FUNGICIDE/MITICIDE/INSECTICIDE

For use on vegetables, fruits, nuts, vine crops, field crops, ornaments and turf for control of fungal diseases, and control of spider mites, aphids, whiteflies.

ACTIVE INGREDIENT:
Potassium Silicate…………………………………29%
OTHER INGREDIENTS:………………………71%
Total 100%

EPA Reg. No. 82100-1  EPA Est. No. 82100-PA-001
Net Weight [565 lbs 55 Gal or 25 lbs 2.5 gal]
Keep Out of Reach of Children
CAUTION PRECAUCION

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.)
• 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:
For terrestrial uses, 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 cleaning equipment or disposing of equipment wash water or rinsate.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

In the event of an in-transit environmental release or spill of this product, that may endanger the environment, call Chemtrec at 1-800-424-9300.

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. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Do not apply this product through any irrigation system unless the supplemental labeling on chemigation is attached.

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 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 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:
• Coveralls
• Chemical-resistant gloves made of any waterproof material
• Shoes and socks
• Goggles or face shield when handling undiluted concentrate

NON-AGRICULTURAL USE REQUIREMENTS
The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep unprotected persons out of treated area until sprays have dried.

GENERAL USE INFORMATION
Sil-Matrix™ is a broad spectrum preventative fungicide recommended for agricultural crops, fruits, nuts, vines, turf and ornamentals. Optimum disease control is obtained when the fungicide is applied on a regularly scheduled preventative spray program. Sil-Matrix™ also provides control of mites, aphids, whiteflies. Optimum performance is achieved using a sufficient volume of water to insure complete coverage of all stems and foliage.

Sil-Matrix™ is for use on Ornamental Turf Lawns (Residential, Industrial and Institutional), Parks, cemeteries, Athletic Fields and Golf Courses (Fairways, Aprons, Tees, and Roughs), and similar turf areas. Also for use on Sod Farms.
Since all combinations or sequences of pesticide applications including surfactants and adjuvants have not been tested, before wide spread application, test a small area to be sprayed first to make certain that no phytotoxicity occurs.

Avoid contact with glass. Remove promptly from glass surfaces. Read the entire label before using Sil-Matrix™. Consult your State Agricultural Experimental Station or Extension Service Specialist for additional information on application timing, rates and any additional requirements or restrictions.

**MIXING INSTRUCTIONS:**
Be sure the sprayer is clean and not contaminated with other materials prior to use. When using an agitated spray tank fill tank 1/2 to 3/4 full with clean water and start agitation. Be certain that the agitation system is working properly. With the agitator running add the required amount of Sil-Matrix™ to the tank. If tank mixing with other materials, add them to the tank and continue agitation. Continue filling tank with the remainder of the water. Agitate until mixed thoroughly and avoid excessive foaming. Mix as needed; do not store diluted material.

**COMPATIBILITY:**
Sil-Matrix™ is compatible with most commonly used agricultural pesticides. If compatibility is in question, use the compatibility jar test before mixing a whole tank. Dilute Sil-Matrix™ to its use rate and then with stirring add the other components in the appropriate amounts. If precipitation, gelation, or sedimentation occurs, do not use the combination of pesticides. Because of the wide variety of possible combinations that can be encountered, observe all precautions and limitations on the label of all products used in mixtures.

**APPLICATION INSTRUCTIONS:**
Sil-Matrix™ is a broad spectrum pesticide for control of the fungal disease powdery mildew, and control of mites, aphids, whiteflies vegetables, fruits, nuts, vine crops, agronomic crops, and ornamentals; for control of gray mold rot (*Botrytis cinerea*) on blueberry; for suppression of Asian soybean rust on soybean, and for suppression of gray leaf spot, brown patch, dollar spot, and snow mold on turf.

Rate of application is variable according to pest pressure, timing of sprays and plant stage of growth. Use lower rates under light to moderate pest pressure; higher rates under heavy pest pressure and for mite control. Arid climates generally require higher rates.

