### Vigilant® 4SC

**Agricultural Miticide**  
For Agricultural Use Only

<table>
<thead>
<tr>
<th>Active Ingredient:</th>
<th>(% by weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>bifenazate: hydrazine carboxylic acid, 2-(4-methoxy-[1,1'-biphenyl]-3-yl) 1-methylethyl ester.</td>
<td>43.2%</td>
</tr>
<tr>
<td>Other Ingredients:</td>
<td>56.8%</td>
</tr>
<tr>
<td>Total:</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Contains 4 lb. active ingredient bifenazate per gallon.

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

See front panel for First Aid Instructions and Booklet for Complete Precautionary Statements and Directions for use

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**NET CONTENTS: 2.5 GALLONS**
FIRST AID

IF SWALLOWED:
• Call poison control center or doctor immediately for treatment advice.
• Have 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 the person to fresh air.
• If the person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
• Call a poison control center or doctor for further treatment advice.

EMERGENCY ASSISTANCE: Have the product container or label with you when calling a poison control center or doctor or going for treatment.
FOR 24-HOUR MEDICAL EMERGENCY ASSISTANCE CALL ROCKY MOUNTAIN POISON AND DRUG SAFETY: 1-866-673-6671.
FOR 24-HOUR CHEMICAL EMERGENCY (Spill, leaks, fire, exposure or accident) CALL CHEMTREC: 1-800-424-9300 or +1-703-527-3887.

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION
Harmful if swallowed. Harmful if inhaled. Avoid breathing spray mist. Prolonged or repeated skin contact may cause an allergic reaction in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE):
Applicators and Other Handlers Must Wear:
• Long-sleeved shirt & long pants;
• Shoes plus socks; and
• For mixing and loading activities when not using a closed system, wear an apron and chemical-resistant gloves made of barrier laminate, polyethylene, butyl rubber (>14 mils), nitrile rubber (>14 mils), neoprene rubber (>14 mils), natural rubber (>14 mils), polyvinyl chloride (>14 mils), or Viton (>14 mils).

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

USER SAFETY RECOMMENDATIONS
Users should:
• Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
• Remove clothing/PPE immediately if pesticide gets inside. Then, wash thoroughly and change into clean clothing.
• Remove PPE immediately after handling this product. Wash the outside of gloves before removing them. As soon as possible, wash thoroughly and change clothing.

ENVIRONMENTAL HAZARDS
This pesticide is toxic to birds, estuarine/marine invertebrates, and fish. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. This product is toxic to bees exposed to direct treatment. Do not apply this product while bees are foraging the treatment area.

PHYSICAL OR CHEMICAL HAZARDS
Do not use or store near heat or open flame.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS
Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. [Exceptions are listed under the USE INSTRUCTIONS for each crop.]

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
• shoes plus socks
• chemical-resistant gloves made of any waterproof material.

USE INFORMATION
VIGILANT® 4SC is a suspension concentrate (flowable). It is a selective miticide for the control of a variety of mite pests on the crops listed on this label. When used as directed and applied to the foliage, it provides knockdown through contact activity, and long residual control. Due to its carbazate chemistry, mode of action and selective nature, VIGILANT 4SC is relatively inactive against beneficial/predaceous mites and insects and therefore is compatible with IPM and resistance management programs.
VIGILANT 4SC is not systemic in action; therefore complete coverage of both upper and lower leaf surfaces is necessary for effective control.

**ALWAYS SHAKE OR STIR THIS PRODUCT WELL BEFORE USE**

**MIXING INSTRUCTIONS**
Fill spray tank with 1/2 the desired amount of VIGILANT 4SC with agitation running to fully disperse the product. Then fill the tank with the remaining amount of required water.

Like many pesticides, VIGILANT 4SC stability can be impacted by high pH and high temperature. Maintain spray mixtures containing VIGILANT 4SC within a range of pH 5.5 to 6.5.

**Restrictions:** Tank mixtures are only permitted in States where all of the pesticide products used as tank-mix partners are registered. It is the pesticide user’s responsibility to ensure that all products used in the tank mix are registered for the intended use. Users must follow the most restrictive of all of the labeled use directions, precautionary language, and use limitations for the tank-mix partners.

**Compatibility:** To obtain broad-spectrum insect control, VIGILANT 4SC can be tank-mixed with other insecticide products. However, due to variations in water quality, e.g., hardness and pH, it is required that users conduct small-scale trials under local conditions to ensure compatibility prior to any large-scale use.

