-Mek SC has been tested in combination with a range of non-ionic activator type wetting, spreading, and/or penetrating spray adjuvants for safety to leafy vegetables, it is impossible to test Epi-Mek SC with all potential spray adjuvants on all leafy vegetable types and varieties under the variety of conditions that could cause crop injury. Carefully follow the Directions for Use and Precautions on the spray adjuvant label as well as the precautions in official local spray guides. Do not use binder or sticker type adjuvants.
- **Application Method:** Ground or aerial application is 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 gallons of water/A. with ground application equipment. Do not apply in less than 5 gallons 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 ensure adequate coverage.

- Maximum Amount per Application: Do not apply more than 3.5 fl. oz./A (or 0.019 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per application.
- **Application Interval:** Wait at least 7 days before repeating application of Epi-Mek SC or any other foliar-applied abamectin-containing product.
- **Number of applications:** For resistance management, do not make more than 2 sequential applications of Epi-Mek SC or any other foliar-applied abamectincontaining product.
- Maximum Amount per Season: Do not apply more than 10.25 fl. oz./A (or 0.056 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product 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 can result in reduced control.

Note:

- Apply Epi-Mek SC with ground application equipment or aircraft.
- For best control of spider mites, apply Epi-Mek SC with ground application equipment. With aerial application, the resulting level and duration of control of spider mites could be less than with ground application.

Mint

Pest	fl. oz./A	Instructions
Twospotted spider mite	1.75-2.5	 To avoid illegal residues, Epi-Mek SC must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant. Do not use binder or sticker type adjuvants. (See Use Information section found at the beginning of this Epi-Mek SC label and Use Restrictions below.) Treat when spider mites first appear.

Use Restrictions – Mint

- PHI: Do not apply within 28 days of harvest.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with
 a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant as
 instructed in the Use Information section found at the beginning of this Epi-Mek SC
 label. The spray adjuvant must be approved for use on mint. Carefully follow the
 Directions for Use and Precautions on the spray adjuvant label as well as the

- precautions in official local spray guides. Do not use binder or sticker type adjuvants.
- 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 gallons of water/A with ground application equipment. Do not apply in less than 5 gallons 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 ensure adequate coverage.
- Maximum Amount per Application: Do not apply more than 2.5 fl. oz./A (or 0.014 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per application.
- **Application Interval:** Wait at least 7 days before repeating application of Epi-Mek SC or any other foliar-applied abamectin-containing product.
- Number of Applications: Do not make more than 2 sequential applications of Epi-Mek SC or any other foliar-applied abamectin-containing product and do not apply more than 3 applications of Epi-Mek SC or any other foliar-applied abamectincontaining product per season.
- **Maximum Amount per Season:** For resistance management, do not apply more than 7.75 fl. oz./A (or 0.042 lb. ai./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per crop per season.
- **Grazing:** Do not allow livestock to graze or feed treated foliage to livestock.

ONION, BULB (Crop Subgroup 3-07A)

Crops in this group are: onion, bulb, including daylily, bulb; fritillaria, bulb; garlic, bulb; garlic, great-headed, bulb; garlic, serpent, bulb; lily, bulb; onion, Chinese, bulb; onion, pearl; onion, potato, bulb; shallot, bulb; and cultivars, varieties, and/or hybrids of these.

For control of *Liriomyza* Leafminers and Thrips

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

Note:

- Apply Epi-Mek SC with ground application equipment or aircraft.
- For best control, apply Epi-Mek SC with ground application equipment. With aerial application, the resulting control of leafminers and thrips could be less than with ground application.

Onion, Bulb (Crop Subgroup 3-07A)

Pest	fl. oz./A	Instructions
Lyriomiza leafminers Thrips	1.75 – 3.5	 To avoid illegal residues, Epi-Mek SC must be mixed with a non-ionic activator type wetting, spreading, and/or penetrating spray adjuvant. Do not use binder or sticker type adjuvants. (See Use Information section found at the beginning of this Epi-Mek SC label and Use Restrictions below.) Use 1.75 – 2.5 fl. oz./A for low to moderate infestations and 3.5 fl. oz./A for high infestations. Insect control can be reduced if Epi-Mek SC is used in combination with a sticker or binder type product such as Bravo® WeatherStik®. Leafminers: Apply when adult leafminer flies are first observed and repeat application as needed to maintain control within constraints of a sound resistance management program. (See Use Restrictions below.) Thrips: Apply in a thrips management program and when thrips are at economic threshold. Repeat application as needed to maintain control within constraints of a sound resistance management program. (See Use Restrictions below.) Do not use Epi-Mek SC as a rescue treatment for thrips control.

