

## SAFETY DATA SHEET

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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Product Name: **ENVIROSYSTEMS® BIOSHIELD® 5000 C (diluted 1 part to 5 parts water)**

Revision Date: March 31, 2020

Chemical Description: Organosilane antimicrobial

Manufacturer: Novalent, Ltd.  
2319 Joe Brown Drive  
Greensboro, NC 27405  
Main Telephone No. 336-375-7555  
CHEMTREC-For Emergencies Only 1-800-424-9300 (24 hours), International 1-703-527-3887  
NZ National Poison Centre 0800 764 766 (0800 POISON)

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### SECTION 2: HAZARDS IDENTIFICATION/EMERGENCY OVERVIEW

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Classification of the Substance or Mixture: ACUTE ORAL TOXICITY – Category 5  
ACUTE DERMAL TOXICITY – Category 5

Hazard Pictograms: None

Signal Word: Warning

Hazard Statements: May be harmful if swallowed.  
May be harmful in contact with skin.

#### Precautionary Statements

Prevention: Wear protective gloves/clothing and eye/face protection. Avoid breathing dust/fume/mist/vapors/spray.

Response: Call a POISON CENTER / Doctor if you feel unwell.

Storage: Store locked up.

Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

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### SECTION 3: COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

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| <u>Ingredient</u>   | <u>CAS #</u> | <u>CONCENTRATION</u> |
|---|--------------|----------------------|
| Octadecylaminodimethyltrihydroxysilyl propyl ammonium chloride<br>[also named 3-(trihydroxysilyl) propyldimethyloctadecyl ammonium chloride in water] | 27668-52-6   | 0.75 – 0.85%         |

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## SECTION 4: FIRST AID MEASURES

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|---------------|---|
| Eye Contact   | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists.  |
| Inhalation:   | If not feeling well, get medical attention. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| Skin Contact: | If skin irritation or rash occurs: Wash with plenty of water. Get medical advice/attention.   |
| Ingestion:    | Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting. Never give anything by mouth to an unconscious person.  |

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## 5. FIRE FIGHTING MEASURES

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|---------------------------------------|--|
| Flammability of the Product           | Not combustible.   |
| Extinguishing Media                   | Small Fire: Use DRY chemical powder<br>Large Fire: Use water spray, fog, or foam.  |
| Protective Equipment for Firefighters | Firefighters should wear full protective clothing including self contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |

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## 6. ACCIDENTAL RELEASE MEASURES

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|---------------------|--|
| Small Spill or Leak | Dilute with water and mop up or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary, use suitable protective equipment (Section 8). Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.   |
| Large Spill or Leak | Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use suitable protective equipment (Section 8). Do not release into the environment.   |
| Containment Methods | Stop the flow of material if this is without risk. Prevent spilled material from entering sewage and drainage systems which lead to waterways. Contain and collect spillage with absorbent material, i.e. sand, earth, diatomaceous earth and place in a container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilled product. |

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## 7. HANDLING AND STORAGE

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|-----------------------------|--|
| Protective Measures         | Wear appropriate personal protective equipment. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Wear appropriate respirator when ventilation is inadequate. Do not enter storage spaces unless adequately ventilated. Keep in the original container and keep tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking, or smoking. |
| Conditions for Safe Storage | Do not store below 0°C (32°F). Store in accordance with local regulations. Store in a segregated area. Store in original container protected from direct sunlight in a dry, cool, and well ventilated area, away from incompatible materials and food and drink. Separate from acids and oxidizing materials. Keep container closed and tightly sealed until ready for use. Use appropriate  |

containment to avoid environmental contamination. Empty containers retain product residue and can be hazardous. Do not reuse container.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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|                      |   |   |
|----------------------|---|---|
| Engineering Controls | Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.   |   |
| Personal Protection  | Eyes  | Wear eye and/or face protection.  |
|                      | Skin  | Permeation resistant gloves. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. Permeation resistant clothing and foot protection. |
|                      | Respiratory   | No personal respiratory protective equipment is normally required. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable), an approved respirator must be worn.     |
| General Hygiene      | When using, do not eat, drink, or smoke. Wash hands and face before breaks and immediately after handling the product. Wash hands after handling and before eating. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice. |   |

