

Issue Date: 18-May-2020

Revision Date: 27-April-2021

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** BIOPROTECT RTU

### Other means of identification

**SDS #** VIA-005

**Registration Number(s)** EPA Reg. No. 87583-3

### Recommended use of the chemical and restrictions on use

**Recommended Use** Organosilane Antimicrobial.

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

PureShield Inc. a ViaClean Technologies Company  
230 S. Broad Street Suite 1201  
Philadelphia, PA 19102  
Ph: 877-447-5956

### Emergency telephone number

**Emergency Telephone** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Clear, colorless liquid

**Physical state** Liquid

**Odor** Mild

### Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Dimethyloctadecyl[3-(trimethoxysilyl)propyl]ammonium chloride	27668-52-6	<1.0

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

## 4. FIRST AID MEASURES

### Description of first aid measures

#### **General Advice**

Provide this SDS to medical personnel for treatment.

<b>Eye Contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Skin Contact</b>	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a poison center or doctor/physician if you feel unwell or if skin irritation persists. Wash contaminated clothing before reuse.
<b>Inhalation</b>	Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician/poison center if individual's condition declines or if symptoms persist. If not breathing, give artificial respiration.
<b>Ingestion</b>	Rinse mouth. Do not induce vomiting without medical advice. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Call a poison center or doctor/physician if you feel unwell.

#### **Most important symptoms and effects, both acute and delayed**

<b>Symptoms</b>	Moderate skin and eye irritation. May cause gastrointestinal irritation, nausea, diarrhea, and vomiting.
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#### **Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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### **5. FIRE-FIGHTING MEASURES**

#### **Suitable Extinguishing Media**

Dry chemical. Foam. Water spray (fog). Carbon dioxide (CO<sub>2</sub>).

**Unsuitable Extinguishing Media** Not determined.

#### **Specific Hazards Arising from the Chemical**

Product is not flammable or combustible.

**Hazardous combustion products** Carbon oxides.

#### **Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool exposed containers with water to prevent rupturing.

### **6. ACCIDENTAL RELEASE MEASURES**

#### **Personal precautions, protective equipment and emergency procedures**

<b>Personal Precautions</b>	Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation.
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#### **Environmental precautions**

<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.
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#### **Methods and material for containment and cleaning up**

<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so. Soak up and contain spill with an inert (i.e. vermiculite, dry sand or earth) absorbent material.
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<b>Methods for Clean-Up</b>	Sweep up and shovel into suitable containers for disposal. For waste disposal, see section 13 of the SDS.
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**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on Safe Handling**                      Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear eye/face protection.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**                      Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible Materials**                      Do not mix with other cleaners or chemicals. Strong oxidizing agents. Inorganic acids. Inorganic bases.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**                      No exposure limits noted for ingredient(s). The following information is given as general guidance

**Appropriate engineering controls**

**Engineering Controls**                      Apply technical measures to comply with the occupational exposure limits. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area. General ventilation is recommended.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection**                      Chemical safety goggles/faceshield. Refer to 29 CFR 1910.133 for eye and face protection regulations.

**Skin and Body Protection**                      Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Refer to 29 CFR 1910.138 for appropriate skin and body protection.

**Respiratory Protection**                      Under normal conditions, respirator is not normally required. Refer to 29 CFR 1910.134 for respiratory protection requirements.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid	<b>Odor</b>	Mild
<b>Appearance</b>	Clear, colorless liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Clear, colorless		

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	~5.0	
<b>Melting point / freezing point</b>	Not determined	
<b>Boiling point / boiling range</b>	>210	
<b>Flash point</b>	Not determined	
<b>Evaporation Rate</b>	Not determined	
<b>Flammability (Solid, Gas)</b>	Not determined	
<b>Flammability Limit in Air</b>		

<b>Upper flammability or explosive limits</b>	Not determined
<b>Lower flammability or explosive limits</b>	Not determined
<b>Vapor Pressure</b>	N/A
<b>Vapor Density</b>	N/A
<b>Relative Density</b>	1.003
<b>Water Solubility</b>	Not determined
<b>Solubility in other solvents</b>	Not determined
<b>Partition Coefficient</b>	Not determined
<b>Autoignition temperature</b>	Not determined
<b>Decomposition temperature</b>	Not determined
<b>Kinematic viscosity</b>	Not determined
<b>Dynamic Viscosity</b>	Not determined
<b>Explosive Properties</b>	Not determined
<b>Oxidizing Properties</b>	Not determined

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

**Hazardous Polymerization**      Hazardous polymerization does not occur.

### Conditions to Avoid

Excessive heat and fire. Keep from freezing.

### Incompatible materials

Do not mix with other cleaners or chemicals. Strong oxidizing agents. Inorganic acids. Inorganic bases.

### Hazardous decomposition products

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Eye Contact</b>	May cause temporary irritation on eye contact.
<b>Skin Contact</b>	Prolonged contact may cause redness and irritation.
<b>Inhalation</b>	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
<b>Ingestion</b>	May cause irritation of gastrointestinal tract.

### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Dimethyloctadecyl[3-(trimethoxysilyl)propyl]ammonium chloride	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 2 mg/L ( Rat ) 1 h

27668-52-6

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity** Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Numerical measures of toxicity**

Not determined.

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

There is no data for this product.

**Mobility**

Not determined

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods**

**Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. TRANSPORT INFORMATION**

**Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Dimethyloctadecyl[3-(trimethoxysilyl)propyl]ammonium chloride	X	ACTIVE	X	X	X	X	X	X	X

#### **Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

*ENCS - Japan Existing and New Chemical Substances*

*IECSC - China Inventory of Existing Chemical Substances*

*KECL - Korean Existing and Evaluated Chemical Substances*

*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

*AICS - Australian Inventory of Chemical Substances*

### US Federal Regulations

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### **EPA/FIFRA**

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION: this product is toxic to fish

### US State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

#### **U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated under applicable state right-to-know regulations

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	1	0	1	Not determined
<b><u>HMS</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical hazards</b>	<b>Personal Protection</b>
	1	0	1	B

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**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**