



SAFETY DATA SHEET

1. IDENTIFICATION

Product Name: EPA Formula Microbe Shield #83129-1-96039

Date of Preparation: April 15, 2019

Recommended use of the chemical and restrictions on use:

Recommended use: Use as an anti-microbial only. Read and understand the entire EPA label before using. Use only according to EPA label directions. It is a violation of Federal law to use this product in a manner inconsistent to EPA label directions.

Restrictions on use: Use only in accordance with EPA label.

Supplier: Zoono USA, LLC
1151 Broad Street, Suite 115
Shrewsbury, NJ 07702

Phone Number: 732-722-8757

Emergency Phone Number: 844 – 966 – 6687

2. HAZARD(S) IDENTIFICATION

GHS Classification:

Physical	Health
Not Hazardous	Not Hazardous

Label Elements:

None Required

Other Hazards: None known.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Non-Hazardous Ingredients	Mixture	Balance
3 (trimethoxysilyl) propyldimethyloctadecyl ammonium chloride	27668-52-6	<1%

4. FIRST-AID MEASURES

Description of First Aid Measures:

Eye: Flush eyes with water, while holding the eye lids apart to be sure the material is washed out. Get medical attention if irritation develops or persists.

Skin: No first aid should be required. Wash skin with water. Get medical attention if irritation develops or persists.

Inhalation: If symptoms develop move victim to fresh air. Get medical attention if irritation or other symptoms develop or persist.

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms develop.

Most Important Symptoms/Effects, Acute and Delayed: May cause slight eye, skin and respiratory irritation.

Indication of Immediate Medical Attention and Special Treatment, If Necessary: Immediate medical attention is generally not required.

5. FIRE-FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Use media appropriate for the surrounding environment.

Specific Hazards Arising from the Chemical: Thermal decomposition may produce oxides of carbon and smoke.

Special Protective Equipment and Precautions for Fire-Fighters: Wear an approved, positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Avoid contact with eyes, skin or clothing.

Environmental Hazards: Avoid releases to the environment. Report spill as required by local and federal regulations.

Methods and Materials for Containment and Cleaning Up: De-activation may be required during clean up if a spill occurs. De-activation of Zoono Microbe Shield can be achieved by the addition of an anionic surfactant or detergent (such as soap, sulfones, or sulphates) in quantity equivalent to that of the active ingredient. Contain and recover liquid where possible. Collect using an inert absorbent material and place in appropriate containers for disposal. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

7. HANDLING AND STORAGE

Precautions for Safe Handling: None required for normal use. Avoid contact with eyes, skin and clothing. Refer product label for additional information on use and handling. Follow all SDS precautions in Section 13 when handling empty containers.

Conditions for Safe Storage, Including Any Incompatibilities: Store in original, tightly closed container in an area inaccessible to children or persons unfamiliar with its use. Keep tightly closed until ready to use. Reclose tightly after each use. When stored in original, unopened containers at or below 25°C (77°F), Zoono Microbe Shield has a minimum shelf life of 12 months from date of shipment. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

Non-Hazardous Ingredients	None Established
3 (trimethoxysilyl) propyldimethyloctadecyl ammonium chloride	None Established

Appropriate Engineering Controls: General ventilation is adequate under normal conditions of use. Refer product label for additional information.

Individual Protection Measures, Such as Personal Protective Equipment:

Respiratory Protection: None required for normal use. In case of insufficient ventilation or where exposure is excessive, wear suitable respiratory equipment. Refer product label for additional information.

Skin Protection: Use impervious gloves to avoid skin contact.

Eye Protection: Wear safety goggles or other eye protection if needed to avoid eye contact.

Other: None required under normal conditions of use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid	Flammable limits: LEL: Not available UEL: Not available
Odor: Characteristic odor	Vapor pressure: Not available
Odor Threshold: Not applicable	Vapor density: >1
pH: Not available	Relative density: 0.98-1.01
Melting point/freezing point: Not available	Solubility(ies): Soluble in water
Boiling point/range: 100-103°C (212-217.4°F)	Partition coefficient (n-octanol/water): Not available
Flash point: Not available	Auto-ignition temperature: Not available
Evaporation rate: Not available	Decomposition temperature: Not available
Flammability (solid, gas): Not applicable	

10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions of use.

Chemical Stability: Stable under normal storage and handling conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Avoid extreme temperatures.

Incompatible Materials: Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products: Thermal decomposition may produce oxides of carbon and smoke.

11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eye: May cause slight eye irritation.

Skin: Prolonged contact may cause slight irritation with drying and dermatitis.

Inhalation: Inhalation of high concentrations of vapors may cause upper respiratory tract irritation.

Ingestion: Ingestion of large amounts may cause gastrointestinal distress.

Chronic Effects: None known.

Carcinogenicity: None of the components of this product are listed as a carcinogen or suspected carcinogen by OSHA, IARC, and NTP.

Reproductive Effects: This product is not classified as toxic to reproduction.

Mutagenic Effects: Not expected to cause mutagenic activity.

Acute Toxicity:

Inert Ingredients: Not acutely toxic.

3 (trimethoxysilyl) propyldimethyloctadecyl ammonium chloride: Oral rat LD50 > 5,000 mg/kg, dermal rabbit LD50 > 2000 mg/kg, inhalation rat LC50 > 2 mg/L/1 hr

12. ECOLOGICAL INFORMATION

Ecotoxicity:

3 (trimethoxysilyl) propyldimethyloctadecyl ammonium chloride: Rainbow trout LC50: 1.73 mg/L/96 hr, Freshwater Daphnids: 0.18 mg/L

This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge.

Persistence and Degradability: No data available

Bioaccumulative Potential: No data available

Mobility in Soil: No data available

Other Adverse Effects: None known.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Do not reuse containers. Triple rinse (or equivalent) empty containers. Then offer for recycling, or puncture or dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. This container will have product residues when emptied. All hazard precautions on label must be observed when handling emptied container.

Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
US DOT	None	Not Regulated	None	None	Not applicable
IMDG	None	Not Regulated	None	None	Not applicable
IATA	None	Not Regulated	None	None	Not applicable

Special precautions: None known

15. REGULATORY INFORMATION

Safety, Health, and Environmental Regulations Specific for the Product in Question:

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.

FIFRA Labeling:

**Keep Out of Reach of Children
PRECAUTIONARY STATEMENTS**

Harmful if swallowed, absorbed through the skin or inhaled. Causes moderate eye irritation; avoid contact with eyes, skin and clothing. Wear protective eyewear (glasses, goggles or face shield) and rubber gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

Environmental Hazard

This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

De-activation may be required during clean up if a spill occurs. De-activation of Zoono Microbe Shield can be achieved by the addition of an anionic surfactant or detergent (such as soap, sulfones, or sulphates) in quantity equivalent to that of the active ingredient.

CERCLA 103 Reportable Quantity: This product is not subject to reporting under CERCLA. Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

SARA TITLE III:

Hazard Category for Section 311/312: Not Hazardous

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: This product is an EPA Registered product # 83129-1-96039. However, all the ingredients of this product are listed on the TSCA inventory.

STATE REGULATIONS:

California Proposition 65: This product does not contain any substances known in the State of California to cause cancer and/or reproductive harm.

16. OTHER INFORMATION

HMIS Ratings: Health – 1

Flammability – 0

Physical Hazard - 0

NFPA Ratings: Health – 1

Flammability – 0

Instability – 0

SDS Revision History: Updated format and all sections to comply with OSHA GHS regulations.

Date of preparation: April 15, 2019

Date of last revision: April 1, 2019