GROUP 6 INSECTICIDE

# **AGRI-MEK® 1.9% EC INSECTICIDE/MITICIDE**

#### **COMMERCIAL**

For Control of Mites on Apples, Pears, Strawberries and Caneberries, Psylla on Pears, Spotted Tentiform Leafminer on Apples and Pea Leafminer on Celery

# **GUARANTEE:**

# READ THE LABEL AND PAMPHLET BEFORE USING REFER TO PAMPHLET FOR COMPLETE DIRECTIONS FOR USE KEEP OUT OF REACH OF CHILDREN



REGISTRATION NO.: 24551
PEST CONTROL PRODUCTS ACT

# Syngenta Crop Protection Canada, Inc.

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**PAMPHLET** 

# **NOTICE TO USER**

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

#### **FIRST AID**

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**IF POISONING IS SUSPECTED**, or any symptoms are serious, **IMMEDIATELY** contact the poison control centre, doctor or nearest hospital. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms, and follow the advice given.

**If swallowed,** call a poison control center or doctor **IMMEDIATELY** for treatment advice. Contains petroleum distillates. DO NOT induce vomiting. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

**If inhaled,** remove victim to fresh air, clean up and rest. If not breathing, give artificial respiration. Obtain medical attention **IMMEDIATELY**.

**If on skin, IMMEDIATELY** remove contaminated clothing and wash skin, hair and fingernails thoroughly with soap and with plenty of water. Obtain medical attention. Wash contaminated clothing before reuse.

**If in eyes, IMMEDIATELY** rinse eyes with a large amount of running water, holding eyelids apart to rinse the entire surface of the eye and lids. Obtain medical attention.

#### TOXICOLOGICAL INFORMATION

Recommendations for Medical Treatment for Abamectin Acute Toxicity: Early signs of intoxication include mydriasis (dilated pupils), ataxia (unsteadiness) and muscle tremors. Toxicity following accidental ingestion of the concentrate can be minimized by inducing vomiting under the direction of a physician within one half hour of exposure. 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) 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.

This product contains petroleum distillates. Vomiting may cause aspiration pneumonia.

#### **PRECAUTIONS**

# KEEP OUT OF REACH OF CHILDREN.

Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Prolonged or frequently repeated exposure may cause allergic skin reactions in some individuals. Harmful if inhaled or absorbed through the skin. Do not breathe spray mist. Avoid contact with skin. May be fatal if swallowed. Wear a full body pesticide applicator suit, chemical-resistant gloves, boots, and mask or pesticide respirator for mixing, loading, and spray application. Remove any contaminated clothing and wash before reuse. Wash thoroughly with soap and water after handling, before eating, drinking, or using tobacco. Do not apply this product in such a manner as to directly, or through drift, expose workers or other persons. The area being treated must be vacated by unprotected persons. Do not re-enter treated areas until residues have dried. This pesticide is toxic to fish and wildlife. Do not contaminate water when disposing of equipment washwater or rinsate. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow drift to blooming crops or weeds if bees are visiting the treatment area. Do not use or store near heat or open flame.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at <a href="https://www.croplife.ca">www.croplife.ca</a>.

#### **ENVIRONMENTAL HAZARDS**

Toxic to aquatic organisms. Observe buffer zones specified under Directions for Use.

# **STORAGE**

Store in a tightly closed container in a cool, dry place. Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

#### **DECONTAMINATION AND DISPOSAL**

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean up of spills.

