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



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

DEC 1 7 2013

Mr. Charles T. Levy Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, NC 27419

Subject:

Amended label to add pollinator protection language

Product Name: Solvigo™ Miticide/Insecticide

EPA Reg. No. 100-1440 EPA Decision No. 484074

Submission dated September 25, 2013; resubmission dated December 9, 2013

Dear Mr. Levy:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act 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. See 40 CFR 156.10(a)(6).

Under 40 CFR 152.130(d), EPA may establish dates by which all product distributed or sold by the registrant must bear revised labeling. The following paragraphs set forth the schedule for ensuring that that your product bears revised labeling within a reasonable time period:

• Any product released for shipment after 2/28/14 must bear the new label.

If these conditions are not complied with, EPA will take appropriate action against this registration. If you have any questions please contact Julie Chao at 703-308-8735 or <a href="mailto:chao.julie@epa.gov">chao.julie@epa.gov</a>.

Regards,

Venus Eagle, Product Manager (01) Insecticide-Rodenticide Branch Registration Division (7505P)

#### (Master Label 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.

Sale, Use, and Distribution of this Product in Nassau and Suffolk Counties in the State of New York is Prohibited.

# Solvigo™ Miticide/Insecticide

GROUP 6 4A INSECTICIDES

Active Ingredient:	
Abamectin <sup>1</sup>	3.43%*
Thiamethoxam <sup>2</sup>	6.86%*
	89.71%
Total:	100.00%

<sup>&</sup>lt;sup>1</sup>CAS No. 71751-41-2 <sup>2</sup>CAS No. 153719-23-4

#### 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. 100-1440

EPA Est. XXXX

SCP 1440-MAS 0612 AMEND SEPT2013

**Net Contents** 

ACCEPTED DEC 1 7 2013

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

EPA. Reg. No: 100-1440

<sup>\*1</sup> gal. contains 0.3 lb. abamectin and 0.6 lb. thiamethoxam formulated as a suspension concentrate.

	FIRST AID		
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>		
If swallowed	<ul> <li>Call poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>		
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		

#### **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 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)

# Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material Category A (e.g., natural rubber ≥ 14mils).
- Respirator with an organic-vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P, or HE prefilter.

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.
- Users should remove PPE immediately after handling this product. Wash the
  outside of gloves before removing. As soon as possible, wash thoroughly and
  change into clean clothing.

#### **Environmental Hazards**

This pesticide is toxic to fish, wildlife and aquatic invertebrates.

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 pesticide is highly toxic to bees exposed to direct treatment on blooming crops/plants or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds while bees are foraging inor 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.

### **Surface Water Advisory**

This product may impact surface water quality due to spray drift and runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several 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 thiamethoxam water from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours.

(See manual at the following Internet address:

http://www.wsi.nrcs.usda.gov/products/W2Q/pest/core4.html.)

# **Ground Water Advisory**

Solvigo Miticide/Insecticide contains the active ingredients abamectin and thiamethoxam. Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.

# PROTECTION OF POLLINATORS



APPLICATION RESTRICTIONS EXIST FOR

THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.

Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

This product can kill bees and other insect pollinators.

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications
- o Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat.
   Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at:

http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx.

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: <a href="https://www.npic.orst.edu">www.npic.orst.edu</a> or directly to EPA at: beekill@epa.gov

#### 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 PRODUCT

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

See individual crops for specific pollinator protection application restrictions. If none exist under the specific crop, for foliar applications, follow these application directions for crops that are contracted to have pollinator services or for food/feed crops & commercially grown ornamentals that are attractive to pollinators.



#### FOR CROPS UNDER CONTRACTED POLLINATION SERVICES

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless the following condition has been met:

If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.



FOR FOOD/FEED CROPS AND COMMERCIALLY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless one of the following conditions is met:

- The application is made to the target site after sunset
- The application is made to the target site when temperatures are below 55°F
- The application is made in accordance with a government-initiated public health response
- The application is made in accordance with an active state-administered apiary registry program where beekeepers are notified no less than 48-hours prior to the

time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying

 The application is made due to an imminent threat of significant crop loss, and a documented determination consistent with an IPM plan or predetermined economic threshold is met. Every effort should be made to notify beekeepers no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.

#### **RESTRICTIONS**

- 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.
- Do not use Solvigo Miticide/Insecticide in nurseries, greenhouses, and plant propagation houses, or on any plants grown for use as transplants.
- Do not apply Solvigo Miticide/Insecticide to crops grown from seed treated with thiamethoxam.

This product is classified as restricted use in New York State.

- Do not apply Solvigo Miticide/Insecticide with aircraft in New York State.
- Sale, use and distribution of this product in Nassau and Suffolk counties in the state
  of New York is prohibited.
- In New York State, do not exceed a total of 0.188 lb. a.i. of thiamethoxam-containing products per acre per growing season.