**USE RATES AND DIRECTIONS**
Refer to **USE INSTRUCTIONS** tables for application rates, application number, and PHI for labeled crops.

For ground application, refer to the **USE INSTRUCTIONS** tables for the minimum numbers of gallons of spray solution to apply per acre using the following types of equipment: compressed air, hydraulic ground boom, or air-blast sprayers.

For aerial application, refer to the **USE INSTRUCTIONS** tables for the minimum numbers of gallons of spray solution to apply per acre (or the minimum gallons/acre allowed by your State, which may be more than the minimum gallons/acre shown on this label) using either a fixed-wing aircraft or a helicopter. Always use a spray volume adequate to assure complete coverage of the crop canopy.

For chemigation application, refer to **CHEMIGATION USE PRECAUTIONS AND INSTRUCTIONS FOR CRANBERRY, MINT, POTATOES, AND TIMOTHY**. Refer to the **USE INSTRUCTIONS BEARING CROPS** table for the ranges in application rates permitted for these crops. Only one application may be made per year. Sprinkler systems must be operated at 80 to 100% during treatment applications to apply the minimum amount of water possible.

To provide maximum residual control, make application as soon as mites appear. Use the lowest specified rate where mite infestations are light. The highest specified rate may be required for heavy infestations or for extended residual control.

When used as directed, VIGILANT 4SC is effective for the control of a variety of mite species, especially spider mites, red mites and grass mites. NOTE: It is not effective against rust mites, broad mites and flat mites. VIGILANT 4SC is primarily active on the motile stage of mites, but also has ovicidal activity against spider mites (*Tetranychus* species).

**Restrictions:**
- Rotational Crops - This product has a plantback restriction of 30 days. Do not plant another crop within 30 days after last VIGILANT 4SC application due to chances of bifenazate residues showing up in rotational crops.
- Do not exceed the maximum amount of bifenazate allowed per crop per year, regardless of the bifenazate-containing product(s) used.
- Do not tank-mix oil with VIGILANT 4SC when applying to Golden Delicious apples.

**MITES CONTROLLED**
Avocado red spider
Banks grass
Brown almond
Citrus red
Clover
European red (use maximum rate specified for crop or crop group)
Pecan leaf scorch
Persea
Six-spotted
Southern red mite
Spruce spider mite
Strawberry spider
Two-spotted spider
Willamette