For all crops, apply Sil-Matrix™ at a volume to volume concentration of 0.25% to 1% spray solution, unless otherwise specified. For example, 1-4 quarts per 100 gallons of water. See Dilution Table for other volumes. Apply on a preventative schedule for disease control. Begin applications when environmental conditions are conducive to disease development. Repeat applications no sooner than every 7 days. When conditions are conducive for rapid disease development, it is recommended that Sil-Matrix™ be used in a rotational program with other registered fungicides. For mite and insect control, begin applications when pests first appear and repeat applications as necessary to maintain control, but no sooner than every 7 days. For best results, apply Sil-Matrix™ before leaf hardening.

For maximum results, use a high analysis non-ionic surfactant such as No-Foam A at recommended label rates.

### DILUTION TABLE FOR FOLIAR APPLICATIONS

(20-250 gallons per acre)

<table>
<thead>
<tr>
<th>Gallons of Water</th>
<th>Quarts Sil-Matrix™ 0.25% Sol.</th>
<th>Quarts Sil-Matrix™ 0.5% Sol.</th>
<th>Quarts Sil-Matrix™ 0.75% Sol.</th>
<th>Quarts Sil-Matrix™ 1% Sol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>0.2 qts</td>
<td>0.4 qts</td>
<td>0.6 qts</td>
<td>0.8 qts</td>
</tr>
<tr>
<td>40</td>
<td>0.4 qts</td>
<td>0.8 qts</td>
<td>1.2 qts</td>
<td>1.6 qts</td>
</tr>
<tr>
<td>50</td>
<td>0.5 qt</td>
<td>1 qt</td>
<td>1.5 qts</td>
<td>2 qts</td>
</tr>
<tr>
<td>100</td>
<td>1 qt</td>
<td>2 qts</td>
<td>3 qts</td>
<td>4 qts</td>
</tr>
<tr>
<td>150</td>
<td>1.5 qts</td>
<td>3 qts</td>
<td>4.5 qts</td>
<td>6 qts</td>
</tr>
<tr>
<td>200</td>
<td>2 qts</td>
<td>4 qts</td>
<td>6 qts</td>
<td>8 qts</td>
</tr>
<tr>
<td>250</td>
<td>2.5 qts</td>
<td>5 qts</td>
<td>7.5 qts</td>
<td>10 qts</td>
</tr>
</tbody>
</table>

qts = quarts  Gal= gallons

For **fruit, nut and vine crops**: apply 0.25% to 1% solution (1-4 quarts Sil-Matrix™/100 gal.) in 50 to 250 gallons finished spray per acre.

**Specific Use Restrictions:**
1. Apply up to the day of harvest (0 day PHI).
2. Do not apply more than 10 quarts per acre (7.5 lb ai/a) per application.
3. Do not apply more than 20 gallons per acre (60 lb ai/a) per season.
4. Do not make post harvest applications.

**For vegetable crops and other agronomic crops:** apply 0.25% to 1% solution (1-4 quarts Sil-Matrix™/100 gal.) in 50 to 250 gallons finished spray per acre.

Specific Use Restrictions:
1. Apply up to the day of harvest (0 day PHI).
2. Do not apply more than 10 quarts per acre (7.5 lb ai/a) per application.
3. Do not apply more than 20 gallons per acre (60 lb ai/a) per season.
4. Do not make post harvest applications.

**For ornamental crops:** apply 0.25% to 1% solution (1-4 quarts Sil-Matrix™/100 gal.) making sure to get good coverage of the foliage. Apply in 20 to 250 gallons of water per acre.

Specific Use Restrictions:
1. Do not apply more than 10 quarts per acre (7.5 lb ai/a) per application.
2. Do not apply more than 15 gallons per acre (45 lb ai/a) per season.
3. Do not apply more than 20 gallons per acre (60 lb ai/a) per season.
4. Do not make post harvest applications.

**For turf use:** apply 1% to 2% solution (4-8 quarts Sil-Matrix™/100 gal.) in a minimum of 40 gallons finished spray per acre [or 1 gallon finished spray per 1000 ft²].

