U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Biopesticides and Pollution Prevention Division (7511P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:
_X_ Registration
___ Reregistration
(under FIFRA, as amended)

EPA Reg. Number:	**Date of Issuance:**
264-1202	3/27/2019

Term of Issuance:
Unconditional

Name of Pesticide Product:
QST 713 FS

Name and Address of Registrant (include ZIP Code):

Bayer CropScience LP
800 N. Lindbergh Blvd.
St. Louis, MO 63167

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA Registration Number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA or the Act).

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency (EPA). In order to protect health and the environment, the Administrator, on his or her motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under the Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration or registration review of your product when the EPA requires all registrants of similar products to submit such data.

Signature of Approving Official:

Seiichi Murasaki, Senior Regulatory Advisor
Microbial Pesticides Branch
Biopesticides and Pollution Prevention Division (7511P)
Office of Pesticide Programs

Date:
3/27/2019

EPA Form 8570-6

2. Make the following labeling change before you release this product for shipment:

    - Revise the EPA Registration Number to read, "EPA Reg. No. 264-1202."

3. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statement of Formula (CSF):

- Basic CSF dated 03/18/2019

If you have any questions, please contact Cody Kendrick by phone at (703) 347-0468 or via email at kendrick.cody@epa.gov.

Enclosure: Stamped Label

ACCEPTED
Mar 27, 2019
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 264-1202

QST 713 FS

Alternate Brand Names: [Serenade® START]

Indended for:
Sub-label A: Agricultural/Commercial In-Furrow Uses
Sub-label B: Seed Treatment Uses

ACTIVE INGREDIENT:	
Bacillus subtilis strain QST 713*	**9.89%**
OTHER INGREDIENTS:	**90.11%**
TOTAL:	**100.00%**

*Contains a minimum of 2.7 x 10^{10} colony forming units (cfu)/g

EPA Reg. No. 264-RENE **EPA Est.**

KEEP OUT OF REACH OF CHILDREN
CAUTION

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-866-99BAYER (1-866-922-2937)

Please refer to [back panel] [booklet] for first aid, additional precautionary statements and directions for use. [Note to reviewer: Location for first aid, additional precautionary statements and directions for use will vary between those listed, depending on container type/size.]

OMRI® LISTED For Organic Use

Net Contents:

PRODUCED FOR

Bayer CropScience

Bayer CropScience LP
800 N. Lindbergh Blvd.
St. Louis, MO 63167
1-866-99BAYER (1-866-992-2937)

QST 713 FS

SUB-LABEL A

For Agricultural/Commercial In-Furrow Uses

QST 713 FS

GROUP	44	FUNGICIDE

[ALT BRAND NAMES: Serenade® START]

[Optional/Alternate Statement: “NOP Logo: For Organic Production”]
[Optional/Alternate Statement: “NOP Logo: Can be Used for Organic Production”]
[Use in Tank Mixes or Rotational alternating spray programs with other crop protection products]
[Use in resistance management programs]
[Use ground, chemigation and hand application equipment]
[For Agricultural Use]

ACTIVE INGREDIENT:	
Bacillus subtilis strain QST 713*	**9.89%**
OTHER INGREDIENTS:	**90.11%**
TOTAL:	**100.00%**

*Contains a minimum of 2.7 x 10^{10} colony forming units (cfu)/g

EPA Reg. No. 264-RENE **EPA Est.**

KEEP OUT OF REACH OF CHILDREN
CAUTION

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-866-99BAYER (1-866-922-2937)

Please refer to [back panel] [booklet] for first aid, additional precautionary statements and directions for use. [Note to reviewer: Location for first aid, additional precautionary statements and directions for use will vary between those listed, depending on container type/size.]

OMRI LISTED® For Organic Use

Net Contents:

PRODUCED FOR

Bayer CropScience

Bayer CropScience LP
800 N. Lindbergh Blvd.
St. Louis, MO 63167
1-866-99BAYER (1-866-992-2937)

FIRST AID	
IF INHALED:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
In case of emergency call toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577. Have the product container or label with you when calling the poison control center or doctor, or going for treatment.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

- Harmful if inhaled. Avoid breathing spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

The PPE requirements below apply to both Worker Protection Standard (WPS) uses (in general, agricultural-plant uses are covered by the Worker Protection Standard (40 CFR Part 170)) and Non-WPS uses.

Mixer/Loader and Applicators must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material
- NIOSH-approved particulate respirator with any N, R or P filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with a HE filter with NIOSH approval number prefix TC-21C.

Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

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

[ENGINEERING CONTROLS]

[OPTIONAL STATEMENT: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.607(d), (e), and (f), 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 "mixer/loader and applicators" 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. • Users should remove clothing/PPE 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

For Terrestrial Use:

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 washwater or rinsate. Do not apply when weather conditions favor drift or run-off from treated areas.

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product at once for a refund of the purchase price.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability. These terms may only be modified by a written document signed by a duly authorized representative of Bayer CropScience LP.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
Read the entire label before using this product.

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. [For use only as described on the labeling. Not for isolation or deformulation. Do not culture.]

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, 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 4 hours.**

Exception: If the product is soil injected or soil incorporated, the Worker Protection Standard under certain circumstances, allows workers to enter the treated area without restrictions if there will be no contact with anything that has been treated.

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:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material

NON-AGRICULTURAL USE REQUIREMENTS

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

[For commercial treatment of plants that are in ornamental gardens, parks, golf courses, and public or residential turf and grounds, and that are intended only for aesthetic purposes or climatic modification, Keep unprotected persons out of treated areas until sprays have dried.]

PRODUCT INFORMATION

QST 713 FS:

- contains bacteria that, when applied to the soil, will germinate to colonize the developing root system and provide suppression of disease-causing organisms such as *Fusarium*, *Pythium* and *Rhizoctonia* that can attack plant roots. For disease prevention, use QST 713 FS in a tank-mix or rotational program with other registered fungicides and bactericides.
- provides benefits which can result in healthier plants. As the plant's root system develops, the bacteria in QST 713 FS, formulated and provided at optimized levels, grows with the roots, and aids in the establishment of a vigorous root system. Improved plant health may help the host plant tolerate environmental stresses and increase nutrient utilization, plant stand and yield.