Use Restrictions – Onion, Bulb (Crop Subgroup 3-07A)

- PHI: Do not apply within 30 days of harvest.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with
 a non-ionic activator type wetting, spreading, and/or penetrating spray adjuvant as
 instructed in the Use Information section found at the beginning of this Epi-Mek SC
 label. The spray adjuvant must be approved for use on bulb onions or on the other
 intended target crop in the bulb crop subgroup 3-07A. Carefully follow the
 Directions for Use and Precautions on the adjuvant label as well as the
 precautions in official local spray guides. Do not use binder or sticker type
 adjuvants.
- 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 gallons of water/A with ground application equipment. Do not apply in less than 5 gallons 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 ensure adequate coverage.
- Maximum Amount per Application: Do not apply more than 3.5 fl. oz./A (or 0.019 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per application.

- Application Interval: Wait at least 7 days before repeating application.
- Number of Applications: Make 2 consecutive applications of Epi-Mek SC, then
 rotate to a chemistry with a different mode of action. Make at least 2 applications of
 a chemistry with a different mode of action before making additional Epi-Mek SC
 applications. Do not make more than 2 sequential applications of Epi-Mek SC or
 any other foliar-applied abamectin-containing product.
- Maximum Amount per Season: Do not apply more than 10.25 fl. oz./A (or 0.056 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product in a growing season.

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

Apply Epi-Mek SC using conventional dilute or concentrate ground application sprayers calibrated to deliver sufficient water for thorough coverage. Adjust gallons of spray per acre based on 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.

Pears

Pest	For Dilute Sprays ¹ fl. oz./ 100 gal.	For Concentrate Sprays ² fl. oz./A	Instructions
European red mite McDaniel spider mite Pear psylla Pear rust mite Twospotted spider mite Yellow mite	0.5-1.0	2.25-4.25	To avoid illegal residues, Epi- Mek SC must be mixed with a spray adjuvant. Horticultural spray oil (not a dormant oil) is recommended. Do not use binder or sticker type adjuvants. (See Use Information section found at
Recommended Rate When Using Horticultural Spray Oil (not a dormant oil)	0.25% or 1 gal./A	Minimum of 1 gal./A	the beginning of this Epi-Mek SC label and Use Restrictions below.) • Apply Epi-Mek SC when spider mite or insect thresholds are reached. • Make a second application, if needed, to maintain control. (See Use Restrictions below.)

¹The rate of Epi-Mek SC per 100 gallons is based on a volume of 400 gal./A dilute spray.

²To 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 can result in use of less than 2.25 fl. oz./A on small trees.

Use Restrictions – Pears

- PHI: Do not apply within 28 days of harvest.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with
 a spray adjuvant as instructed in the Use Information section found at the
 beginning of the Epi-Mek SC label. The spray adjuvant must be approved for use on
 pears. Carefully follow the Directions for Use and Precautions on the spray
 adjuvant label as well as the precautions in official local spray guides.
- Applying the combination of Epi-Mek SC and horticultural spray oil fewer than 14 days before or after applying Captan® or other sulfur-containing products can result in phytotoxicity and crop loss.
- Application Method: Ground application only. Do not apply with aircraft.
- Amount of Water: Do not apply in less than 40 gallons of water/A.
- Maximum Amount per Application: Do not apply more than 4.25 fl. oz./A (or 0.023 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per application.
- Application Interval: If a second application is necessary, wait at least 21 days before repeating application of Epi-Mek SC or any other foliar-applied abamectincontaining product.
- **Number of Applications:** Do not make more than 2 applications of Epi-Mek SC or any other foliar-applied abamectin-containing product per growing season.
- Maximum Amount per Season: Do not apply more than 8.5 fl. oz./A (or 0.047 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product in a growing season.
- Grazing: Do not allow livestock to graze in treated orchards.