#### 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**

Solvigo Miticide/Insecticide is an aqueous-based soluble concentrate that will control specified pests on Tuberous and Corm Vegetables and Grapes when the product is applied according to the **Crop Use Directions**. Thorough coverage of foliage is essential for good mite and insect control.

#### NOTE:

Adjuvant Requirement: To avoid illegal crop residues, Solvigo Miticide/Insecticide
must always be mixed with a non-phytotoxic non-ionic activator type wetting,
spreading and/or penetrating adjuvant as specified in the Directions for Use for
Tuberous and Corm Vegetables and Grapes on this label. Non-ionic activator
type wetting, spreading and/or penetrating adjuvants include non-ionic 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 adjuvants. Adjuvants must be compatible with Solvigo and must be used at concentrations specified on the adjuvant label directions for use. Do not use binder or sticker type adjuvants. SYNGENTA recommends the use of a Chemical Producers and Distributors Association-certified adjuvant.
- Phytotoxicity: Solvigo Miticide/Insecticide has been tested for phytotoxicity and has a wide margin of safety on a variety of crops. Solvigo Miticide/Insecticide has also been shown to be compatible with many commonly used pesticides, crop oils, adjuvants and nutritional sprays. However, since it is not possible to test all possible mixtures, pre-test any proposed mixtures with Solvigo Miticide/Insecticide to ensure physical compatibility and lack of phytotoxic effects.
- 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 Solvigo Miticide/Insecticide 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 nontarget 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 in the vicinity of aquatic areas such as lakes, reservoirs, permanent streams, marshes, potholes, natural ponds, estuaries, or commercial fish ponds:
  - Do not apply Solvigo Miticide/Insecticide 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 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 Solvigo Miticide/Insecticide 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

Solvigo Miticide/Insecticide 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**

Some insect and 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 on this label.

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.

Solvigo Miticide/Insecticide contains a Group 6 Insecticide (abamectin, belonging to the mectin class of chemistry) and a Group 4A insecticide (thiamethoxam, belonging to the neonicotinoid class of chemistry). Insect or mite biotypes with acquired or inherent resistance to Group 6 or Group 4A insecticides may eventually dominate the population if Group 6 or Group 4A 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 Solvigo Miticide/Insecticide or other Group 6 or Group 4A insecticides.

# In order to maintain susceptibility to these classes of chemistry:

- Avoid using Group 6 and/or Group 4A insecticides exclusively for season-long control of insect species with more than one generation per crop season.
- For insect species with successive or overlapping generations, apply Solvigo Miticide/Insecticide or other Group 6 and/or Group 4A 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 and/or Group 4A insecticides. Do not exceed the maximum Solvigo Miticide/Insecticide allowed per growing season. Following a treatment window of Group 6 or Group 4A insecticides, rotate to a treatment window of effective products with a different mode of action before using additional applications of Group 6 or Group 4A insecticides.
- A treatment window rotation, along with other IPM practices for the crop and use area, is considered an effective use strategy for preventing or delaying an insect or mite pest's ability to develop resistance to these classes of chemistry.
- If resistance is suspected, do not reapply Solvigo Miticide/Insecticide or other Group 6 or Group 4A insecticides.

# Other Resistance Management (IRM) practices include but are not limited to:

- Incorporating IPM techniques into your insect or mite control program.
- Avoiding treatment of successive generations of a target pest with Solvigo Miticide/Insecticide.
- Monitoring treated insect populations for loss of field efficacy.
- Using tank mixtures or premixes with insecticides or miticides 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.
- Using labeled rates at the specified spray intervals.
- Using non-chemical alternatives such as beneficial arthropods.
- Using various cultural practices.

# For additional information on 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: <a href="http://www.irac-online.org/">http://www.irac-online.org/</a>.

#### **CROP USE DIRECTIONS**



### **Pollinator Precautions**

- Solvigo Miticide/Insecticide is highly toxic to bees exposed to direct treatment or residues on blooming crops/plants or weeds.
- Do not apply Solvigo Miticide/Insecticide or allow it to drift to blooming crops/plants or weeds if bees are foraging inor adjacent to the treatment area. This is especially critical if there are adjacent crops or orchards that are blooming. (Refer to Spray Drift Precautions for additional information.)
- After a Solvigo Miticide/Insecticide application, wait at least 5 days before placing beehives in the treated field.
- If bees are foraging in the ground cover and it contains any blooming plants or weeds, always remove flowers before making a Solvigo Miticide/Insecticide application. This can be accomplished by mowing, disking, mulching, flailing, or applying a labeled herbicide.
- Consult with your local cooperative extension service or state agency responsible for regulating pesticide use for additional pollinator safety practices.