APPLICATION INSTRUCTIONS

Ground

This product can be applied by commonly used ground equipment, such as hose-end, pressurized, greenhouse and hand-held sprayers. Consult spray nozzle and accessory documentation for specific information on proper equipment calibration. Maintain agitation during mixing and application to ensure uniform product suspension. Use the application rate indicated in the Specific Crop Directions tables of this label, in sufficient water to achieve thorough coverage. Overall, to achieve good coverage, use proper spray pressure, gallonage per acre, nozzles, nozzle spacing and ground speed.

Chemigation

This product can be applied through sprinkler (center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set or hand move) or drip-type irrigation systems. Refer to the Chemigation section of this label for additional directions and precautions. Maintain agitation during mixing and application to ensure uniform product suspension. Use the application rate, indicated for the appropriate crop in the Application Rate tables fo this label, in sufficient water to achieve throrough coverage.

USE RESTRICTIONS

- Do not apply when wind speed favors drift beyond the area intended for treatment**.**
- Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues, may cause QST 713 FS to lose effectiveness or strength.
- Do not combine QST 713 FS with pesticides, surfactants, or fertilizers for application through chemigation equipment unless prior experience has shown the combination physically compatible, effective, and non-injurious under conditions of use. QST 713 FS has not been fully evaluated for compatibility with all of these.
- Conduct a spray compatibility test if mixture with other pesticides, surfactants, or fertilizers is planned.

FUNGICIDE RESISTANCE MANAGEMENT RECOMMENDATIONS

QST 713 FS contains an active ingredient with a mode of action classified as a Group 44 Fungicide, i.e., a Microbial fungicide.

- Integrate QST 713 FS into an overall disease and pest management strategy. Follow practices known to reduce disease development.
- Consult local agricultural authorities for specific IPM strategies developed for your crop(s) and location.
- Be sure use of this product conforms to resistance management strategies, which may include rotating and/or tank mixing with other products with different modes of action.

CHEMIGATION

Types of irrigation systems

Apply this product only through the following types of equipment:

- Sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set or hand move)
- Drip-type and micro-jet irrigation systems.

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

Maintain agitation during mixing and application to ensure uniform product suspension. Use the application rate indicated in the Specific Crop Directions tables of this label, in sufficient water to achieve thorough coverage.

Uniform Water Distribution and System Calibration

The chemigation system must provide uniform distribution of treated water. Crop injury or lack of effectiveness can result from non-uniform distribution of treated water. The chemigation system must be calibrated to uniformly apply the rates specified in crop-specific label sections. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.

Chemigation Monitoring

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.

Required System Safety Devices

The system must contain a functional check valve, a vacuum relief valve, and a low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional automatic quick-closing check valve to prevent the flow of fluid back toward the injection pump. 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. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. 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. 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.

Using Water From Public Water Systems

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.

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 (RPZ), back-flow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged 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 pump. The pesticide injection pipeline must 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. 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.

Injection for Chemigation

Inject the specified dosage of QST 713 FS into the irrigation main water stream: (1) through a constant flow, metering device; (2) into the center of the main line flow via a pivot tube or equivalent; (3) at a point ahead of at least one, right-angle turn in the main stream flow such that thorough mixing with the irrigation water is ensured.

Center Pivot, Lateral Move, End Tow, and Traveler Irrigation Equipment (Use only with electric or oil hydraulic drive systems that provide a uniform water distribution)

- Determine size of area to be treated.
- Determine the time required to apply no more than 1/4 inch of water (6,750 gallons water per acre) over the area to be treated when the system and injection equipment are operated at normal pressures specified by the equipment manufacturer. Run system at 80 to 95% of manufacturer's rated capacity.
- Using only water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of QST 713 FS fungicide required to treat area.
- Add required amount of QST 713 FS fungicide and sufficient water to meet the injection time requirements of the solution tank.
- Maintain constant solution tank agitation during the injection period.
- Stop injection equipment after treatment is completed. Continue to operate the system until QST 713 FS fungicide solution has cleared the sprinkler head.

Solid Set, Side (Wheel) Roll, and Hand Move Irrigation Equipment

- Determine acreage covered by sprinkler.
- Fill injector solution tank with water and adjust flow rate to use contents over a 10- to 30-minute interval.
- Determine the amount of QST 713 FS fungicide required to treat area.
- Add the required amount of QST 713 FS fungicide into the same quantity of water used to calibrate the injection equipment.
- Maintain constant solution tank agitation during the injection period.
- Operate system at normal pressures specified by the manufacturer of the injection equipment and used for the time interval established during calibration.
- Inject QST 713 FS fungicide at the end of the irrigation cycle or as a separate application to maximize foliar fungicide retention.
- Stop injection equipment after treatment is completed. Continue to operate the system until QST 713 FS fungicide solution has cleared the last sprinkler head.

Flushing and Cleaning the Chemical Injection System

At the end of the application period, allow time for all lines to flush the pesticide through all nozzles or emitters before turning off irrigation water. To ensure the lines are flushed and free of pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

In order to apply pesticides accurately, the chemical injection system must be kept clean, free of chemical or fertilizer residues and sediments. Refer to your owner's manual or ask your equipment supplier for the cleaning procedure for your injection system.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Consult the local Cooperative Extension for additional information. Avoiding spray drift is the responsibility of the applicator.

Droplet Size

Use the largest droplet size which provides sufficient control and coverage. Higher flow nozzles and lower pressures will produce larger droplets and minimize drift. Low drift and air induction nozzles will provide lower drift potential. Use larger droplet size when applying in hot, dry conditions (droplet evaporation is higher under these conditions, thus reducing the effective droplet size and increasing drift potential).

Wind Speed

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. Applications during gusty or calm wind conditions should be avoided. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. For applications made in-furrow or below soil-level, wind speed restrictions are not applicable.

