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**Product  
Bulletin**

## AGRI-GUARD<sup>®</sup>™ 841

### APPLICATION

Impurities in irrigation water can result in mineral crystallization on maturing crops, which is difficult to remove during post-harvest washing. Typical mineral deposits adhere tightly to the skin of fruit. This deposit is composed chiefly of calcium and magnesium carbonates. In the past, strong mineral acid washes have been an expensive method for removing these deposits. In addition to being costly, strong mineral acids are also corrosive to processing equipment. Other hazards associated with strong mineral acids include handling and storage procedure.

Traditionally, sulfur burners and sulfuric acid have been utilized to inhibit the formation of crystalline mineral deposition. These approaches have been effective with source waters of low to medium levels of impurities to inhibit serious deposition problems. However, the risk of inducing phytoplasma toxicity is high if strict residual controls are not maintained. These approaches are effective only within a small pH range that plants will tolerate. pH outside of this range may cause plant foliage to be damaged.

**AGRI-GUARD<sup>®</sup> 841** is specifically formulated for overhead irrigation systems. It causes distortion of mineral deposits, producing a highly irregular pattern. The resulting deposit is soft, relatively non-adherent, and is easily removed during regular post-harvest cleaning. Materials used in **AGRI-GUARD<sup>®</sup> 841** are listed in Title 21 CFR Part 173.310 - Secondary direct food additives permitted in food for human consumption.

### SAFETY & HANDLING PROCEDURE

This product is acidic. Chemical splash goggles and impervious gloves should be worn during all handling of the concentrate. Eye contact will cause severe irritation with possible burns. Refer to the Material Safety Data Sheet for further safety and handling procedure.

### CONTROL

Maintain a residual of 0.5 to 5 parts per million of active **AGRI-GUARD<sup>®</sup> 841** in the system at all times. Contact your water treatment specialist for further information on analytical testing.

### DOSAGE

Inject **AGRI-GUARD<sup>®</sup> 841** directly into the system distribution lines at the rate of 0.30 to 3.0 ounces per 1,000 gallons of water. This dosage rate will yield a residual of 0.5 to 5 ppm. Dosage may be adjusted as required to help maintain adequate control. A maximum of 5.0 ppm residual has been established by the U.S. Environmental Protection Agency. pH adjustment is recommended where source water is highly alkaline.

### PHYSICAL PROPERTIES

pH of 1% Solution.....	1.5-2.5
Pounds per Gallon.....	9.1-9.6
Physical Appearance.....	Clear Liquid
Odor .....	Mild
Flash Point .....	NA

### **Seller Warranty**

Applies to all products sold by CH<sub>2</sub>O, Inc., and is hereby communicated to all of its customers as a condition of sale.

Seller warrants that this product conforms to its chemical description and is reasonably fit for the purpose referred to in the directions for use when used in accordance with the directions under normal conditions. Buyer assumes the risk of any use contrary to such directions. Seller makes no other warranty or representation of any kind, express or implied, concerning the product, including **NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OF THE GOODS FOR ANY OTHER PARTICULAR PURPOSE**. No such warranties shall be implied by law and no agent of seller is authorized to alter this warranty in any way except in writing with a specific reference to this warranty. The exclusive remedy against seller shall be a claim for damages not to exceed the purchase price of the product, without regard to whether such a claim is based upon breach of warranty or tort. Jurisdiction for any issues arising from or relating to this product shall be in the courts of the State of Washington and the venue shall be Thurston County. Any controversy or claim arising out of or relating to this contract, or breach thereof, shall be settled by arbitration in accordance with the rules and procedures as stated in RCW 7.06 and shall be binding upon both parties without right to appeal, and judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.

March 19, 2002

