



## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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<b>Product Name:</b>	WATERGUARD
<b>Chemical Family:</b>	Aluminium Oxide Al <sub>2</sub> O <sub>3</sub> , Amorphous Silica SiO <sub>2</sub> , Titanium Dioxide TiO <sub>2</sub> , Zirconium Dioxide ZrO <sub>2</sub> , Ceramic, Silver Ag, Copper Cu.
<b>Recommended Use:</b>	Control of pathogenic bacteria in water systems.
<b>Distributed by:</b>	Alpine Technical Services, 601 West 6825 South, Midvale, UT 84047
<b>Telephone:</b>	801-255-5336
<b>Fax:</b>	801-255-0486

**FOR CHEMICAL EMERGENCY, CALL CHEM-TEL AT 1-800-255-3924**

## SECTION 2: HAZARDS IDENTIFICATION

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### CHEMICAL COMPOSITION

As shown in Section 1. above under CHEMICAL NAMES.

### GENERAL CHARACTERISTICS

A mixture of white and brown spheres and a woven matrix of silver coated wire contained in a slotted PVC tube. Non-flammable, non-volatile, non-corrosive. Becomes active in water in a way beneficial to human health

### CLASSIFICATION

Non-corrosive solid

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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### CLASSIFICATION

Not Applicable

### RISK PHRASES

Not Applicable

### SAFETY / HAZARD PHRASES

Not Applicable

### OTHER

Non-flammable but PVC of outer tube can cause hazard when subjected to fire through other means. This would only be possible prior to or after use, i.e. in the transport, handling, and storage phases.

## SECTION 4: FIRST AID MEASURES

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### HEALTH EFFECTS

None

### ACUTE EFFECTS

None

### SWALLOWED:

Not Applicable

### EYE:

Not Applicable

### SKIN:

Would only be a problem if significant amount of dust occurs, which is extremely unlikely.



**INHALED:**

Would only be a problem if significant amount of dust occurs, which is extremely unlikely.

**CHRONIC EFFECTS**

No information available.

**FIRST AID**

**SWALLOWED:**

Not applicable to finished product. A large amount of dust would need to be swallowed to cause any health problem at which point a doctor should be consulted.

**EYE:**

Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open while washing. If pain persists seek immediate medical assistance.

**SKIN:**

Remove any contaminated clothing and wash the area of skin contact with soap or soft detergent along with sufficient amount of water for 15 minutes. Completely wash and dry contaminated clothes before re-using.

**INHALED:**

Remove victim from exposure. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If breathing labored ensure airways are clear and administer oxygen. If breathing has stopped apply artificial respiration at once. Seek immediate medical assistance.

**ADVICE TO DOCTOR**

Treat symptomatically

## **SECTION 5: FIRE FIGHTING MEASURES**

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**GENERAL:**

No fire hazard unless outer tube is subjected to fire from other source. If subjected to fire, wear NIOSH approved positive pressure, self-contained breathing apparatus (SCBA) and full protective clothing. Evacuate all personnel from danger area. Use dry chemical, foam, water, or carbon dioxide to extinguish fire.

**FIREFIGHTERS:**

Firefighters to wear self-contained breathing apparatus and full protective clothing when fighting fire

**GENERAL:**

Will not continue to burn after ignition without an external fire source. When forced to burn the major gaseous products of combustion of PVC are carbon monoxide, carbon dioxide, and hydrogen chloride. Move products out of fire area if safe to do so. Cool outer tube if feasible. Stay upwind of fumes, keep out of low areas.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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Not Applicable as only solids involved.

## **SECTION 7: HANDLING AND STORAGE**

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**HANDLING:**

Unclassified.

**STORAGE:**

Store in a dry, well-ventilated place.



## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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**LONG TERM EXPOSURE LIMITS:**

Not applicable.

**EXPOSURE CONTROL:**

Avoid skin and eye contact and inhalation of dust.

**Respiratory Protection:**

Protection only required if significant amounts of dust are given off by product, which is extremely unlikely.

**Body Protection:**

Protection only required if significant amounts of dust are given off by product, which is extremely unlikely.

**Eye Protection:**

Only required if significant amounts of dust are given off by product. Safety Glasses or goggles to EN 166

**Hand Protection:**

Gloves only required if significant amounts of dust are given off by product.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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**APPEARANCE:**

White and brown spheres and sliver coated matrix contained in a slotted PVC tube. Non-flammable, non-volatile, non-soluble in liquid.

**MELTING POINT:**

Not established – avoid subjecting to temperatures above 250°C

**BOILING POINTS:**

Not Applicable

**VAPOUR PRESSURE (20C):**

Not Applicable

**SPECIFIC GRAVITY (25C):**

Not Applicable

**FLASH POINT (OPEN CUP):**

Not Applicable

**EXPLOSION LIMITS:**

No data available

**SOLUBILITY IN WATER:**

Non-Soluble in water

**AUTOIGNITION TEMP:**

No data available

**VAPOUR DENSITY:**

Not applicable

**pH:**

7 ± 0.5

**STORAGE COLOUR CODE:**

Not Applicable

## SECTION 10: STABILITY AND REACTIVITY

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**STABILITY:**

Highly stable

**REACTIVITY:**

Inert in the dry state. Oxidizing and local ionizing reaction when immersed in water.



## **SECTION 11: TOXICOLOGICAL INFORMATION**

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**TOXICOLOGICAL TESTING:**

Non-toxic

## **SECTION 12: ECOLOGICAL INFORMATION**

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**ECOTOXICITY:**

Non-toxic when PVC container is disposed of in accordance with Local Regulations.

**BIODEGRADABILITY:**

The PVC container is not biodegradable. The spheres are not biodegradable but can be beneficial to ecosystems.

**BIOACCUMULATION:**

No data available

**GENERAL:**

No ecological problems are expected when the product is handled and used with due care

## **SECTION 13: DISPOSAL CONSIDERATIONS**

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Dispose of in accordance with Federal, State or Local regulations. The PVC tube should be re-cycled whenever the facilities exist. After use, the spheres are not harmful to the environment.

## **SECTION 14: TRANSPORT INFORMATION**

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This product is not considered Dangerous for the purposes of the International Regulations for Transport.

## **SECTION 15: REGULATORY INFORMATION**

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**No data Available.**

## **SECTION 16: OTHER INFORMATION**

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All information, recommendations, and suggestions appearing herein concerning our product are based upon tests and data believed to be reliable; however, it is the user's responsibility to determine the safety, toxicity, and suitability for their own use of the product described herein. Since actual use by others is beyond our control, no guarantees, expressed or implied, are made by Alpine Technical Services and its representatives as to the effects of such use, the results to be obtained or the safety and toxicity of the product, nor does Alpine Technical Services or its representatives assume any liability arising out of the use by others of the product referred herein. The information herein is not be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws of government regulations. Wear self-contained breathing apparatus and protective suit.