Temperature Inversions
Drift potential is high during temperature inversions and applications should be avoided under these conditions. Temperature inversions are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog. If fog is not present, inversions can also be identified by the movement of smoke or dust from a ground source -- smoke or dust that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion.

Sensitive Areas
When applying adjacent to residential areas, bodies of water, habitats known to have threatened or endangered species, or non-target crops, drift can be minimized to these areas by making application when the wind is direction is away from these areas.

Where states or local authorities have more stringent regulations, they should be observed.

COMPATIBILITY TESTING AND TANK MIX PARTNERS

Compatibility
QST 713 FS is physically and biologically compatible with many commonly used pesticides, fertilizers, adjuvants, and surfactants but has not been fully evaluated with all of these. To ensure compatibility of tank-mix combinations, evaluate them prior to use as follows: Using a suitable container, add proportional amounts of product to water. Add wettable powders first, followed by water dispersible granules, then by liquid flowables, and lastly, emulsifiable concentrates. Mix thoroughly and let stand for at least five minutes. If the combination stays mixed or can be remixed, it is physically compatible. Test the combination on a small portion of the crop to be treated to ensure that a phytotoxic response does not occur as a result of application.

Do not combine QST 713 FS with pesticides, surfactants, or fertilizers with which there has been no previous experience or use demonstrating that they are physically compatible, effective, and non-injurious under your use conditions.

Order of Mixing
QST 713 FS may be tank-mixed with other registered pesticides to enhance plant disease control or suppression. This product cannot be mixed with any product with a prohibition against such mixing. When tank-mixing QST 713 FS with other registered pesticides, always read and follow all use directions, restrictions, and precautions of both QST 713 FS and the tank-mix partner(s). Use of the resulting tank mix must be in accordance with the more restrictive label limitations and precautions. Do not exceed label dosage rates.

1. Partially fill the spray tank with clean water and begin agitation.
2. Add the specified amount of QST 713 FS
3. Finish filling the tank to the volume necessary to obtain the proper spray concentration.

It is critical that the spray solution be agitated during mixing and application to assure a uniform suspension. Do not allow spray mixture to stand overnight or for prolonged periods. Maintain a spray solution pH between 4.5 and 8.5.

SPECIFIC CROP DIRECTIONS

CROP USE DIRECTIONS

- QST 713 FS has a 0-Day Pre-Harvest Interval for all crops contained on this label.
- Applying QST 713 FS to the soil at plant establishment will enhance root colonization.
- For improved performance under moderate to severe disease pressure, use the stated higher rates and reduced spray intervals as stated or use QST 713 FS in a tank-mix or rotational program with other registered fungicides.

Soil Treatment Application Instructions

QST 713 FS is a broad spectrum fungicide and bactericide for the prevention, suppression [and control] of soil borne diseases on a wide range of horticultural and broadacre crops. For all crops, QST 713 FS may be applied as a soil surface drench, shanked-in, side-dress, injected and in-furrow at any time.

Greenhouse Application Instructions

QST 713 FS may be applied as a soil treatment in Greenhouses with good resistance management programs. See soil treatment application instructions. Crop safety has not been confirmed on all cultivars. Plant compatibility testing is recommended when first using under your greenhouse conditions.

Preventative Applications for Plant Health and Optimum Disease Control

[*Not for use in CA]

QST 713 FS provides benefits which can result in healthier plants. QST 713 FS colonizes plants, preventing the establishment of disease-causing fungi and bacteria. As the plant's root system develops, the bacteria in QST 713 FS, formulated and provided at optimized levels, grow with the roots, providing protection throughout the growing season and resulting in the establishment of a vigorous root system. Improved plant health may help the host plant tolerate environmental stresses such as drought, heat, and cold temperatures [and ozone damage]. QST 713 FS improves plant utilization of [nitrogen], phosphorus, [potassium], [other micronutrients] and [iron]. Overall increased plant health may improve crop vigor, yields and quality, especially under stressful conditions.

ARTICHOKES – SOIL APPLICATION		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Pythium* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

ASPARAGUS – SOIL APPLICATION		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Phytophthora* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

BERRY – SOIL APPLICATION

Crops of Crop Group 13 Including: Blackberry**,** Blueberry, Caneberry, Currant, Elderberry, Gooseberry, Huckleberry, Loganberry, Raspberry, and other berry crops. Includes cultivars, varieties and/or hybrids of these commodities.

Target Diseases	Rate (oz/acre)	Rate when Tank Mixed (oz/acre)
Armillaria Root Rot[*] - *Armillaria mellea* ***Fusarium* spp.** **Phytophthora Root Rot -** *Phytophthora* spp. ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.** **[*NOT FOR USE IN CALIFORNIA]**	2 - 24	1 - 24

BRASSICA (COLE) LEAFY VEGETABLES – SOIL APPLICATION

Crops of Crop Group 5 Including: Broccoli, Broccoli raab (rapini), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccolo, Chinese broccoli (gai lon), Chinese cabbage (bok choy and napa), Chinese mustard cabbage (gai choy), Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens, and other brassica leafy vegetable crops. Includes cultivars, varieties and/or hybrids of these commodities.

Target Diseases	Rate (oz/acre)	Rate when Tank Mixed (oz/acre)
Clubroot - *Plasmodiophora brassicae* ***Fusarium* spp.** ***Macrophomina* spp.** ***Pythium* spp.** ***Phytophthora* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

BULB VEGETABLES – SOIL APPLICATION

Crops of Crop SubGroup 3-07A Including: Daylily (bulb), Fritillaria (bulb), Garlic (bulbs of common, great-headed, Serpent), Lily (bulb), Onion (bulbs of common, Chinese, Pearl, potato onion), Shallot (bulb), and other bulb vegetable crops. Includes cultivars, varieties, and/or hybrids of these commodities.

Crops of Crop Subgroup 3-07B Including: Chinese Chive (fresh leaves), Chive (fresh leaves), Elegans hosta, Fritillaria (leaves), Kurrat, Leek (Allium porrum, Lady's, Wild), Onion (Beltsville bunching, fresh, green, macrostem, tree [tops], Welsh [tops]), Shallot (fresh leaves), and other bulb vegetable crops. Includes cultivars, varieties, and/or hybrids of these commodities.