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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| Physical State            | Liquid                       |
| Color                     | Clear colorless              |
| Odor                      | Slight                       |
| pH                        | 3.5 - 5.0                    |
| Viscosity, 25°C           | Water Thin                   |
| Evaporation Rate          | Not available                |
| Explosion Limits          | Non-Explosive                |
| Specific Gravity          | 0.99-1.01                    |
| Flash Point               | Not combustible              |
| Solubility                | Soluble in cold or hot water |
| Auto-ignition Temperature | Not available                |
| Decomposition Temperature | Not available                |

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## 10. CHEMICAL STABILITY AND REACTIVITY

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|----------------------------------|--|
| Reactivity                       | No specific test data for this product   |
| Chemical Stability               | Material is stable under normal conditions.  |
| Conditions to Avoid              | Extremes of temperature and direct sunlight.   |
| Incompatible Materials           | Inorganic acids and bases. Avoid contact with oxidizing agents (for example, nitric acid, peroxides, and chromates.) |
| Hazardous Decomposition Products | Carbon monoxide. Organic compounds which may be toxic.   |
| Hazardous Polymerization         | Hazardous polymerization will not occur.   |

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**11. TOXICOLOGICAL INFORMATION**

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CARCINOGENS: OSHA: NO ACGIH:NO NTP:NO IARC:NO

Acute Oral Toxicity, SD Rats  
Oral LD<sub>50</sub> >2000 mg/kg

Acute Dermal Toxicity, SD Rats  
Dermal LD<sub>50</sub> >2000 mg/kg

Acute Dermal Irritation, Rabbit Non-Irritant  
Acute Eye Irritation, Rabbit Non-Irritant  
Skin Sensitization, Guinea Pigs Negative (Magnusson and Kligman Rating of Allergenicity - Weak Sensitizer, Grade 1)  
Acute Inhalation Toxicity, SD Rats Unclassified

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**12. ECOLOGICAL INFORMATION**

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Degradability/OECD Inherently biodegradable. The trihydroxysilyl quats are not expected to contaminate surface or ground water due to rapid degradation by hydrolysis. (US EPA 739-R-07-007)

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**13. DISPOSAL CONSIDERATIONS**

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Environmental Hazards De-activation required during clean up if a spill occurs. De-activation can be achieved by addition of anionic surfactants in quantity equivalent to that of BioShield®75 actives. This product is toxic to fish. Do not discharge effluent containing this product into lakes, streams, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority.

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**14. TRANSPORT INFORMATION**

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Land-DOT (US Dept of Transportation)----- Not Dangerous Goods, Not Regulated  
Sea-IMDG (International Maritime Dangerous Goods Code)-- Not Dangerous Goods, Not Regulated  
Air-IATA (International Air Transport Association)----- Not Dangerous Goods, Not Regulated

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**15. REGULATORY INFORMATION**

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U.S. Federal Regulations OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200): Hazardous  
TSCA: All intentionally present components are listed on the TSCA inventory.  
CERCLA Hazardous substances: none  
SARA 311/312 HAZARD CATERGORIES:  
Acute: Yes  
Chronic: No  
Fire: No  
Pressure: No  
Reactive: No  
SARA Title III Section 302 Extremely Hazardous Substances: none  
SARA Title III Section 313 Toxic Chemicals subject to reporting: none  
State Regulations CALIFORNIA:

This product contains no chemicals known by the State of California (Proposition 65) to cause cancer, birth defects or other reproductive harm.

International Regulations

EINECS registry number

3-(trimethoxysilyl)propyldimethyloctadecyl ammonium chloride: 248-595-8

NZ Group Standard HSR002530

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**16. OTHER INFORMATION**

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Notice to the Reader: The information in this Safety Data Sheet should be provided to all who will use, handle, store, transport, or otherwise be exposed to this product. The information is designed for workplace employees, emergency personnel and for other situations where there is a potential for large-scale or prolonged exposure. For consumer use, all precautionary and first aid language is provided on the product label in accordance with applicable government regulations. All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable as of the date of publication. However, no warranty is made as to the accuracy of and/or sufficiency of such information. The Buyer must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes, including mixing with other products.