**BEARING CROPS USE INSTRUCTIONS**

<table>
<thead>
<tr>
<th>CROP</th>
<th>AMOUNT VIGILANT 4SC PER ACRE (A) FL. OZ.</th>
<th>MINIMUM GALLONS PER ACRE</th>
<th>CHEMIGATION ACRE INCHES OF WATER</th>
<th>TOTAL NUMBER OF SPRAYS PER YEAR</th>
<th>MINIMUM DAYS BETWEEN APPLICATIONS</th>
<th>HARVEST DAYS AFTER APPLICATION (PHI DAYS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVOCADO</td>
<td>12 – 16</td>
<td>50</td>
<td>-</td>
<td>2</td>
<td>21 (N)</td>
<td>7</td>
</tr>
<tr>
<td>CANEBERRY SUBGROUP 13-07A, (B)</td>
<td>12 – 16</td>
<td>50</td>
<td>-</td>
<td>2</td>
<td>30 (N)</td>
<td>1</td>
</tr>
<tr>
<td>WILD RASPBERRY</td>
<td>12 – 16</td>
<td>100</td>
<td>10 (C)</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>CHRISTMAS TREES/CONIFER PLANTATIONS AND NURSERIES</td>
<td>12 – 16</td>
<td>100</td>
<td>10 (C)</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>COTTON</td>
<td>16 – 24</td>
<td>20</td>
<td>5 (C)</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>CUCURBIT VEGETABLES (See footnote D for crops in addition to those listed below) MUSKMELON (F); PUMPKIN; SQUASH (summer (G) &amp; winter (H)); WATERMELON</td>
<td>12 – 16</td>
<td>50</td>
<td>10 (C)</td>
<td>-</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>CROP</td>
<td>AMOUNT VIGILANT 4SC PER ACRE (A) FL. OZ.</td>
<td>MINIMUM GALLONS PER ACRE</td>
<td>CHEMIGATION ACRE INCHES OF WATER</td>
<td>TOTAL NUMBER OF SPRAYS PER YEAR</td>
<td>MINIMUM DAYS BETWEEN APPLICATIONS</td>
<td>HARVEST DAYS AFTER APPLICATION (PHI DAYS)</td>
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<td>------------------------------------------</td>
</tr>
<tr>
<td>DRIED SHELLED BEAN (EXCEPT SOYBEAN) SUBGROUP (I)</td>
<td>16 – 24</td>
<td>20</td>
<td>7 (C)</td>
<td>-</td>
<td>2</td>
<td>14 (N)</td>
</tr>
<tr>
<td>FRUITING VEGETABLES, GROUP 8-10 (See footnote J for crops in addition to those listed below)</td>
<td>12 – 16</td>
<td>50</td>
<td>10 (C)</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>EGGPLANT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>OKRA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEPPERS (including all varieties of Capsicum spp.) (K)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOMATOES (field grown)</td>
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<td></td>
</tr>
<tr>
<td>SMALL FRUIT VINE CLIMBING SUBGROUP 13-07F; EXCEPT FUZZY KIWFUIT GRAPE (L); AMUR RIVER GRAPE; GOOSEBERRY; KIWFUIT, hardy; MAYPOP; SCHISANDRA BERRY; CULTIVARS, VARIETIES, AND/OR HYBRIDS OF THESE</td>
<td>12 – 16</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>HOPS</td>
<td>12 – 24</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>LEGUME VEGETABLES SUBGROUP 6A (succulent); SUCCULENT PEAS and BEANS SUBGROUP 6B; SUCCULENT SHELLED SOYBEAN (M)</td>
<td>16 – 24</td>
<td>20</td>
<td>10 (C)</td>
<td></td>
<td>2</td>
<td>14 (N)</td>
</tr>
<tr>
<td>POME FRUIT, GROUP 11-10: (See footnote P for crops in addition to those listed below) APPLES; CRABAPPLES; PEARS; QUINCE</td>
<td>12 – 16</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>POTATOES (Q)</td>
<td>16 – 24</td>
<td>20</td>
<td>10 (C)</td>
<td>0.1 – 0.2 (O)</td>
<td>2</td>
<td>14 (N)</td>
</tr>
<tr>
<td>TUBEROUS AND CORM VEGETABLES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOW GROWING BERRY SUBGROUP 13-07G; STRAWBERRY; BEARBERRY; BILBERRY; BLUEBERRY, LOWBUSH; CLOUDBERRY; CRANBERRY; LINGONBERRY; MUNTRIES; PARTRIDGEBERRY; CULTIVARS, VARIETIES, AND/OR HYBRIDS OF THESE.</td>
<td>12 – 16</td>
<td>100</td>
<td>-</td>
<td>0.1 – 0.2 (O) (cranberry)</td>
<td>2</td>
<td>21 (N)</td>
</tr>
<tr>
<td>STONE FRUIT: (See footnote R for crops in addition to those listed below) APRICOTS; CHERRIES (Sweet &amp; Tart); NECTARINES; PEACHES; PLUMS/PRUNES</td>
<td>12 – 16</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>TIMOTHY forage and hay to be fed only to horses. Application can only be made in Eureka and Humboldt Counties in Nevada</td>
<td>16 – 24</td>
<td>20</td>
<td>10</td>
<td>0.1 – 0.2 (O)</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>TREE NUTS: (See footnote S for crops in addition to those listed below) ALMOND</td>
<td>12 – 24</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>FILBERT (Hazelnut), PECANS, PISTACHIOS, WALNUTS (Black &amp; English)</td>
<td>12 – 24</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>
### BEARING CROPS USE INSTRUCTIONS (continued)

<table>
<thead>
<tr>
<th>CROP</th>
<th>AMOUNT VIGILANT 4SC PER ACRE (A) FL. OZ.</th>
<th>MINIMUM GALLONS PER ACRE</th>
<th>CHEMIGATION ACRE INCHES OF WATER</th>
<th>TOTAL NUMBER OF SPRAYS PER YEAR</th>
<th>MINIMUM DAYS BETWEEN APPLICATIONS</th>
<th>HARVEST DAYS AFTER APPLICATION (PHI DAYS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TROPICAL FRUIT: PAPAYA, STAR APPLE, BLACK SAPOTE, MANGO, SAPODILLA, CANISTEL, MAMEY SAPOTE, LYCHEE, LONGAN, SPANISH LIME, RAMBUTAN, PULASAN, GUAVA, FEIJOA, JABOTICABA, WAX JAMBU, STARFRUIT (CARAMBOLA), PASSIONFRUIT, ACEROLA, SUGAR APPLE, CHERIMOYA, ATEMOYA, CUSTARD APPLE, ILAMA, SOURSAP, BIRIBA</td>
<td>12 – 16</td>
<td>50 -</td>
<td>-</td>
<td>2</td>
<td>21 (N)</td>
<td>1</td>
</tr>
</tbody>
</table>