Target Diseases	Rate (oz/acre)	Rate when Tank Mixed (oz/acre)
***Fusarium* spp.** ***Phytophthora* spp.** **Pink Root -** *Phoma* spp. ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

CEREAL GRAINS (EXCEPT CORN) – SOIL APPLICATION (INCLUDING FORAGE, FODDER OR STRAW FROM CEREAL GRAINS)

Crops of Crop Group 15 (and 16) Including: Barley, Buckwheat, Millet (pearl and proso), Oats, Rice, Rye, Sorghum, Teosinte, Triticale, Wheat, Wild rice, and other cereal grain crops, Includes cultivars, varieties and/or hybrids of these commodities.

Target Diseases	Rate (oz/acre)	Rate when Tank Mixed (oz/acre)
Bakanae[*] - *Gibberella fujikuroi* ***Fusarium* spp.** ***Macrophomina* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.** **[*NOT FOR USE IN CALIFORNIA]**	2 - 24	1 - 24

CORN – SOIL APPLICATION
(INCLUDING FORAGE and FODDER FROM CORN)

Corn (field, sweet, and popcorn). Includes cultivars, varieties and/or hybrids of these commodities.

Target Diseases	Rate (oz/acre)	Rate when Tank Mixed (oz/acre)
Bakanae[*] - *Gibberella fujikuroi* ***Fusarium* spp.** ***Macrophomina* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.** **[*NOT FOR USE IN CALIFORNIA]**	1.6 - 16	1 - 16

CITRUS FRUITS – SOIL APPLICATION

Crops of Crop Group 10 Including: Calamondin, Citrus citron, Citrus hybrids (including chironja, tangelo, tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Orange (sweet and sour), Pummelo, Satsuma mandarin, and other citrus fruit crops. Includes cultivars, varieties and/or hybrids of these commodities.

Target Diseases	Rate (oz/acre)	Rate when Tank Mixed (oz/acre)
***Fusarium* spp.** ***Macrophomina* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

Citrus Application Instructions:

QST SC Soil drench rate for immature citrus. Apply 2 to 24 ounces per acre as a soil drench using a metered dose directed to the soil around the trunk. Make applications in a volume not to exceed 32 ounces of diluted spray solution per tree (8 to 16 ounces is recommended).

Rate per Acre	Trees	Fluid ounces / Tree
12 oz rate	140 trees	0.09 fl oz
18 oz rate	140 trees	0.14 fl oz
24 oz rate	140 trees	0.18 fl oz

QST 713 FS rates for mature citrus. Apply 4 to 24 ounces per acre as a soil drench or chemigated injection through micro-jet irrigation systems.

COFFEE – SOIL APPLICATION

Target Diseases	Rate (oz/acre)	Rate when Tank Mixed (oz/acre)
***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

COTTON – SOIL APPLICATION		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Fusarium* spp.** ***Pythium* spp.** ***Phytophthora* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

CUCURBIT VEGETABLES – SOIL APPLICATION **Crops of Crop Group 9 including:** Balsam apple, Balsam pear, Bitter melon, Cantaloupe, Chayote (fruit), Cucumber, Chinese cucumber, Chinese waxgourd, Gherkin, Gourd (edible), Citron melon, Muskmelon, Pumpkin, Summer squash, Winter squash, Watermelon, and other cucurbit vegetable crops. Includes cultivars, varieties and/or hybrids of these commodities.		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Fusarium* spp.** ***Macrophomina* spp.** ***Monosporascus cannonballus*[*]** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.** **[*NOT FOR USE IN CALIFORNIA]**	2 - 24	1 - 24

FRUITING VEGETABLES – SOIL APPLICATION **Crops of Crop Group 8 Including:** Eggplant, Groundcherry, Pepino, Pepper (including bell, chili, cooking, pimento and sweet), Tomatillo, Tomato, and other fruiting vegetable crops. Includes cultivars, varieties and/or hybrids of these commodities.		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Fusarium* spp.** ***Macrophomina* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** **Southern blight -** *Sclerotium rolfsii* ***Verticillium* spp.**	2 - 24	1 - 24

GRAPE – SOIL APPLICATION		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
Armillaria Root Rot - *Armillaria mellea* ***Fusarium* spp.** **Oak Root Fungus[*]** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.** **[*NOT FOR USE IN CALIFORNIA]**	2 - 24	1 - 24

HERBS AND SPICES – SOIL APPLICATION **Crops of Crop Subgroup 19A including:** Angelica, Balm, Basil, Borage, Burnet, Camomile, Catnip, Chervil (dried), Chive, Chinese chive, Clary, Coriander (leaf), Costmary, Culantro (leaf), Curry, Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet bay, Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood, and other herb crops. Includes cultivars, varieties and/or hybrids of these commodities. **Crops of Crop Subgroup 19B including:** Allspice, Anise (seed), Anise (star), Annatto (seed), Caper (buds), Caraway, Black caraway, Cardamom, Cassia (buds), Celery (seed), Cinnamon, Clove (buds), Coriander (seed), Culantro (seed), Cumin, Dill (seed), Fennel (common), Florence fennel (seed), Fenugreek, Grains of paradise, Juniper (berry), Lovage (seed), Mace, Mustard (seed), Nutmeg, Pepper (black and white), Poppy (seed), Saffron, Vanilla, and other spice crops. Includes cultivars, varieties and/or hybrids of these commodities.		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

HOPS – SOIL APPLICATION		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

LEAFY VEGETABLES (EXCEPT BRASSICA) – SOIL APPLICATION

Crops of Crop Group 4 Including: Amaranth (leafy), Arugula, Cardoon, Celery, Chinese celery, Celtuce, Chervil, Chrysanthemum (edible-leaved and garland), Corn salad, Cress (garden and upland), Dandelion, Dock (sorrel), Endive (escarole), Florence fennel (finochio), Sea kale, Lettuce (head and leaf), Orach, Parsley, Puslane (garden and winter), Radicchio (red chicory), Rhubarb, Spinach (including chinese, new zealand and vine), Swiss chard, Tampala, and other leafy vegetable crops. Includes cultivars, varieties and/or hybrids of these commodities.