STONE FRUIT CROP GROUP (Crop Group 12)

Crops in this group are: apricot, cherry (sweet and tart), nectarine, peach, plum, plum (chickasaw, damson, and Japanese), plumcot, and prune (fresh)

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

Apply Epi-Mek SC using conventional dilute or concentrate sprayers calibrated to deliver sufficient water for thorough coverage. Adjust gallons of spray per acre based on size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good spider mite control.

Stone Fruit Crop Group

Pest	For Dilute Sprays ¹ fl.oz./ 100 gal.	For Concentrate Sprays ² fl. oz./A	Instructions
European red mite Pacific spider mite Twospotted spider mite	0.5-1.0	2.25-4.25	 To avoid illegal residues, Epi-Mek SC must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant or with a horticultural spray oil (not a dormant oil). Do not use binder or sticker type adjuvants. (See Use Information section found at the beginning of this Epi-Mek SC label and Use Restrictions below.) Apply when mites first appear. Make a second application, if needed, to maintain control. (See Use Restrictions below.)
Recommended Rate When Using Horticultural Spray Oil (not a dormant oil)	0.25% or 1 gal./A	Minimum of 1 gal./A	 A horticultural spray oil (not a dormant oil) can improve efficacy but it could also increase the possibility of phytotoxicity to foliage and fruit. Use a minimum of 0.25% horticultural spray oil (not a dormant oil) in the dilute spray mixture and not less than 1.0 gallon of horticultural spray oil per acre in the final finished spray.

¹The rate of Epi-Mek SC per 100 gallons is based on a volume of 400 gal./A dilute spray.

Use Restrictions – Stone Fruit Crop Group

- PHI: Do not apply within 21 days of harvest.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with
 a spray adjuvant as instructed in the Use Information section found at the
 beginning of the Epi-Mek SC label. The spray adjuvant must be approved for use on
 the intended crop in the stone fruit crop group. Carefully follow the Directions for
 Use and Precautions on the spray adjuvant label and in official local spray guides.
 See the Directions for Use table above for application instructions. Do not use
 binder or sticker type adjuvants.
- **Application Method:** Ground application only. Do not apply with aircraft.
- Amount of Water: Do not apply in less than 40 gallons of water/A.
- Maximum Amount per Application: Do not apply more than 4.25 fl. oz./A (or 0.023 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per application.
- Application Interval: If a second application is needed, wait at least 21 days before repeating application of Epi-Mek SC or any other foliar-applied abamectin-containing product.

²To 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 can result in use of less than 2.25 fl. oz./A on small trees.

- **Number of Applications:** Do not make more than 2 applications of Epi-Mek SC or any other foliar-applied abamectin-containing product per growing season.
- Maximum Amount per Season: Do not apply more than 8.5 fl. oz./A (or 0.047 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product in a growing season.
- **Grazing:** Do not allow livestock to graze in treated orchards.

STRAWBERRIES

For control of Strawberry spider mite, Twospotted spider mite, and Carmine spider mite

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

Strawberries

Pest	Fl. oz./A	Instructions
Strawberry spider mite Twospotted spider mite Carmine spider mite	3.5	 To avoid illegal residues, Epi-Mek SC must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant. Do not use binder or sticker type adjuvants. (See Use Information section found at the beginning of this Epi-Mek SC label and Use Restrictions below.) Make 2 applications 7-10 days apart when mites first appear. Repeat this application sequence, if needed, to maintain control. (See Use Restrictions below.)

Use Restrictions – Strawberries

- **PHI:** Do not apply within **3 days** of harvest.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with a surfactant approved for use on strawberries. Do not use binder or sticker type adjuvants. Carefully follow the **Directions for Use** and **Precautions** on the surfactant label, as well as the precautions in official spray guides on product labels.
- 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 gallons 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 3.5 fl. oz./A (or 0.019 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product 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 14 fl. oz./A (or 0.075 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product in a growing season.

TREE NUTS CROP GROUP (Crop Group 14) AND PISTACHIO

Crops in this group are: almond, beech nut, Brazil nut, butternut, cashew, chestnut, chinquapin, filbert (hazelnut), hickory nut, macadamia nut, pecan, and walnuts (black and English)

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

Apply Epi-Mek SC using conventional dilute or concentrate sprayers calibrated to deliver sufficient water for thorough coverage. Adjust gallons of spray per acre based on 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.