A. Use the highest specified rate under heavy mite pressure. For maximum control, applications must be made as soon as mites appear.
B. CANEBERRY: Blackberry; loganberry; red and black raspberry; cultivars and/or hybrids of these.
C. Minimum gallonage per acre or the minimum permitted by your state, but not less than shown.
D. CUCURBIT VEGETABLES: Other crops which may be treated with VIGILANT 4SC with the same use instructions are: Chayote (fruit) (*Sechium edule*), Chinese waxgourd (Chinese preserving melon) (*Benincasa hispida*), Citrus melon (*Citrus latan var. citroides*), Gherkin (*Cucumis anguria*), Momordica spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber).
E. EDIBLE GOUD (Lagenaria spp.) (includes hyotan and cucuza). Also (*Luffa acutangula* and *L. cylindrical*) which includes hechima and Chinese okra.
F. MUSKMELOON: (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.
G. SQUASH, SUMMER: (*Cucurbita pepo var. melopepo*) includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini.
H. SQUASH, WINTER: (*Cucurbita maxima*: *C. moschata*) includes butternut squash, calabaza, Hubbard squash; (*C. mixta*; *C. pepo*) includes acorn squash, spaghetti squash.
I. Cultivars of *Lupinus spp.* include grain lupin, sweet lupin, white lupin, and white sweet lupin; *Phaseolus spp.* include field bean, kidney bean, lima beans (dry), navy bean, and pinto bean; tepary bean; *Vigna* spp. include adzuki bean, blackeyed pea, catjang, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, and urd bean; broad bean (dry); chickpea; guar; lablab bean; and lentil.
J. FRUITING VEGETABLES: *African eggplant*; *bush tomato*; bell pepper; cocona; currant tomato; garden huckleberry; goji berry; groundcherry (*Physalis* spp.); *martynia*; *naranjilla*; *pea eggplant*; *pepino*; pepper (includes bell pepper, nonbell pepper, chili pepper, hot cooking pepper, pimento, sweet pepper); *rosett*; *scarlet eggplant*; *sunberry*; *tomatillo*; *tree tomato*; *cultivars, varieties, and/or hybrids of these*
K. PEPPER (*Capsicum spp.*) includes bell peppers, chili peppers, cooking peppers, pimento, and sweet peppers.
L. GRAPES: *POME FRUIT: azarole*; *medlar*; *pear; Asian; quince; Chinese; quince; Japanese; tejocote; cultivars, varieties, and/or hybrids of these.*
M. SQUASH: *SUMMER:* *Cucumis melo* var. *hyotan*; *C. moschata*; *C. pepo*; *C. mixta*; *C. pepo* *var. melopepo*; *C. maxima*; *C. japonica*; *C. sativa*; *C. reticulata*; *C. texana*; *C. melo* var. *mexicanus*; *C. melo* var. *maxima*; *C. melo* var. *mexicana*; *C. melo* var. *sativus*; *C. melo* var. *zeylanica*.
N. Nettle: *SHEPHERD’S PURSE:* *Achyranthes bidentata*; *A. aspera*; *A. asperula*; *A. capillaris*; *A. digitata*; *A. nodosa*; *A. pseudochinensis*; *A. punctata*; *A. sieboldii*; *A. viscosa*.
O. Refer to USE RATES AND DIRECTIONS and CHEMIGATION USE PRECAUTIONS sections of this manual.
P. POME FRUIT: *azarole; medlar; pear; Asian; quince; Chinese; quince; Japanese; tejocote; cultivars, varieties, and/or hybrids of these.*
Q. POTATO: *Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; canna; edible; cassava, bitter and sweet; chayote (root); chufa; dasheen (taro); ginger; leren; potato; sweet potato; tanier; turmeric; yam bean; yam, true.
R. STONE FRUIT: *Other crops which may be treated with VIGILANT 4SC with the same use instructions are: Plum (*Prunus domestica, Prunus spp.*), Chickasaw Plum (*Prunus angustifolia*), Damson Plum (*Prunus domestica spp. Instititia*), Japanese Plum (*Prunus salicina*) and Plumcot (*Prunus armeniaca X P domestica*).
S. TREE NUTS: *Other crops which may be treated with VIGILANT 4SC with the same use instructions (14 day PHI) are: Beech nut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Hickory nut, Macadamia nut (bush nut).*
T. STRAWBERRY (only): 2 Applications may be made per crop cycle, with up to 2 crop cycles per year.