# **GRAPES**

Apply Solvigo Miticide/Insecticide 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. Solvigo Miticide/Insecticide must be applied to both sides of each row for maximum coverage.

# Grapes

Pests	fl. oz./A	Instructions
Japanese Beetle Mealybugs Pacific spider mite Sharpshooters Twospotted spider mite Variegated leafhopper Western grape leafhopper Western grapeleaf skeletonizer Willamette spider mite	5.0 8.0	<ul> <li>To avoid illegal residues, Solvigo Miticide/Insecticide must be mixed with a non-ionic activator type wetting, spreading and/or penetrating adjuvant. Do not use binder sticker type adjuvants. (See Use Information and Use Restrictions.)</li> <li>Use 5.0 – 6.5 fl. oz./A for low to moderate infestations and 7.0 – 8.0 fl. oz. for high infestations.</li> <li>Repeat application, if needed. (See Use Restrictions.)</li> <li>Spider mites: Apply when mites first appear but before motiles exceed 5 per leaf.</li> <li>Western grapeleaf skeletonizer: Apply Solvigo Miticide/Insecticide when larvae are first observed. For optimum control, apply shortly after egg hatch.</li> </ul>

# **Use Restrictions – Grapes**

- PHI: Do not apply within 28 days of harvest.
- Adjuvant Requirement: To avoid illegal residues, Solvigo Miticide/Insecticide must be mixed with a non-ionic activator type wetting, spreading and/or penetrating adjuvant (See Use Information) approved for use on grapes. Although Solvigo Miticide/Insecticide has been tested in combination with a range of non-ionic activator type wetting, spreading, and/or penetrating adjuvants for safety to grapes, it is impossible to test on all grape varieties under the variety of conditions that could cause crop injury. Therefore, when using Solvigo Miticide/Insecticide carefully follow the Directions for Use and Precautions on the adjuvant label and in official 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 gal. of water/A with conventional ground application equipment.
  - When using an electro-static sprayer, less than 50 gal. of water/A can be used; however, do not use less than 5 gal. of water/A.
- Maximum Amount per Application: Do not apply more than 8.0 fl. oz./A of Solvigo Miticide/Insecticide or more than 0.019 lb. ai./A of any foliar-applied abamectin-containing products or more than 0.055 lb. ai./A of any foliar-applied thiamethoxam-containing products per application.
- Application Interval: If a second application is necessary, wait at least 21 days before repeating application of Solvigo Miticide/Insecticide or any foliar-applied product containing abamectin. Wait at least 14 days before repeating application of any other foliar-applied product containing thiamethoxam.
- Number of Applications: Do not make more than 2 applications of Solvigo Miticide/Insecticide or any foliar-applied abamectin-containing product per growing season.
- Maximum Amount per Season: Do not apply more than 16.0 fl. oz./A of Solvigo Miticide/Insecticide or more than 0.038 lb. ai./A of any foliar-applied abamectin-containing products or more than 0.11 lb. ai./A of any foliar-applied thiamethoxam-containing products per growing season.
- Grazing: Do not allow livestock to graze in treated vineyards.



Refer to **Pollinator Precautions** section.
Refer to **Resistance Management** section.

# 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, Flea beetle species (adults), *Liriomyza* leafminers, Potato leafhopper, 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. Apply Solvigo Miticide/Insecticide using ground application equipment or aircraft.

**Note:** For best control of mites, apply Solvigo Miticide/Insecticide with ground application equipment. With aerial application, the resulting level and duration of control of mites could be less than with ground application.

# **Tuberous and Corm Vegetables Crop Subgroup**

Pests	fl. oz./A	Instructions
Colorado potato beetle Flea beetle species (adults) Liriomyza leafminers Potato leafhopper Potato psyllid Spider mites	fl. oz./A 5 8	<ul> <li>Instructions</li> <li>To avoid illegal residues, Solvigo Miticide/Insecticide must be mixed with a nonionic activator type wetting, spreading and/or penetrating adjuvant. Do not use binder-sticker type adjuvants. (See Use Information and Use Restrictions.)</li> <li>Use 5 7 fl. oz./A for low to moderate infestations and 8 fl. oz./A for severe infestations.</li> <li>Insect and spider mite control can be reduced if Solvigo Miticide/Insecticide is used in combination with a sticker or binder type product such as Bravo® Weather Stik®.</li> <li>Colorado potato beetle: Make the first application after approximately 50% of the egg masses have hatched and larvae are present. If 2 applications are needed, limit them to a single Colorado potato beetle generation per crop. Do not make more than 2 applications per crop. (See Use Restrictions.)</li> <li>Flea beetles: Make the first application when adults are first observed. Repeat applications as needed to maintain control. (See Use Restrictions.)</li> <li>Liriomyza leafminers: Make the first application when adult flies are first observed. Repeat application when adult flies are first observed. Repeat applications as needed to maintain control. (See Use Restrictions.)</li> <li>Potato leafhopper: Make the first application when leafhoppers are first observed. Repeat applications as needed to maintain control. (See Use Restrictions.)</li> <li>Potato psyllid: Make applications within a locally recommended potato psyllid management program. Repeat applications as recommended within the local program to maintain control. (See Use Restrictions.)</li> </ul>
		Spider mites: Make the first application when mites first appear. Repeat application as needed to maintain control. (See Use Restrictions.)