Target Diseases	Rate (oz/acre)	Rate when Tank Mixed (oz/acre)
***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Sclerotinia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

LEGUME VEGETABLES – SOIL APPLICATION

Crops of Crop Group 6 (Except Soybean) Including: Edible Podded and Succulent Shelled Pea & Bean and
Dried Shelled Pea and Bean
Bean (*Lupinus* spp., including grain lupin, sweet lupin, white lupin, and white sweet lupin)
Bean (*Phaseolus* spp., including field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean)
Bean (*Vigna* spp., including adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean)
Pea (*Pisum* spp. including dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea)
Other Beans and Peas (Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pigeon pea, Soybean (immature seed), Sword bean, and other legume vegetable crops. Includes cultivars, varieties and/or hybrids of these commodities.

Target Diseases	Rate (oz/acre)	Rate when Tank Mixed (oz/acre)
***Aphanomyces* spp.[*]** ***Fusarium* spp.** ***Macrophomina* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.** **[*NOT FOR USE IN CALIFORNIA]**	0.5 - 24	0.5 - 24

MINT – SOIL APPLICATION

Target Diseases	Rate (oz/acre)	Rate when Tank Mixed (oz/acre)
***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

NONGRASS ANIMAL FEEDS – SOIL APPLICATION
(FORAGE, FODDER, STRAW AND HAY)

Crops of Crop Group 18 Including: Alfalfa, Bean (velvet), Clover, Kudzu, Lespedeza, Lupin, Sainfoin, Trefoil, Vetch (including crown and milk) and other nongrass animal feed crops. Includes cultivars, varieties and/or hybrids of these commodities.

Target Diseases	Rate (oz/acre)	Rate when Tank Mixed (oz/acre)
Aphanomyces spp.*[*]** **Bacterial wilt [*]** ***Fusarium* spp.** ***Macrophomina spp. ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.** **[*NOT FOR USE IN CALIFORNIA]**	2 - 24	1 - 24

OILSEED CROPS (EXCEPT COTTON) – SOIL APPLICATION

Crops of Crop Group 20 (Except Cotton) Including: Canola, Castor, Flax seed, Rapeseed, Safflower, Sesame, Sunflower and other oilseed crops (including those grown for seed or oil production). Includes cultivars, varieties and/or hybrids of these commodities.

Target Diseases	Rate (oz/acre)	Rate when Tank Mixed (oz/acre)
Clubroot[*] - *Plasmodiophora brassicae* ***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.** **[*NOT FOR USE IN CALIFORNIA]**	2 - 24	1 - 24

OLIVE – SOIL APPLICATION
(including those grown for oil production)

Target Diseases	Rate (oz/acre)	Rate when Tank Mixed (oz/acre)
***Fusarium* spp.** ***Phytophthora* spp.** ***Rhizoctonia* spp.** ***Pythium* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

PEANUT – SOIL APPLICATION (including those grown for oil production)		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Aspergillus* spp.[*]** **Cylindrocladium Black Rot[*]** ***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.** **White Mold -** *Sclerotium rolfsii* **[*NOT FOR USE IN CALIFORNIA]**	2 - 24	1 - 24

POME FRUIT – SOIL APPLICATION **Crops of Crop Group 11 Including:** Apple, Asian pear, Azarole, Chinese quince, Crabapple, Japanese quince, Loquat, Mayhaw, Medlar, Pear, Quince (including Chinese and Japanese quince), Tejocote and other pome fruit crops. Includes cultivars, varieties and/or hybrids of these commodities.		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

POTATOES – SOIL APPLICATION

Including: Potato, Sweet potato and other potato crops. Includes cultivars, varieties and/or hybrids of these commodities.

Target Diseases	Rate (oz/acre)	Rate when Tank Mixed (oz/acre)
Aphanomyces* spp.[*]** **Clubroot[*] -** *Plasmodiophora brassicae* ***Colletotrichum spp. ***Erwinia* spp.** ***Fusarium* spp.** ***Macrophomina* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Sclerotium rolfsii*** ***Verticillium* spp.** **Common Scab -** *Streptomyces scabies* **[*NOT FOR USE IN CALIFORNIA]**	2 - 24	1 - 24

ROOT AND TUBER VEGETABLES (EXCEPT POTATO) – SOIL APPLICATION (INCLUDING LEAVES OF ROOT AND TUBER VEGETABLES)

Crops of Crop Group 1 (and 2) Including: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Beet (garden and sugar), Burdock, Canna, Carrot, Cassava (bitter and sweet), Celeriac, Chayote, Chervil (turnip-rooted), Chicory, Chufa, Dasheen (taro), Ginger, Ginsing, Horseradish, Leren, Parsley (turnip-rooted), Parsnip, Radish, Rutabaga, Salsify (oyster plant), Salsify (black and Spanish), Skirret, Tanier, Turmeric, Turnip, True Yam, Yam bean (jicama, manioc pea), and other root and tuber vegetable crops. Includes cultivars, varieties and/or hybrids of these commodities.

Target Diseases	Rate (oz/acre)	Rate when Tank Mixed (oz/acre)
Aphanomyces* spp.[*]** **Clubroot[*] -** *Plasmodiophora brassicae* ***Colletotrichum spp. ***Erwinia* spp.** ***Fusarium* spp.** ***Macrophomina* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Sclerotium rolfsii*** ***Verticillium* spp.** **Common Scab -** *Streptomyces scabies* **[*NOT FOR USE IN CALIFORNIA]**	2 - 24	1 - 24

SOYBEANS – SOIL APPLICATION		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Aphanomyces* spp.[*]** ***Fusarium* spp.** ***Macrophomina* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.** **[*NOT FOR USE IN CALIFORNIA]**	2 - 24	1 - 24

STONE FRUIT – SOIL APPLICATION **Crops of Crop Group 12 Including:** Apricot, Cherry (sweet and tart), Nectarine, Peach, Plum (includes Chickasaw, Damson, and Japanese), Plumcot, Prune (fresh) and other stone fruit crops. Includes cultivars, varieties and/or hybrids of these commodities.		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

