



Safety Data Sheet

Section 1 - Identification

Product Identification: Sterisil Straw **Product Use**: Dental Water Treatment **Chemical Family:** Inorganic Compounds

Date of MSDS: 05/14/2014

Company Name: Sterisil, Inc.

Company Address: 835 S. Highway 105, Suite D, Palmer Lake, CO 80133, USA

General Information Telephone: (719) 622-7200

Emergency Telephone: (719) 622-7200

Section 2 - Hazard(s) Identification

Health Hazards Acute & Chronic: Although no such observations have been made with Sterisil's antimicrobial media, users should know that long-term absorption of silver or its compounds may produce generalized 'Argyria' (gray skin discolorization).

The lifetime exposure standard of acquiring the non-health threatening aesthetic effect of silver bioaccumulation, Argyria is 25 grams (Federal Register, Vol. 56, No. 20 Jan. 1991, p3573.). Use of the product as intended, dental patients consuming Sterisil's treated water at its highest concentration of 3 ppm, the total annual exposure to silver would be 15 micrograms. Assuming continuous annual exposure over a 70 – year life span, the total exposure would be 0.001 grams of silver. The maximum lifetime exposure to silver from dental water treated with Sterisil would then be only 0.004 % of the EPA established standard.

HMIS Rating:

Health – 1 Flammability – 1 Reactivity – 0 Personal Protection Index - E

NFPA/HMIS Definitions: (0-Least, 1-Slight, 2-Moderater, 3-High, 4-Extreme). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

Section 3 - Composition/Information on Ingredients

Sterisil Stage 5 Media within the cartridge housing, contains less than 17.5% silver by weight.

		CAS Registration Number	Weight Percent
Resin	Sodium Form Weak Acid Cation Exchange	9052-45-3	80%
	Risen		
	(Copolymer of acrylic acid with Divinybenzene)		
Water	Water	7732-18-5	2.5%
Silver	Silver	7440-22-4	17.5%

Section 4 - First Aid Measures

First Aid:

Minimize contact, wash with soap and water.

Eye Protection/Contact First Aid: ANSI approved safety glasses. In case of eye contact flush with water for 15 minutes. Seek medical attention if irritation develops or persists.

Skin Protection/Contact First Aid: Wash area with soap and water. Seek medical attention if irritation develops or persists.

Inhalation First Aid: While product is granular, if exposed to excessive levels of dust, remove to fresh air. If breathing is difficult, provide oxygen. If not breathing, give artificial respiration. Get medical attention if cough or other symptoms develop.

Section 5 - Fire Fighting Measures

Flammable Properties:

COC Flash Point: None **TCC Flash Point:** None

Autoignition Temperature: None

LEL: None UEL: None

Fire Fighting Procedures:

Product is not combustible. As in any fire use NIOSH/MSHA approved SCBA & full protective equipment.

Unusual Fire or Explosion Hazard:

Combustion may generate carbon, nitrogen and sulfur fumes.

Extinguishing Media:

Media suitable for surrounding fire.

Section 6 - Accidental Release Measures

Spill Release Procedures:

No known hazard from spills. Clean with disposable paper towel and wash area with soap and water. If dust is present wear dust mask to minimize exposure.

Section 7 – Handling and Storage

Storage:

Store at room temperature. Avoid repeated freeze-thaw cycles, beads may fracture. If frozen thaw at room temperature. Keep cartridges in original packing containers, closed, and sealed when not in use.

Handling: Handle tubes with latex gloves to prevent contact and transference of HPC bacteria to the tubes outer surface prior to installation within a dental chair's reservoir bottle. Dispose of in accordance with all Local, State and Federal regulations, or discharge laws & regulations.

Section 8 – Exposure Controls/Personal Protection

Exposure Guidelines:

OSHA PEL: 0.01 mg/m³ OSHA TWA: 0.01 mg/m³

Other Protective Equipment: None specified by manufacturer.

Work Hygienic Practices: None specified by manufacturer.

Section 9 - Physical & Chemical Properties

Appearance: Grey/green granular resin within the tubes. Water treated by the tubes is clear.

State: Beads **Odor:** None

pH: Water treated pH dependant on the water used (5 to 8).

Boiling Point: N/A Specific: 1.2 (water = 1) Melting/Freezing Point: N/A Vapor Pressure: N/A Vapor Density: N/A Solubility in Water: Nil Corrosivity: None known.

Polymerization: Hazardous polymerization will not occur.

Section 10 - Stability and Reactivity

Stability: Stable at ambient conditions.

Incompatibility with other Materials: Strong oxidizing agents (i.e. nitric acid).

Dangerous Reactions: None known.

Dangerous Products of Decomposition: May yield oxides of carbon, nitrogen, and sulfur as a result of thermal

(fire) decomposition.

Section 11 – Toxicological Information

Potential Health Effects:

Eye: This is a granular product. Therefore, dust would be minimal. Not known to cause permanent injury to eye tissue.

Skin: Non-irritating. No hazards expected in normal use.

Inhalation: Not expected to be toxic by inhalation. While dust would be minimal, dust may be slightly irritating to respiratory tract.

Ingestion: Non-toxic. No known hazards when used according to container instructions.

Carcinogenicity Information: None of the components present in this material are listed as carcinogens.

Section 12 – Ecological Information

Releases of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA Title III Section 304. This product does not contain a chemical, which is listed in Section 313 at or above de minimis concentrations.

Section 13 – Disposal Considerations

When decision is made to discard this material as supplied, it does not meet RCRA's characteristic definition of ignitability, corrosivity, or reactivity, and is not listed in 40 CFR 261.33.

Section 14 – Transport Information

Left blank on purpose.

Section 15 – Regulatory Information

Left blank on purpose.

Section 16 – Other Information

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof.

Sterisil, Inc. assumes no responsibility for personal injury or property damage to vendees, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of the material.