### NON-BEARING CROPS USE INSTRUCTIONS

VIGILANT 4SC use on non-bearing crops, i.e. those crops which will not bear fruit within one year of application, includes all the crops listed in the bearing crops use instructions plus crops listed below. These include fruit trees and berries in both commercial plantings and nurseries, including transplant uses but excluding residential areas. The listed non-bearing crops all have a 12-hour restricted entry interval (REI). Application is by ground equipment only. Additional non-bearing crops that may be so treated are:
Follow the mite control strategies below:

- Incorporate IPM techniques into your insect control program.
- Ensure thorough spray coverage to all foliage.
- Scout regularly and apply **VIGILANT 4SC** as soon as infestations are observed. Do not wait until large populations have established.

**CHEMIGATION USE PRECAUTIONS AND INSTRUCTIONS FOR CRANBERRY, MINT, POTATOES, AND TIMOTHY**

A. Apply this product only through sprinkler systems, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation system.

B. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

C. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

D. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.

E. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make the necessary adjustments should the need arise.

F. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

G. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

H. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

I. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

J. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

K. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

L. Do not apply when wind speed favors drift beyond the area intended for treatment.

M. Constant agitation must be maintained in the chemical supply tank during the entire period of miticide application.

N. Inject the product with a positive displacement pump into the main line ahead of a right angle turn, to ensure adequate mixing.

O. Application of more than label recommended quantities of irrigation water per acre may result in decreased product performance by removing the chemical from the zone of effectiveness.

P. Do not apply when system connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product must be dismantled and drained.

Q. Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of more dilute mixture per hour. Pesticide should be applied continuously for the duration of the water addition.

R. Where sprinkler irrigation patterns do not overlap sufficiently unacceptable mite control may result. Where sprinkler distribution patterns overlap excessively crop injury may result.

S. Check with state lead agencies for state specific chemigation requirements.

**STRATEGIES FOR RESISTANCE MANAGEMENT**

When used as directed, **VIGILANT 4SC** combines high activity on mites with safety to beneficial/predaceous mites and insects. In addition, the carbazate chemistry of **VIGILANT 4SC** provides a means of controlling mites which have developed resistance to commonly used products. These properties can result in fewer miticide/insecticide applications as well as general reduction in the problems caused by resistance.

**VIGILANT 4SC** has demonstrated no cross-resistance with other commercial miticides. **VIGILANT 4SC** contains an active ingredient classified as a Group 20D acaricide. **VIGILANT 4SC** is suitable to be used as a rotational partner with other miticides.

Follow the mite control strategies below:

- Incorporate IPM techniques into your insect control program.
- Ensure thorough spray coverage to all foliage.
- Scout regularly and apply **VIGILANT 4SC** as soon as infestations are observed. Do not wait until large populations have established.

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### CROP MITES CONTROLLED AMOUNT VIGILANT 4SC PER ACRE MINIMUM GALLONS SPRAY SOLUTION PER ACRE TOTAL NUMBER OF SPRAYS PER YEAR

<table>
<thead>
<tr>
<th>CROP</th>
<th>MITES CONTROLLED</th>
<th>AMOUNT VIGILANT 4SC PER ACRE</th>
<th>MINIMUM GALLONS SPRAY SOLUTION PER ACRE</th>
<th>TOTAL NUMBER OF SPRAYS PER YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berries (blueberry, highbush; elderberry; huckleberry)</td>
<td>Banks grass Brown almond Citrus red Clover European red* McDaniel Pacific spider Pecan leaf scorch Strawberry spider Southern red mite Spruce spider mite Two-spotted spider Wilamette</td>
<td>12 - 16 fl oz</td>
<td>50</td>
<td>1</td>
</tr>
<tr>
<td>Citrus (grapefruit, lemons, limes, oranges, tangerines, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currants; Dates, Figs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persimmons</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Use maximum rate specified for crop or crop group.
Always apply VIGILANT 4SC at the required rates and according to label information.