# **CONTAINER DISPOSAL:**

# For recyclable containers:

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

# IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING CALL 1-800-327-8633 (FASTMED)

#### **DIRECTIONS FOR USE**

DO NOT APPLY BY AIR

AGRI-MEK 1.9% EC Insecticide/Miticide is an emulsifiable concentrate containing 19 grams of abamectin per litre which when mixed with water according to the Directions for Use will control Tetranychid and Eriophyid mites and Pear Psylla on pears, spider mites and Spotted Tentiform Leafminer on apples, spider mites on caneberries, and Two Spotted Spider Mites and McDaniel Spider Mite on strawberries. Apply during the cover spray period using dilute or concentrate ground sprayers calibrated to deliver sufficient water for thorough coverage. Spray volume will vary with size and number of trees per hectare and density of foliage. In any case, thorough coverage is essential for good mite, psylla and leafminer control. When using concentrate sprays, the amount of water is reduced but the amount of AGRI-MEK 1.9% EC Insecticide/Miticide per hectare should remain the same as for dilute sprays. Applications should be made with a minimum of 0.25% paraffinic oil in the dilute spray mixture and not less than 10 L of paraffinic oil per hectare in the final finished spray on crops for which the use of paraffinic oil is specified on this label. Refer to the list below for oils approved for use with AGRI-MEK 1.9% EC Insecticide/Miticide.

Recommended Paraffinic Oil Products: Use only a registered Superior "70" Oil in a tank mix combination with AGRI-MEK 1.9% EC Insecticide/Miticide on pears and apples.

#### **ENVIRONMENTAL PRECAUTIONS:**

**DO NOT** apply this product directly to aquatic habitats (such as lakes, rivers, sloughs, ponds, coulees, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries or marine habitats.

**DO NOT** contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

**DO NOT** apply during periods of calm or when winds are gusty.

# Airblast application:

**DO NOT** direct spray above plants to be treated. Turn off outward pointing nozzles at row end and outer rows. **DO NOT** apply when wind speed is greater than 16 km/hr at the application site as measured outside of the treatment area on the upwind side.

# **Buffer zones:**

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, coulees, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuarine / marine habitats.

Mothed of Application	Buffer zone (metres) required for the protection of:	
Method of Application	Freshwater habitat	Estuarine/marine habitat
Field sprayer*	30	60
Airblast (early growth stage)	45	75
Airblast (late growth stage)	35	65

<sup>\*</sup> For field sprayers, buffer zones can be reduced by 70% when using shrouds or 30% when using cones.

# **APPLES: For Control of Spider Mites**

For best results, apply before a threshold of 5 spider mites per leaf is reached. Residual spider mite control with AGRI-MEK 1.9% EC Insecticide/Miticide in combination with paraffinic spray oil is greater from spray deposits on newer leaves compared to older. Applications of AGRI-MEK 1.9% EC Insecticide/Miticide for spider mite control should be limited to a period extending from petalfall through six weeks following petalfall.

Pests	For Dilute Sprays <sup>a</sup> mL/100 L	For Concentrate Sprays <sup>b</sup> mL/ha
Two-spotted spider mite McDaniel mite European red mite	20	750
Rate of Paraffinic Spray oil	Minimum 0.25%	Minimum of 10 L/ha

- a. The rate of AGRI-MEK 1.9% EC Insecticide/Miticide per 100 litres is based on a standard volume of 3750 L/ha dilute spray.
- b. Use the same amount of product per hectare in concentrate sprays as would be required for the dilute sprays to the same orchard/grove.

# **USE RESTRICTIONS - APPLES**

- Do not apply more than once per growing season.
- Do not apply in less than 375 L of water per hectare.
- Do not apply within 28 days of harvest.
- Do not apply this product through any type of irrigation equipment.
- Do not use in orchards interplanted with other crops.
- Do not graze treated orchards.
- Do not use in aerial application equipment.

AGRI-MEK 1.9% EC Insecticide/Miticide in combination with paraffinic spray oil may cause fruit injury to certain varieties of apples, e.g., russetting on light-skinned varieties such as Golden Delicious, when used alone or when other products are applied sequentially. The Directions for Use and Precautions on oil labels, as well as precautions in official Spray Guides, should be followed carefully when using AGRI-MEK 1.9% EC Insecticide/Miticide in combination with paraffinic spray oil.