STRAWBERRY – SOIL APPLICATION		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
Angular Leaf Spot[*] - *Xanthomonas fragariae* **Black Root Rot (complex)** ***Macrophomina* spp.** ***Phytophthora* spp.** ***Verticillium Wilt*** ***Rhizoctonia* spp.** ***Fusarium* spp.** **[*NOT FOR USE IN CALIFORNIA]**	2 - 24	1 - 24

SUGARCANE – SOIL APPLICATION		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Phytophthora* spp.[*]** ***Pythium* spp.[*]** ***Rhizoctonia* spp.[*]** **[*NOT FOR USE IN CALIFORNIA]**	2 - 24	1 - 24

TOBACCO – SOIL APPLICATION		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
Black Shank - *Phytophthora* spp. ***Fusarium* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

TREE NUTS – SOIL APPLICATION **Crops of Crop Group 14 Including:** Almond, Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia nut (bush nut), Pecan, Pistachio, Walnut [black and English (Persian)], and other tree nut crops. Includes cultivars, varieties and/or hybrids of these commodities.		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

TROPICAL FRUITS

POMEGRANATE – SOIL APPLICATION		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Fusarium* spp.[*]** ***Phytophthora* spp.[*]** ***Pythium* spp.[*]** ***Rhizoctonia* spp.[*]** ***Verticillium* spp.[*]** **[*NOT FOR USE IN CALIFORNIA]**	2 - 24	1 - 24

AVOCADO AND MANGO – SOIL APPLICATION		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

PAPAYA – SOIL APPLICATION

Target Diseases	Rate (oz/acre)	Rate when Tank Mixed (oz/acre)
***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

PINEAPPLE – SOIL APPLICATION		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

BANANAS AND PLANTAINS – SOIL APPLICATION		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

KIWI – SOIL APPLICATION		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

WATERCRESS – SOIL APPLICATION		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

GRASS FORAGE, FODDER, AND HAY – SOIL APPLICATION **Crops of Crop Group 17 Including:** Bluegrass, Fescue, Orchard grass and other grass seed production crops. Includes cultivars, varieties and/or hybrids of these commodities.		
Target Diseases	**Rate (oz/acre)**	**Rate when Tank Mixed (oz/acre)**
***Fusarium* spp.** ***Phytophthora* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.** ***Verticillium* spp.**	2 - 24	1 - 24

STORAGE AND DISPOSAL

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

Pesticide storage
Store in a dry area inaccessible to children. Store in original container only. Keep container closed when not in use. Store at room temperature.
Pesticide disposal
To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

Container handling

[Non-Refillable Containers]

Rigid, Non-refillable containers (equal to or less than 5 gallons)
Non-refillable container. Do not reuse or refill this container. Triple rinse or pressure 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 1/4 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.

Pressure rinse as follows: 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 or 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.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

Rigid Non-refillable Containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs)
Non-refillable container. Do not reuse or refill this container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows.

Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)
Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.
Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs)
Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, and Kegs)
Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

Non-Refillable Fiber Drums with Liners

Non-refillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment, then offer for recycling if available or dispose of in a sanitary landfill or by incineration. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

Non-Rigid, Non-refillable Containers
Non-refillable container. Do not reuse or refill this container. Completely empty container into application equipment. Then offer for recycling if available or dispose of in a sanitary landfill or by other procedures approved by state and local authorities."

[Refillable Containers]

Refillable container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows. Refill this container with pesticide only. Do not reuse this container for any other purpose. Contact your Ag retailer or Bayer CropScience for container return, disposal and recycling information.

Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)
Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs)
Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To triple rinse the containers before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

End users are authorized to remove tamper-evident cables as required to remove the product from the container unless the container is equipped with one-way valves and refilling or returning is planned. If this is the case, end-users are not authorized to remove tamper-evident cables, remove one-way valves, or clean container.

[batch codes are sticker applied to the front panel of every label on every product container]

QST 713 FS

SUB-LABEL B

For Seed Treatment Uses

QST 713 FS

GROUP	44	FUNGICIDE

[ALT BRAND NAMES: QST 713 ST]

[Optional/Alternate Statement: “NOP Logo: For Organic Production”]
[Optional/Alternate Statement: “NOP Logo: Can be Used for Organic Production”]
[Use in Application Mixes with other commercial seed treatment products]
[A systemic biological seed treatment for suppression of seedling and root diseases on the following select agricultural crops: canola, rapeseed, corn, cotton, cereal grains, legume vegetables, and rice].

ACTIVE INGREDIENT:	
Bacillus subtilis strain QST 713*	**9.89%**
OTHER INGREDIENTS:	**90.11%**
TOTAL:	**100.00%**

*Contains a minimum of 2.7 x 10^{10} colony forming units (cfu)/g

EPA Reg. No. 264-RENE **EPA Est.**

KEEP OUT OF REACH OF CHILDREN
CAUTION

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-866-99BAYER (1-866-922-2937)

FIRST AID

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

In case of emergency call toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577. Have the product container or label with you when calling the poison control center or doctor, or going for treatment.

Please refer to [back panel] [booklet] for first aid, additional precautionary statements and directions for use. [Note to reviewer: Location for first aid, additional precautionary statements and directions for use will vary between those listed, depending on container type/size.]

OMRI® LISTED For Organic Use

Net Contents:

PRODUCED FOR

Bayer CropScience LP
800 N. Lindbergh Blvd.
St. Louis, MO 63167
1-866-99BAYER (1-866-992-2937)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION

- Harmful if inhaled. Avoid breathing spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Workers involved with treating the seed (e.g. connecting and disconnecting hoses and transfer pumps, mixing, equipment calibration, etc.) and others exposed to the concentrate, and cleaners/repairers of seed treatment equipment must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material
- NIOSH-approved particulate respirator with any N, R or P filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with a HE filter with NIOSH approval number prefix TC-21C.

