

# MATERIAL SAFETY DATA SHEET



**MICROBEGUARD™**  
EPA Reg. Number: 82077-1

EMERGENCY TELEPHONE NUMBER  
(800)262-8200 (24 Hours) CHEMTREC

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : MicrobeGuard  
CHEMICAL DESCRIPTION : Organosilane  
COMPANY IDENTIFICATION : Microbe Guard Inc  
6901 East Fish lake Road, Suite 132  
Maple Grove, MN 55369  
Ph: 866-601-6653  
EMERGENCY TELEPHONE NUMBER : (800)262-8200 (24 Hours) CHEMTREC

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Substance(s)</u>	<u>CAS NO.</u>	<u>% Weight</u>	<u>TWA</u>	<u>STEL</u>
3-(Trimethoxysilyl)propyldimethyloctadecyl ammonim chloride	27668-52-6	72%	N/A	N/A
Deionized Water		28%	N/A	N/A
SARA 313:	No			
Formula:	C26H58ClNO3Si			

## 3. HAZARDS IDENTIFICATION

### \*\*EMERGENCY OVERVIEW\*\*

FLAMMABLE. HARMFUL. HARMFUL BY INHALATION AND IF SWALLOWED. IRRITATING TO RESPIRATORY SYSTEM AND SKIN. RISK OF SERIOUS DAMAGE TO EYES. TARGET ORGAN(S): LIVER. KIDNEYS. MAY CAUSE SUBSTANTIAL BUT TEMPORARY EYE INJURY. HARMFUL IF ABSORBED THROUGH SKIN OR INHALED.

### HMIS RATING

HEALTH: 2\*  
FLAMMABILITY: 3  
REACTIVITY: 1

### NFPA RATING

HEALTH: 2  
FLAMMABILITY: 3  
REACTIVITY: 1

\*additional chronic hazards present. For additional information on toxicity, please refer to Section 11.

## 4. FIRST AID MEASURES

ORAL EXPOSURE: If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE: If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

DERMAL EXPOSURE: In case of contact, immediately wash skin with soap and copious amounts of water.

EYE EXPOSURE: In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

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### 5. FIRE FIGHTING MEASURES

FLAMMALBE LIMITS IN AIR :	YES
FLASH POINT:	93 °F 34 °C Method: closed cup
EXTINGUISHING MEDIA:	Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.
SPECIAL FIRE FIGHTING PROCEDURES:	Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Flammable liquid. Emits toxic fumes under fire conditions.
UNUSUAL FIRE AND EXPOLSION HAZARDS:	Vapor may travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions.
HAZARDOUS DECOMPOSITION PRODUCTS:	N/A

### 6. ACCIDENTAL RELEASE MEASURES

#### PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area. Shut off all sources of ignition.

#### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

#### METHODS FOR CLEANING UP

Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

See applicable regulatory compliance information in section 15.

SECTION 6 NOTES: See Section 8 fo Personal Protective Equipment for Spills.

### 7. HANDLING AND STORAGE

**HANDLING:** User Exposure: Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

**STORAGE:** Suitable: Keep container closed. Keep away from heat, sparks, and open flame.

**SPECIAL REQUIREMENTS:** Moisture sensitive.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Safety shower and eye bath. Use nonsparking tools. Mechanical exhaust required.

#### PERSONAL PROTECTIVE EQUIPMENT:

Respiratory: Government approved respirator.

Hand: Compatible chemical-resistant gloves.

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Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES: Wash thoroughly after handling. Wash contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Pale yellow, slightly viscous liquid at 25°C
APPEARANCE	Liquid
ODOR	Odorless or slight aliphatic amine odor
SPECIFIC GRAVITY	0.944 g/cm <sup>3</sup>
SOLUBILITY IN WATER	Complete
pH	3 - 8
FREEZING POINT	Not available
BOILING POINT	Not available
MELTING POINT	Not available
VAPOR PRESSURE	Not available
VISCOSITY	I/P
VOLATILE CONTENT	Not available

## 10. STABILITY AND REACTIVITY

STABILITY: Stable. Avoid Moisture. Avoid: Acids, Acid chlorides, Acid anhydrides, Oxidizing agents, Reducing agents, Alkali metals.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Hydrogen chloride gas, Silicon oxide, Formaldehyde.

HAZARDOUS POLYMERIZATION: Will not occur

## 11. TOXICOLOGICAL INFORMATION

### ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Skin Absorption: May be harmful if absorbed through the skin. Eye Contact: Causes severe eye irritation.

Inhalation: Harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.

Ingestion: Harmful if swallowed.

### TARGET ORGAN(S) OR SYSTEM(S)

Liver. Kidneys. Eyes. Adrenal cortex. Bladder. Heart.

### SIGNS AND SYMPTOMS OF EXPOSURE

Exposure can cause: Gastrointestinal disturbances. May cause convulsions. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL EFFECTS : 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 requirements of the

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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.

### 13. DISPOSAL CONSIDERATIONS

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION: Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

### 14. TRANSPORT INFORMATION

DOT

Proper Shipping Name: Flammable liquids, n.o.s.  
UN#: 1993  
Class: 3  
Packing Group: Packing Group III  
Hazard Label: Flammable liquid  
PIH: Not PIH

IATA

Proper Shipping Name: Flammable liquid, n.o.s.  
IATA UN Number: 1993  
Hazard Class: 3 Packing Group: III

### 15. REGULATORY INFORMATION

EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xn  
Indication of Danger: Harmful.  
R: 10 20/22 41 37/38  
Risk Statements: Flammable. Harmful by inhalation and if swallowed. Risk of serious damage to eyes. Irritating to respiratory system and skin.  
S: 7/9 16 26 36/37/39  
Safety Statements: Keep container tightly closed and in well-ventilated place. Keep away from sources of ignition – no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection.

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Flammable. Harmful.  
Risk Statements: Harmful by inhalation and if swallowed. Risk of serious damage to eyes. Irritating to respiratory system and skin.  
Safety Statements: Keep away from sources of ignition – no smoking. Keep container tightly closed and in well-ventilated place. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection.  
US Statements: Target organ(s): Liver. Kidneys.

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### UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

NOTES: This product is subject to SARA section 313 reporting requirements. This product is subject to SARA section 313 reporting requirements.

### CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

## 16. OTHER INFORMATION

PREPARATION INFORMATION: Prepared by Microbe Guard Inc.

DISCLAIMER: This information is offered in good faith as typical values and not as a product specification. No warranty, expressed or implied is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

Date issued : 1/19/06

Replaces : 12/19/05