PEARS: For Control of Mites and Pear Psylla

Pests	For Dilute Sprays <sup>a</sup> mL/100 L	For Concentrate Sprays <sup>b</sup> mL/ha	
Two-spotted spider mite McDaniel mite European red mite Pear rust mite Yellow mite	20 - 40	750 - 1500	
Pear Psylla	20 - 40	750 - 1500	
Paraffinic spray oil	Minimum 0.25%	Minimum of 10 L/ha	

- a. The rate of AGRI-MEK 1.9% EC Insecticide/Miticide per 100 litres is based on a standard volume of 3750 L per hectare dilute spray.
- b. To determine the amount of product per hectare for concentrate sprays, first determine the amount that would be required in a full cover dilute spray. Use the same amount of product per hectare in concentrate sprays as would be required for the dilute sprays to the same orchard/grove. This may result in the use of less than 750 mL AGRI-MEK 1.9% EC Insecticide/Miticide per hectare on small trees.

#### **USE RESTRICTIONS - PEARS:**

- Do not exceed 1.5 L AGRI-MEK 1.9% EC Insecticide/Miticide per hectare in a growing season.
- Do not make more than two (2) applications at 0.75 L or one (1) application at 1.5 L per growing season.
- Do not apply in less than 375 L of water per hectare.
- If a second application is necessary, do not retreat within 21 days.
- Do not apply within 28 days of harvest.
- Do not apply this product through any type of irrigation equipment.
- Do not use in orchards interplanted with other crops.
- Do not graze treated orchards.
- Do not use in aerial application equipment.

AGRI-MEK 1.9% EC Insecticide/Miticide plus oil may cause fruit injury to certain varieties of pears particularly d'Anjou and other sensitive varieties, when used alone or when other products are applied sequentially. The Directions for Use and Precautions on oil labels, as well as precautions in official Spray Guides, should be followed carefully when using AGRI-MEK 1.9% EC Insecticide/Miticide plus oil. Certain conditions, including but not limited to, application when temperatures are expected to exceed 30°C within 24 hours of application may result in fruit injury after the use of AGRI-MEK 1.9% EC Insecticide/Miticide plus oil. Do not make applications of AGRI-MEK 1.9% EC Insecticide/Miticide plus oil under conditions that would favor runoff.

#### NOTE TO BUYER/USER

The following uses for this product were developed by persons other than Syngenta Crop Protection Canada, Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Syngenta Crop Protection Canada, Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crops listed below. Accordingly, the Buyer and User assume all liability arising, and agree to hold Syngenta Crop Protection Canada, Inc. harmless, from any claims based on efficacy and/or phytotoxicity in connection with the uses described below.

#### **APPLES: For Control of Spotted Tentiform Leafminer**

For best results, apply at the time of first generation egg hatch for control of early sap feeder stages of first and second generation tentiform leafminers. Residual tentiform leafminer control with AGRI-MEK 1.9% EC Insecticide/Miticide in combination with paraffinic spray oil is greater from spray deposits on newer leaves compared to older. Applications of AGRI-MEK 1.9% EC Insecticide/Miticide for tentiform leafminer control should be limited to a period extending from petalfall through six weeks following petalfall.

Pests	For Dilute Sprays <sup>a</sup> mL/100 L	For Concentrate Sprays <sup>b</sup> mL/ha
Spotted Tentiform Leafminer	20	750
Rate of Paraffinic Spray oil	Minimum 0.25%	Minimum of 10 L/ha

a. The rate of AGRI-MEK 1.9% EC Insecticide/Miticide per 100 litres is based on a standard volume of 3750 L/ha dilute spray.

#### **USE RESTRICTIONS – APPLES**

- Do not apply more than once per growing season.
- Do not apply in less than 375 L of water per hectare.
- Do not apply within 28 days of harvest.
- Do not apply this product through any type of irrigation equipment.
- Do not use in orchards interplanted with other crops.
- Do not graze treated orchards.
- Do not use in aerial application equipment.

AGRI-MEK 1.9% EC Insecticide/Miticide in combination with paraffinic spray oil may cause fruit injury to certain varieties of apples, e.g., russetting on light-skinned varieties such as Golden Delicious, when used alone or when other products are applied sequentially. The Directions for Use and Precautions on oil labels, as well as precautions in official Spray Guides, should be followed carefully when using AGRI-MEK 1.9% EC Insecticide/Miticide in combination with paraffinic spray oil.

b. Use the same amount of product per hectare in concentrate sprays as would be required for the dilute sprays to the same orchard/grove.

