

MATERIAL SAFETY DATA SHEET (MSDS) (Advisory Document)

ÆGIS Microbe Shield® — AEM 5700 Antimicrobial
(Typical Applied Material)

Current Version: 10/26/2009

SECTION 1 — CHEMICAL PRODUCT AND COMPANY INFORMATION

GERMGUARD
2110 Matheson Blvd. E Suite 102
Mississauga, ON L4W 5E1

Telephone: (905) 602-1555
Fax: (905) 602-5757

Generic Description: Organosilane in water
Physical Form: Solid
Color: Colorless
Odor: None
NFPA* Profile: Health 1 Flammability 0 Reactivity 0
* NFPA = National Fire Protection Association

SECTION 2 — OSHA HAZARDOUS COMPONENTS

OSHA ID	Wt. %	Component	Exposure Limits
02768526	84%	(Octadecyldimethyltrihydroxy-silylpropyl Ammonium Chloride) _x	Copolymer — None
002530872	16%	(Chloropropyltrihydroxysilane) _x	Copolymer — None

SECTION 3 — EFFECTS OF OVEREXPOSURE

Acute Effects

Eye	No untoward effects.
Skin	No untoward effects.
Inhalation	Not Applicable.
Oral	No untoward effects. LD ₅₀ = 12.27 gm/kg (Albino Rats)

Prolonged/Repeated Exposure Effects

Skin	No untoward effects
Inhalation	No untoward effects
Oral	No untoward effects

Signs and Symptoms of Overexposure

No known applicable information

Medical Conditions Aggravated by Exposure

No known applicable information

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for detailed toxicology information.

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SECTION 4 — FIRST AID MEASURES

Eye	No effects expected from treated materials
Skin	No effects expected from treated materials
Inhalation	Not Applicable
Oral	No effects expected from treated materials
Comments	Any unsuspected and unexplained irritations or reactions in the presence of treated substances should be brought to the attention of a physician.

SECTION 5 — FIRE FIGHTING MEASURES

Flash Point (closed cup)	None
Autoignition Temperature	Not Applicable
Extinguishing Media	Not Applicable
<u>Fire Fighting Procedures</u>	Not Applicable
Unusual Fire Hazards	None

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve hazardous decomposition products: Carbon oxides and traces of incompletely burned carbon compounds; Nitrogen oxides; Chlorine compounds; Silicon dioxide; Formaldehyde.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Not Applicable

SECTION 7 — HANDLING AND STORAGE

Not Applicable

SECTION 8 — EXPOSURE CONTROLS / PERSONAL PROTECTION

Not Applicable

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Physical Form	Liquid
Colour	Colorless to pale yellow
Odour	None
Specific Gravity @ 25C	Not Applicable
Viscosity	Not Applicable
Freezing/Melting Point	Not Applicable
Boiling Point	Not Applicable
Vapor Pressure @ 25C	None
Vapor Density	Not Applicable
Solubility in Water	None
pH	Not Applicable

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SECTION 10 — STABILITY AND REACTIVITY

Chemical Stability	Stable
Hazardous Polymerization	Hazardous polymerization will not occur
Conditions to Avoid	None
Materials to Avoid	Oxidizing materials
Comments	None

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute Toxicology Data for Product
 Complete information is not yet available

SECTION 12 — ECOLOGICAL INFORMATION

Environmental Fate and Distribution No specific information is available **Ecotoxicity**

No specific information is available **Persistence and Degradation**

No specific information is available

Ecotoxicity Classification Criteria

Hazard Parameters (LC50 or EC50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity (mg/kg)	<-100	>100 and <= 2000	>2000

This table is adapted form “Environmental Toxicology and Risk Assessment”, ATMA STP 1179, p. 34, 1993

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

SECTION 13 — DISPOSAL CONSIDERATIONS

RCRA Hazard Class (40 CFR 261)
 When a decision is made to discard this material, as received, is it classified as a hazardous waste? No
 Federal Hazardous Waste Code: N/A
 Characteristic Waste Ignitable: N/A Corrosive: N/A Reactive: N/A TCLP: N/A
 Comments: State or local laws may impose additional regulatory requirements regarding disposal
 N/A = Not Applicable
 Call GERMGUARD, 1-905-602-1555, if additional information is required

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SECTION 14 — REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29CFR 1910.1200

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances None

Section 304 CERCLA Hazardous Substances None

Section 312 Hazard Class Acute: N* Chronic: N Fire: N Pressure: N Reactive: N

* Y= Yes N = No

Section 313 Toxic Chemicals None

Supplemental State Compliance Information

CAS Number

Wt.% Component

California

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer.

None Known

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer.

None Known Massachusetts

None

New Jersey

027668526	0.84%	Octadecylaminodimethyl trimethoxysilylpropyl ammonium chloride
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002530872	0.16%	Chloropropyltrimethoxysilane
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Pennsylvania

027668526	0.84%	Octadecylaminodimethyl trimethoxysilylpropyl ammonium chloride
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002530872	0.16%	Chloropropyltrimethoxysilane
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SECTION 15 — OTHER INFORMATION

Prepared by GERMGUARD.

This information is offered in good faith as typical values and not as product specifications. No warranty, either 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

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