# Use Restrictions - Tuberous and Corm Vegetables Crop Subgroup

- PHI: Do not apply within 14 days of harvest.
- Adjuvant Requirement: To avoid illegal residues, Solvigo Miticide/Insecticide must be mixed with a non-ionic activator type wetting, spreading and/or penetrating adjuvant (See Use Information) approved for use on crops in the tuberous and corm vegetables crop subgroup. Carefully follow the Directions for Use and Precautions on the adjuvant label and in official 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 gal. of water/A with ground application equipment. Do not apply in less than 5 gal. 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 8 fl. oz./A of Solvigo Miticide/Insecticide or more than 0.019 lb. ai./A of any foliar-applied abamectin-containing products or more than 0.047 lb. ai./A of any foliar-applied thiamethoxam-containing product per application.
- Application Interval: Wait at least 7 days before repeating application of Solvigo Miticide/Insecticide or any other foliar-applied abamectin- or thiamethoxamcontaining products.
- **Number of Applications:** Do not make more than 2 sequential applications of Solvigo Miticide/Insecticide or any other foliar-applied abamectin-containing product.
- Maximum Amount per Crop:
  - For spider mite or Colorado potato beetle control, do not apply more than 16 fl. oz./A of Solvigo Miticide/Insecticide or more than 0.038 lb. ai./A of any other foliar-applied abamectin-containing product per crop.
  - o For flea beetle, leafhopper, leafminer or potato psyllid, do not apply more than 20.0 fl. oz./A of Solvigo Miticide/Insecticide or more than 0.056 lb. ai./A of any other foliar-applied abamectin-containing product per crop or more than 0.094 lb. ai./A of any other foliar-applied thiamethoxam-containing product per crop.
- Grazing: Do not allow livestock to graze or feed treated foliage to livestock.



Refer to **Pollinator Precautions** section. Refer to **Resistance Management** section. -22-

# STORAGE AND DISPOSAL

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

Solvigo™, Bravo® Weather Stik®, the ALLIANCE FRAME, the SYNGENTA Logo, and the PURPOSE ICON are Trademarks of a Syngenta Group Company

©201X 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 1440-MAS 0612 AMEND SEPT2013

(Non-detachable 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.

Sale, Use, and Distribution of this Product in Nassau and Suffolk Counties in the State of New York is Prohibited.

# Solvigo™ Miticide/Insecticide

# GROUP 6 4A INSECTICIDES

Active Ingredient:	
Abamectin <sup>1</sup>	3.43%*
Thiamethoxam <sup>2</sup>	6.86%*
Other Ingredients:	
Total:	100.00%

<sup>&</sup>lt;sup>1</sup>CAS No. 71751-41-2 <sup>2</sup>CAS No. 153719-23-4

#### 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. 100-1440 EPA Est. XXXX

SCP 1440-MAS 0612 AMEND SEPT2013

Net Contents

<sup>\*1</sup> gal. contains 0.3 lb. abamectin and 0.6 lb. thiamethoxam 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 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 inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>	
If swallowed	<ul> <li>Call poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>	
If in eyes	<ul> <li>Do not give anything by mouth to an unconscious person.</li> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	

#### **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, wildlife and aquatic invertebrates.

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 pesticide is highly toxic to bees exposed to direct treatment on blooming crops/plants or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging inor 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.

# **Surface Water Advisory**

This product may impact surface water quality through spray drift and runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several 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 thiamethoxam water from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours. (See manual at the following Internet address:

http://www.wsi.nrcs.usda.gov/products/W2Q/pest/core4.html.)

#### **Ground Water Advisory**

Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.

#### STORAGE AND DISPOSAL

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

Solvigo™ and the SYNGENTA Logo are Trademarks of a Syngenta Group Company

© 201X Syngenta

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

SCP 1440-MAS 0612 AMEND SEPT2013

SOLVIGO 1440 MAS 0612 AMEND SEPT2013 CLEAN-dk-09/26/13 000100-01440-20130926.SOLVIGO\_AMEND\_POLL\_SEPT2013-CLEAN

SOLVIGO 1440 MAS 0612 AMEND SEPT2013 CLEAN-dk-12/04/13 000100-01440-20130926.B.SOLVIGO AMEND\_ SEPT2013-CL.pdf