Baggers and bag sewers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material
- NIOSH-approved particulate respirator with any N, R or P filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with a HE filter with NIOSH approval number prefix TC-21C

Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization. Follow the manufacturer's instructions for cleaning / maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When engineering controls that meet the OSHA requirements as defined in 29 CFR Part 1910.1000 are used the respirator requirement may be waived or modified as specified in 29 CFR Part 1910.1000.

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

Follow manufacturer's instructions for cleaning/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.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on

clean clothing.

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

ENVIRONMENTAL HAZARDS

For Terrestrial Use: 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 washwater or rinsate. Cover spilled seed, or collect spilled seed from soil surface.

CONDITIONS FOR SALE AND WARRANTY

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product at once for a refund of the purchase price.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability. These terms may only be modified by a written document signed by a duly authorized representative of Bayer CropScience LP.

Treatment of highly mechanically damaged seed, or seed of known low vigor and poor quality, may result in reduced germination and/or reduction of seed and seedling vigor. Treat and conduct germination tests on a small portion of seed before committing the total seed lot to a selected chemical treatment. Due to seed quality conditions beyond the control of Bayer CropScience LP, no claims are made to guarantee germination of carry-over seed.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

DIRECTIONS FOR USE

STOP - READ THE ENTIRE LABEL BEFORE 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 State or Tribal agency responsible for pesticide regulation. [For use only as described on the labeling. Not for isolation or deformulation. Do not culture.]

[Note to the reviewer, all uses on label may be for Commercial and or Non-commercial (on agricultural establishments) use.]

[For Commercial Seed Treatment Use: Not for use on agricultural establishments in hopper-box, planter-box, slurry-box or other seed treatment applications at or immediately before planting.]

[NON-COMMERCIAL SEED TREATMENT USE DIRECTIONS

For Seed Treatment Use on Agricultural Establishments: Do not apply this product with a hopper box, planter box, slurry box, or any other at-plant methods. Uniform application to seed is necessary to ensure seed safety and best disease control. Only use seed that is sound and well cured prior to treatment. Consult your area agronomist regarding planting depth recommendations for the particular variety to be planted.]

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 4 hours.
Exception: If the seed is treated with the product and the seed is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- Waterproof gloves
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

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

[For commercial treatment of plants that are in ornamental gardens, parks, golf courses, and public or residential turf and grounds, and that are intended only for aesthetic purposes or climatic modification, Keep unprotected persons out of treated areas until sprays have dried.]

PRODUCT INFORMATION

QST 713 FS contains bacteria that, when applied to seed, will germinate in the soil to colonize the developing root system and provide suppression of disease-causing organisms such as *Fusarium*, *Pythium* and *Rhizoctonia* that can attack plant roots. As a result of this biological protection, a vigorous root system is established by the plant, which often results in improved plant stand, plant health, and yield.

For improved performance use QST 713 FS in a program with other registered fungicides for seed treatment.

All seed treated with this product must be colored with an EPA-approved dye or colorant that imparts an unnatural color to the seed to help prevent the inadvertent use of treated seed for food, feed, or oil purposes.

USE RATE DETERMINATION

Carefully read and follow all label directions, use rates and restrictions. Prepare only the amount of product solution required to treat the amount of seed required.

APPLICATION INSTRUCTIONS

This product is for commercial or on-farm application. Do not apply this product with a hopper box, planter box, slurry box, or any other at-plant methods. Uniform application to seed is necessary to ensure seed safety and best disease control. Only use seed that is sound and well cured prior to treatment.
Consult your area agronomist regarding planting depth recommendations for the particular variety to be planted.

MIXING INSTRUCTIONS

MIXING: QST 713 FS may be mixed with other registered pesticides. This product cannot be mixed with any product with a prohibition against such mixing. When mixing QST 713 FS with other registered pesticides, always read and follow all use directions, restrictions, and precautions of both QST 713 FS and the mix partner(s). Use of the resulting mix must be in accordance with the more restrictive label limitations and precautions. Do not exceed label dosage rates.

COMPATIBILITY: Do not combine QST 713 FS in the slurry with any product in which there has been no previous experience or use of the combination to show it is physically compatible, effective and non-injurious under your use conditions. QST 713 FS is compatible with many commonly used pesticides but has not been fully evaluated with all of these. It is essential that before using QST 713 FS in any tank mixture the compatibility of the mixture be established. Add QST 713 FS at the labeled rate to a clean quart jar containing approximately one-half the amount of water intended for a final slurry application rate. Next, follow with all other tank mix components that will be used in the total slurry application. Add last the remaining balance of water. The total amount of volume is determined by the seed size and how much is necessary to ensure complete and uniform coverage and distribution on the seed, as well as the type of commercial seed treating application equipment that will be used.

DO NOT USE MIXTURES THAT CURDLE, PRECIPITATE, OR GEL. USE TANK MIXTURES IMMEDIATELY AFTER MIXING WITH ADEQUATE AGITATION.

For Use as a Seed Treatment:

When using with other chemical insecticide or fungicide seed treatments: first add the chemical insecticides or fungicides to the slurry mix with approximately ½ of the required water. Slowly add the QST 713 FS to the slurry until a suspension is obtained. Add the remainder of the water and maintain adequate agitation.
Do not store mixed slurries for more than 24 hours.

When using only QST 713 FS seed treatment: Add ½ the required water to the slurry mix. Slowly add the QST 713 FS to the slurry until a suspension is obtained. Add the remainder of the water and maintain adequate agitation.
Do not store mixed slurries for more than 24 hours.