Unless labeled otherwise, use only one application of VIGILANT 4SC per year, and rotate to a product with a different mode-of-action grouping.

Because of its selectivity, VIGILANT 4SC can be used in conjunction with most biological control organisms available for mite control. VIGILANT 4SC, when used as directed, does not adversely affect populations of beneficial/predaceous mites and insects including:

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predatory mite</td>
<td>Amblyseius fallacis</td>
</tr>
<tr>
<td>Predatory mite</td>
<td>Phytoseiulus persimilis</td>
</tr>
<tr>
<td>Western predatory mite</td>
<td>Tylphodromus occidentalis</td>
</tr>
<tr>
<td>Predatory mite</td>
<td>Tylphodromus pyri</td>
</tr>
<tr>
<td>Predatory mite</td>
<td>Zetella mali</td>
</tr>
<tr>
<td>Seven-spotted lady beetle</td>
<td>Coccinella septempunctata</td>
</tr>
<tr>
<td>Spider mite destroyer</td>
<td>Stethorus punctum</td>
</tr>
<tr>
<td>Common lacewing</td>
<td>Chrysopa carnea</td>
</tr>
<tr>
<td>Insidious flower bug</td>
<td>Orius insidiosus</td>
</tr>
<tr>
<td>Six-spotted thrips</td>
<td>Scolothrips sexmaculatus</td>
</tr>
<tr>
<td>Western flower thrips</td>
<td>Frankliniella occidentalis</td>
</tr>
</tbody>
</table>

The use of these organisms in conjunction with VIGILANT 4SC is encouraged as a means of reducing the number of chemical applications.

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store in a dry location.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING:**

Nonrefillable containers equal to or less than 5 gallons. Do not reuse or refill this container. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact Ag Container Recycling Council (ACRC) at 1-877-952-2272 (toll free) or www.acrecycle.org. 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 container 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. If pressure rinsing, empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling or reconditioning, or puncture and dispose of container in a sanitary landfill, or by incineration. Do not burn container, unless allowed by state and local ordinances.

**IMPORTANT NOTICE**—Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions and instructions specified on the label under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, expressed or implied, extends to the use of this product, contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and to the extent consistent with applicable law, the buyer assumes the risk of any such use.

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Vigilant® 4SC

Agricultural Miticide
For agricultural use only

Active Ingredient: ( % by weight)
- bifenazate: hydrazine carboxylic acid, 2-(4-methoxy-[1,1'-biphenyl]-3-yl) 1-methylethyl ester ........................................ 43.2%
- Other Ingredients: ........................................ 56.8%
Total: .................................................. 100.0%
Contains 4 lb. active ingredient bifenazate per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID

IF SWALLOWED:
- Call poison control center or doctor immediately for treatment advice.
- Have 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 the person to fresh air.
- If the person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
- Call a poison control center or doctor for further treatment advice.

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

FOR 24-HOUR MEDICAL EMERGENCY CALL ROCKY MOUNTAIN POISON AND DRUG SAFETY: 1-866-673-6671.
FOR 24-HOUR CHEMICAL EMERGENCY (Spills, leaks, fire, exposure or accident) CALL CHEMTREC: 1-800-424-9300 or +1-703-527-3887.

For Product Use Information Call 1-800-438-6071

See Booklet for Complete Precautionary Statements and Directions for Use

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed. Harmful if inhaled. Avoid breathing spray mist. Prolonged or repeated skin contact may cause an allergic reaction in some individuals.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to birds, estuarine/marine invertebrates, and fish. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. This product is toxic to bees exposed to direct treatment. Do not apply this product while bees are foraging the treatment area.

PHYSICAL OR CHEMICAL HAZARDS: Do not use or store near heat or open flame.

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EPA Reg. No. 400-514
- AM EPA Est. No. 005481-ID-001
- BO EPA Est. No. 037429-GA-002
- CJ EPA Est. No. 070815-GA-001
- GW EPA Est. No. 067545-AZ-001

The EPA Establishment Number is identified by the circled letters that match the first two letters in the batch number.

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Manufactured For: MACDERMID AGRICULTURAL SOLUTIONS, INC.
c/o UPL NA INC.
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406

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2022275-E

NET CONTENTS: 2.5 GALLONS