Specific Use Restrictions:
1. Do not apply more than 8 quarts per acre (6.0 lb ai/a) per application. [Do not apply more than 5.8 fluid ounces per 1000 ft² (0.14 lb ai/1000 ft²) per application.]
2. Do not apply more than 10 gallons per acre (30 lb ai/a) per season. [Do not apply more than 29 fluid ounces per 1000 ft² (0.7 lb ai/1000 ft²) per season.]

**DISEASE MONITORING:**
Sil-Matrix™ is a broad spectrum, preventative fungicide. If not applied on a routine protectant spray schedule, observe plants for disease signs or symptoms. Apply appropriate fungicide, at the listed label use rate and spray schedule, at the first sign of disease, report of disease in the area, or during environmental conditions favorable for disease development.

**OUTDOOR AND GREENHOUSE CROPS:**

**POME FRUIT, NUT CROPS, STONE FRUITS**
(Containing but not limited to)

- Apples
- Mayhaw
- Apricot
- Peach
- Almond
- Butternut
- Cranberry
- Crabapple
- Pear
- Cherry
- Plum
- Beech nut
- Cashew
- Loquat
- Quince
- Nectarine
- Prune
- Filbert
- Chestnut

**BERRIES AND VINE CROPS**
(Containing but not limited to)

- Blackberry
- Loganberry
- Grapes
- Blueberry
- Raspberry
- Gooseberry
- Strawberry

**ROOT & BULB VEGETABLES**
(Containing but not limited to)

- Beet, garden
- Beet, sugar
- Horseradish
- Celeriac
- Chervil
- Ginger
- Garlic
- Onion
- Chicory
- Ginseng
- Carrot
- Parsley root
- Potato
- Sweet Potato
- Turnip
- Cassava
- Yam
- Leek
- Shallot

**LEAFY & BRASSICA VEGETABLES**
(Containing but not limited to)

- Arugula
- Fennel
- Rhubarb
- Broccoli
- Cauliflower
- Kohlrabi
- Celery
- Parsley
- Radicchio
- Brussels sprouts
- Collards
- Mustard Greens
- Endive
- Parsley
- Swiss chard
- Kale
- Lettuce

**LEGUME VEGETABLES**
(Containing but not limited to)

- Beans
- Lentil
- Pea
- Broad bean
- Chickpea
- Soybean

**CUCURBIT & FRUITING VEGETABLES**
(Containing but not limited to)

- Cucumber
- Muskmelon
- Eggplant
- Gherkin
- Squash
- Watermelon
- Pepper
- Tomato

**CITRUS FRUITS**
(Containing but not limited to)

- Grapefruit
- Lemon
- Tangerine
- Orange
- Mandarin
- Lime
- Pummelo

**CEREAL GRAINS**
(Containing but not limited to)

- Barley
- Popcorn
- Wheat
- Wild rice
- Oats
- Corn
- Millet
- Sorghum
- Rice
- Rye

**ADDITIONAL CROPS**
(Containing but not limited to)

- Artichoke
- Coffee
- Jojoba
- Turf grass
- Sesame
- Grass grown for Seed
- Asparagus
- Cotton
- Ornamental
- Industrial Hemp*
- Sunflower
- Asparagus
- Cotton
- Ornamental
- Tobacco
- Tea

*Non-Food Use

**TURF & ORNAMENTALS**
(Containing but not limited to broadleaf shrubs and trees, flowering plants and bulbs, and foliage plants.)
IMPORTANT NOTE: Plant sensitivities to Sil-Matrix™ have been found to be acceptable for plants listed on this label; however it is impossible to know sensitivities under all conditions and phytotoxicity may occur. Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for sensitivity to Sil-Matrix™. Neither the manufacturer nor seller endorses use upon species not listed on the label, nor has it been determined that Sil-Matrix™ can be safely used on ornamental or nursery plants not listed on this label. The user must determine if Sil-Matrix™ can be used safely prior to commercial use. In a small area, apply the listed rates to the plants in question, i.e., foliage, fruit, etc., and observe for 7-10 days for symptoms of phytotoxicity prior to commercial use.

Do not apply foliar sprays to open blooms of Geranium, Marigold, Pansy, and Petunia.