SPECIFIC CROP DIRECTIONS

CROP USE DIRECTIONS
Application Rates of QST 713 FS for Seed Treatment

For suppression of seedling and root diseases on the following select agricultural crop seeds:

CANOLA, RAPESEED	
Disease	**Product Rate (fl oz per 100 lb of seed)**
***Fusarium* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.**	0.3 – 5

CORN **Corn, Sweet; Corn, Feed; Corn, Field; Corn, Fuel; Corn, Pop**	
Disease	**Product Rate (fl oz per 100 lb of seed)**
***Fusarium* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.**	0.2 – 5

COTTON **Cotton, Short Staple; Cotton, Long Staple; Cotton, Upland; Cotton, Pima**	
Disease	**Product Rate (fl oz per 100 lb of seed)**
***Fusarium* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.**	0.2 – 3

CEREAL GRAINS (EXCEPT CORN, RICE AND SORGHUM) **AND FORAGE, FODDER, AND STRAW OF CEREAL GRAINS** **Barley, Buckwheat, Millet (pearl and proso), Oats, Rye, Sorghum, Teosinte, Triticale, Wheat**	
Disease	**Product Rate (fl oz per 100 lb of seed)**
***Fusarium* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.**	0.1 – 3

LEGUME VEGETABLES (EXCEPT SOYBEANS) **Beans Sprouts, Bean; Adzuki, Bean; Black, Blue Lake, Bean; Broad, Bean; Butter, Bean; Cacao, Bean; Dry, Bean; Fava, Bean; French, Bean; Garden, Bean; Garbanzo, Bean; Green, Bean; Kidney, Bean; Lima, Bean; Mung, Bean; Navy, Bean; Pea, Bean; Pigeon, Bean; Pinto, Bean; Red, Bean; String, Bean; Sugar, Bean; Snap, and other fresh, dry, vine, fuel and forage legume vegetables grown for seed.**	
Disease	**Product Rate (fl oz per 100 lb of seed)**
***Fusarium* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.**	0.1 – 3

RICE	
Disease	**Product Rate (fl oz per 100 lb of seed)**
***Fusarium* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.**	0.1 – 3

SORGHUM	
Disease	**Product Rate (fl oz per 100 lb of seed)**
***Fusarium* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.**	0.1 – 3

SOYBEANS	
Disease	**Product Rate (fl oz per 100 lb of seed)**
***Fusarium* spp.** ***Pythium* spp.** ***Rhizoctonia* spp.**	0.1 – 3

SEED BAG TAG

The Federal Seed Act requires that the container of seed treated with QST 713 FS must be labeled with the following statements:

- This seed has been treated with:
    - **QST 713 FS**, which contains **9.89% *Bacillus subtilis* strain QST 713**.
- Do not use treated seed for food, feed, or oil production. User is responsible for ensuring that the seed bag meets all the requirements under the Federal Seed Act.

In addition, the US Environmental Protection Agency requires the following statements on the container of seed treated with QST 713 FS:

- **Store treated seeds away from food and feedstuffs.**
- **Do not allow children, pets, or livestock to have access to treated seed.**
- **Wear long-sleeved shirt, long pants and chemical-resistant gloves when handling treated seed.**
- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in ethanol by-products that are used in agronomic practice.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading.
- [Dispose of all excess treated seed. Leftover treated seed may be buried away from water sources in accordance with local requirements.]
- [Do not contaminate water bodies when disposing of planting equipment wash waters.]
- Treated at manufacturer's recommended rate.
- Treated seed must be adequately covered with soil at planting.
- Dispose of seed packaging or containers in accordance with local requirements. Do not use empty seed bags for any other purpose.
- [To reduce seed dust which can drift onto blooming crops or weeds, ensure that planting equipment is functioning properly in accordance with manufacturer's recommendations. Surplus seed or empty seed containers should be stored or disposed according to local federal regulations.]

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

For MEDICAL, TRANSPORTATION or OTHER Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a dry area inaccessible to children. Store in original containers only. Keep container closed when not in use. Store at room temperature.

PESTICIDE DISPOSAL: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

CONTAINER HANDLING

[Dilutable Seed Treatment Products in Non-Refillable Plastic Containers]

Rigid, Non-refillable containers (equal to or less than 5 gallons)
Non-refillable container. Do not reuse or refill this container. Triple rinse or pressure 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 1/4 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.

Pressure rinse as follows: 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 or 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.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

Rigid Non-refillable containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs)
Non-refillable container. Do not reuse or refill this container. After emptying product from container, either return container to Bayer CropScience per instructions from Bayer CropScience Customer Service Center (1-800-527-4781), or rinse and either recycle or dispose of the container as follows:

Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)
Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, and Kegs)
Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

[Dilutable Seed Treatment Products in Non-Refillable Metal Containers]

Non-refillable container. Do not reuse or refill this container. After emptying product from container, either return container to Bayer CropScience per instructions from Bayer CropScience Customer Service Center (1-800-527-4781), or rinse and either recycle or dispose of the container as follows:

Liquid dilutables in containers small enough to shake (5 gallons or less)

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.

Solid dilutables in containers small enough to shake (5 gallons or 50 pounds or less)
Triple Rinse as follows: Empty the remaining contents into application equipmentor a mix tank. 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.

Any dilutable pesticides in containers too large to shake (larger than 5 gallons or 50 pounds)
Triple Rinse as follows: Empty 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.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

[Non-Dilutable Seed-Treatment Products in Non-Refillable Containers]

Seed-Treatment Products in Non-Refillable Fiber Drums with Liners
Non-refillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment, then offer for recycling if available or dispose of in a sanitary landfill or by incineration. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

Seed-Treatment Products in Non-rigid, Non-Refillable Containers
Non-refillable container. Do not reuse or refill this container. Completely empty container into application equipment. Then offer for recycling if available or dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

[Seed Treatment Products in Refillable Containers]

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. After emptying product from container, either return container to Bayer CropScience per instructions from Bayer CropScience Customer Service Center (1-800-527-4781) or rinse and either recycle or dispose of the container as follows:

Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)
Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g. – Snyder 120 Next Gen, Bonar B120, Drums, and Kegs)
Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To triple rinse the containers before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

End-users are authorized to remove tamper-evident cables as required to remove the product from the container unless the container is equipped with one-way valves and refilling or returning is planned. If this is the case, end-users are not authorized to remove tamper-evident cables, remove one-way valves, or clean container.

[Batch codes are sticker applied to the front panel of every label on every product container]

QST 713 FS (PENDING) 03/02/2018, 10/09/2018, 10/10/2018, 11/01/2018, 11/12/2018, 02/27/2019, 02/28/2019, 03/19/2019, 03/20/2019, 03/27/2019