Tree Nuts Crop Group and Pistachio

Pest	For Dilute Sprays ¹ fl. oz./ 100 gal.	For Concentrate Sprays ² fl. oz./A	Instructions
European red mite Pacific spider mite Strawberry spider mite Twospotted spider mite	0.5-1.0	2.25-4.25	To avoid illegal residues, Epi- Mek SC must be mixed with a spray adjuvant. Horticultural spray oil (not a dormant oil) is recommended. Do not use
Recommended Rate When Using Horticultural Spray Oil (not a dormant oil)	0.25% or 1 gal./A	Minimum of 1 gal./A	binder or sticker type adjuvants. (See Use Information section found at the beginning of this Epi-Mek SC label and Use Restrictions below.) • Apply Epi-Mek SC when spider mites first appear. • Residual spider mite control is greater from spray deposits on newer leaves compared to older leaves. • Make a second application, if needed, to maintain control. (See Use Restrictions below.)

Use Restrictions – Tree Nuts Crop Group and Pistachio

- **PHI:** Do not apply within **21 days** of harvest.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with
 a spray adjuvant as instructed in the Use Information section found at the beginning
 of this Epi-Mek SC label. The spray adjuvant must be approved for use on the
 intended target crop in the tree nuts crop group or on pistachio. Carefully follow the
 Directions for Use and Precautions on the spray adjuvant label as well as the
 precautions in official local spray guides.
- Application Method: Ground application only. Do not apply with aircraft.
- Amount of Water: Do not apply in less than 40 gallons of water/A.
- Application Interval: If a second application is necessary, wait at least 21 days before repeating application of Epi-Mek SC or any other foliar-applied abamectincontaining product.
- Maximum Amount per Application: Do not apply more than 4.25 fl. oz./A (or 0.023 lb. ai./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per application.
- **Applications per Season:** Do not make more than 2 applications of Epi-Mek SC or any other foliar-applied abamectin-containing product per growing season.
- Maximum Amount per Season: Do not apply more than 8.5 fl. oz./A (or 0.047 lb. ai./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product in a growing season.
- **Grazing:** Do not allow livestock to graze in treated groves/orchards.

TUBEROUS AND CORM VEGETABLES CROP SUBGROUP (Crop Subgroup 1C)

Crops in this subgroup are: arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; canna, edible; cassava (bitter and sweet); chayote (root); chufa; dasheen; ginger; leren; potato; sweet potato; tanier; turmeric; yam bean; and yam (true).

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

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

Note:

Apply Epi-Mek SC using ground application equipment or aircraft.

¹The rate of Epi-Mek SC per 100 gallons is based on a volume of 400 gal./A dilute spray.

²To 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 can result in use of less than 2.25 fl. oz./A on small trees.

• For best control of mites, apply Epi-Mek SC with ground application equipment. With aerial application, the resulting level and duration of control of insects and spider mites could be less than with ground application.

Tuberous and Corm Vegetables Crop Subgroup

Pests	fl. oz./A	Instructions
Colorado potato beetle Liriomyza leafminers Potato psyllid Spider mites	1.75-3.5	 To avoid illegal residues, Epi-Mek SC must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant. Do not use binder or sticker type adjuvants. (See Use Information section found at the beginning of this Epi-Mek SC label and Use Restrictions below.) Use 1.75-2.5 fl. oz./A for low to moderate infestations and 3.5 fl. oz./A for severe infestations. Insect and spider mite control can be reduced if Epi-Mek SC 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. (See Use Restrictions below.) Liriomyza leafminers: Make the first application when adult flies are first observed. Repeat applications as needed to maintain control. (See Use Restrictions below.) Spider mites: Make the first application when mites first appear. Repeat application as needed to maintain control. (See Use Restrictions below.)