BROADLEAF SHRUBS & TREES
Andromeda
Azalea
Cherry Laurel
Eucalyptus
Flowering almond
Flowering peach
Flowering quince
Holly
Maple
Red-tip
Rhododendron
Sycamore

FLOWERING PLANTS & BULBS
African violet
Chrysanthemum
Daisy
Hollyhock
Lily
Pansy
Tulip

*NOTE: Do not apply foliar sprays of Sil-Matrix™ to open blooms of these species.

FOLIAGE PLANTS
Aglonema
Boston fern
Fatsia
Lipstick plant
Pachysandra
Philodendron
Zebra plant

Limited Warranty and Limitations of Liability and Remedies

Read the Conditions of Sale – Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return unopened container at once to the seller for full refund of purchase price paid.

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control or suppression of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of PQ Corporation or the seller. PQ Corporation recommends that the user or grower test this product on a portion of the crop to determine suitability for the intended use. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment.

PQ Corporation warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the factors noted above which are beyond the control of PQ Corporation. To the extent allowed by law, the PQ Corporation makes no other

STORAGE AND DISPOSAL
Do not contaminate water, food, or feed by storage and disposal.

Storage: Keep pesticide in original container. Keep container tightly closed when not in use. Store product above 40°F. Do not store in aluminum, fiberglass, copper, brass, zinc, or galvanized containers. Protect from excessive heat. Store in a cool, dry place.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. For nonrefillable containers with capacities greater than 5 gallons:

Container Handling: Nonrefillable 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. Then offer for recycling, if available or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For nonrefillable containers with capacities greater than 5 gallons:

Container Handling: Nonrefillable 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. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Container Batch or Lot Code #
warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

To the extent allowed by law, the exclusive remedy against PQ Corporation for any cause of action relating to the handling or use of this product shall be limited to, at PQ Corporation's election, one of the following:

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

To the extent allowed by law, PQ Corporation shall not be liable and any and all claims against PQ Corporation are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. PQ Corporation and the seller offer this product, and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

Sil-Matrix® is a registered trademark of PQ Corporation.

AS25-1007
SUPPLEMENTAL LABELING
Sil-Matrix™
FUNGICIDE/MITICIDE/INSECTICIDE

Chemigation Application Instructions
GENERAL INFORMATION:

Apply this product only through drip (trickle); sprinkler (solid set, lateral move, end tow, sideroll, center pivot, or hand move); flood (basin); furrow; or border irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury or lack of effectiveness can result from non-uniform distribution of treated water.

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.

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 necessary adjustments should the need arise.

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, discharge the water from the public water system into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

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

The pesticide injection pipeline must contain a functional, normally dosed, 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.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

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.

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

DRIP TRICKLE CHEMIGATION:
1. 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.

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

3. 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.

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

5. 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.

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

7. Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water, fertilizer, or other appropriate tank-mixed agricultural chemicals. Agitation is necessary. Apply to moderately moist soils. Use volumes that thoroughly wet the foliage and/or soil but that do not cause significant runoff or excessive drip from pots. Application should be continuous in sufficient water to apply the application rate evenly to the entire treated area.

SPRINKLER CHEMIGATION:

1. 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.

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

3. 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.

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

5. 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.

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

7. Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water, fertilizer, or other appropriate tank-mixed agricultural chemicals. Agitation is necessary. Apply when soils are moderately moist. Use volumes that thoroughly wet the foliage and/or soil but that do not cause significant runoff or excessive drip from pots. Application should be continuous in sufficient water to apply the application rate evenly to the entire treated area.

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

FLOOD (BASIN), FURROW AND BORDER CHEMIGATION:

1. Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic...
discontinuity such as a drop structure or wear box to decrease potential of water source contamination from the backflow if water flow sllops.

2. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
   a. 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.
   b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
   c. 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.
   d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
   e. 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.
   f. Systems must use a metering pump, such as a positive displacement injection pump (i.e. diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

3. Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water, fertilizer, or other appropriate tank-mixed agricultural chemicals. Agitation is necessary. Apply to moderately moist soils. Use volumes that thoroughly wet the soil but that do not cause significant runoff. Application should be continuous in sufficient water to apply the application rate evenly to the entire treated area.