# **CANEBERRIES: For Post Harvest Control of Two-spotted Spider Mites**

Apply as post harvest treatments. Apply first application when mites appear and second application after 7-10 days interval. Do not make more than two applications per year.

Pests	Product Rate
Two-spotted spider mites	1L/ha

#### **USE RESTRICTIONS – CANEBERRIES**

- Do not apply more than two applications per growing season.
- Do not apply in less than 375 L of water per hectare.
- Apply as a post harvest treatment only.
- Do not graze treated crop.
- Do not use in aerial application equipment.

# STRAWBERRIES: For Post Harvest Control of Two-Spotted Spider Mites and McDaniel Spider Mite

Pests	Product Rate
Two-spotted spider mites	1L/ha
McDaniel Spider Mite	

#### **USE RESTRICTIONS – STRAWBERRIES**

- Do not apply more than two applications per growing season.
- Do not apply in less than 375 L of water per hectare.
- Do not apply more than 2 L of product per hectare per season.
- Apply as a post harvest treatment only.
- Do not graze treated crop.
- Do not use in aerial application equipment.
- Do not apply within 10 month of harvest.

#### STRAWBERRIES: For Pre-Harvest Control of Mites

Pests	Product Rate	Instructions
Cyclamen Mite	1L/ha	Apply first application when mites first appear.
Two-Spotted Spider Mites		Reapply if monitoring indicates that it is necessary. Allow a minimum of 7-10 days between applications.
McDaniel Spider Mite		Apply in a minimum spray volume of 375 L of water /ha. Spray volume will vary with plant density per hectare.

# **USE RESTRICTIONS – STRAWBERRIES**

- Use calibrated ground sprayers to deliver sufficient water for thorough coverage on upper and lower leaf surfaces
- Do not apply more than two applications per crop season.
- Do not apply more than 2 L of product per hectare per season.
- Do not apply within 3 days of harvest.
- Do not graze treated crop.
- DO NOT APPLY BY AIR

CELERY:	For	Control	of Paa	Leafminer
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Pest	Pea Leafminer (Liriomyza huidobrensis)
Rate of application:	0.6 –1.1 L/ha. The lower rate is recommended for control under low pest population pressure. Use the higher rate under higher population pressure.
Number of applications	Maximum of 4 applications per season. Allow at least 7 days between applications. Do not make 2 sequential applications. Re-apply by monitoring. Consult provincial guidelines and local extension experts for treatment advice.  Apply in sufficient water, a minimum 200 L of water /ha for good upper and lower leaf coverage.
Timing of application:	Apply when the pea leafminer flies and leaf damage are first observed.
Pre-harvest Interval (PHI)	Do not apply within 14 days of harvest.

#### **USE RESTRICTIONS – CELERY**

- Do not apply through any type of irrigation equipment.
- Do not graze treated crop.
- Do not apply by air.
- Do not apply to transplants.
- Do not re-enter treated areas until residues have dried.

# **Resistance-Management Statements**

For resistance management, please note that AGRI-MEK 1.9% EC Insecticide/Miticide contains a Group 6 insecticide. Any insect population may contain individuals naturally resistant to AGRI-MEK 1.9% EC Insecticide/Miticide and other Group 6 insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

# To delay insecticide resistance:

Where possible, rotate the use of AGRI-MEK 1.9% EC Insecticide/Miticide or other Group 6 insecticides with different groups that control the same pests in a field.

Use tank mixtures with miticides/insecticides from a different group when such use is permitted.

Insecticide use should be based on an IPM program that includes scouting, record keeping, and considers cultural, biological and other chemical control practices.

Monitor treated pest populations for resistance development.

Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.

For further information or to report suspected resistance, contact company representatives at 1-87-SYNGENTA (1-877-964-3682) or at <a href="https://www.syngenta.ca">www.syngenta.ca</a>.

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