Use Restrictions – Tuberous and Corm Vegetables Crop Subgroup

- **PHI:** Do not apply within **14 days** of harvest.
- Adjuvant Requirement: To avoid illegal residues, Epi-Mek SC must be mixed with
 a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant as
 instructed in the Use Information section found at the beginning of this Epi-Mek SC
 label. The spray adjuvant must be approved for use on the intended target crop in
 the tuberous and corm vegetables crop subgroup. Carefully follow the Directions for
 Use and Precautions on the spray adjuvant label and in official local spray guides.
 See the Directions for Use table above for application instructions. Do not use
 binder or sticker type adjuvants.
- **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 gallons of water/A with ground application equipment. Do not apply in less than 5 gallons 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 ensure adequate coverage.

- Maximum Amount per Application: Do not apply more than 3.5 fl. oz. /A (or 0.019 lb. a.i./A) per application.
- **Application Interval:** Wait at least 7 days before repeating application of Epi-Mek SC or any other foliar-applied abamectin-containing product.
- **Number of Applications:** For resistance management, do not make more than 2 sequential applications of Epi-Mek SC or any other foliar-applied abamectin-containing product.
- Maximum Amount per Crop: Do not apply more than 10.25 fl. oz./A (or 0.056 lb. a.i./A) of Epi-Mek SC or any other foliar-applied abamectin-containing product per crop.
- **Grazing:** Do not allow livestock to graze or feed treated foliage to livestock.

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.

Pesticide Disposal

Pesticide waste may be hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control agency, or the Hazardous Waste representative at the nearest EPA regional Office for guidance.

Container Handling

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. Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!

Epi-Mek[™], Bravo® Weather Stik®, the ALLIANCE FRAME, the SYNGENTA Logo, and the PURPOSE ICON are Trademarks of a Syngenta Group Company

Captan® is a trademark of Tomen Agro, Inc.

©2014 Syngenta

For non-emergency (e.g. current product information) call Syngenta Crop Protection at 1-800-334-9481.

Manufactured for: Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, North Carolina 27419-8300

SCP 1408 MAS 0413

(Nondetachable Container Label)

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 APPLICATOR'S CERTIFICATION.

Epi-Mek™ SC

Miticide/Insecticide

GROUP 6 INSECTICIDE

Active Ingredient:

Abamectin¹......8.0%*

Other Ingredients: 92.0%

Total: 100.0%

KEEP OUT OF REACH OF CHILDREN.

WARNING/AVISO

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

See additional precautionary statements and directions for use in booklet.

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-1408 EPA Est. XXXX

SCP 1408 MAS 0413

Net Contents

¹CAS No. 71751-41-2

^{*1} gallon contains 0.7 lb. abamectin formulated as a suspension concentrate

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING/AVISO

May be fatal if swallowed or inhaled. Do not breathe vapor or spray mist. Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

FIRST AID		
If swallowed	Call poison control center or doctor immediately for treatment advice.	
	Have a person sip a glass of water if able to swallow.	
	Do not induce vomiting unless told to do so by the poison control	
	center or doctor.	
	Do not give anything by mouth to an unconscious person.	
If inhaled	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.	
If on skin or	Take off contaminated clothing.	
clothing	Rinse skin immediately with plenty of water for 15-20 minutes.	
	Call a poison control center or doctor for treatment advice.	
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.	
	Call a poison control center or doctor for treatment advice.	

NOTE TO PHYSICIAN

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).

If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral 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.

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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

HOT LINE NUMBER

For 24-Hour Medical Emergency Assistance (Human or Animal)
Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident),
Call
1-800-888-8372

Refer to booklet for PPE.

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 on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are foraging in/or adjacent to 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.

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a medium potential for reaching both surface water and aquatic sediment via runoff for several weeks to months after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of abamectin from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours.

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.

Pesticide Disposal

Pesticide waste may be hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control agency, or the Hazardous Waste representative at the nearest EPA regional Office for guidance.

Container Handling

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. Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!

Epi-Mek[™] and the Syngenta logo are trademarks of a Syngenta Group Company

© 2014 Syngenta

Manufactured for: Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, North Carolina 27419-8300

SCP 1408 MAS 0413

EPI-MEK SC 1408 MAS 0413 AMEND MAR2014-Hilite – pl – 3/14/14 000100-01408.20140314.EPIMEK-SC_AMEND_MAR2014-HI.pdf

EPI-MEK SC 1408 MAS 0413 AMEND MAR2014-Clean – pl – 3/14/14 **000100-01408.20140314.EPIMEK-SC_AMEND_MAR2014.pdf**