

Kärcher PS 4/7 Bp Mister

Prevention is the best medicine. Achieve a higher level of efficacy with the new Kärcher PS 4/7 Bp. This hospital-grade misting system is specifically designed for use with disinfectants that are EPA approved*. Reduce the risks of Health Care Acquired Infections by killing virus, bacteria and mold faster, safer and quieter. Misting provides higher efficacy by improving coverage more efficiently than spray wipe methods and wipes. It delivers disinfectant into hard to reach corners and crevices found in many healthcare facilities. The whisper quiet efficient pump and power supply are specifically designed to provide operation without disturbing people around you. Rechargeable 12-volt system easily provides a full 8 hour of use. A 3 hour recharge time insures the unit gets back into service quickly. A small foot print and low center of gravity allows the mister to easily glide on 4 swivel caster wheels. Rubber wheels keep the transportation quiet and easy to roll over tile floors and thresholds. The narrow design makes it ideal for travel though aisles experienced on planes, busses, trains and other tight areas. Ideal for high risk areas: Hospitals and clinics Nursing homes Schools Day care facilities Transportation *Please read and understand the EPA label for proper use and personal protection.



Technical Data

3M™ Quat Disinfectant Cleaner Concentrate 5A and 5L/5H

Description

3M™ Quat Disinfectant Cleaner Concentrate 5A is a concentrated product to be diluted and dispensed using the 3M™ Flow Control System Wall Mount Dispenser or the 3M™ Flow Control System Portable Dispenser.

3M™ Quat Disinfectant Cleaner Concentrate 5L/5H is a concentrated product to be diluted and dispensed using the 3M™ Twist 'n Fill™ Cleaning Chemical Management System.

This product is a concentrated, one-step, Hospital Use disinfectant cleaner that is effective against a broad spectrum of bacteria, is virucidal*, including HIV-1, the AIDS Virus and Hepatitis B Virus and Hepatitis C Virus, fungicidal, and inhibits the growth of mold and mildew, and their odors, when used as directed.

The ready-to-use product contains 848ppm quat. The product is a proven "one-step" disinfectant/cleaner/fungicide/mildewstat/virucide* that is effective in water up to 200 ppm hardness in the presence of 5% serum contamination. This product is a disinfectant that cleans, disinfects and deodorizes in one labor-saving step.

Applications

For hospital, institutional and industrial use

Use on washable, hard non-porous surfaces: floors, walls, countertops, sinks, garbage cans, tables, chairs, telephones,

bathbubs, urinals, toilet bowls, and other hard non-porous surfaces made of metal, glazed ceramic, plastic and stainless steel. Is a proven soft surface sanitizer against: *Staphylococcus aureus* and *Enterobacter aerogenes*. For use on soft surfaces such as upholstery (cushions(s), pillow(s), furniture) and fabric (window treatment(s), curtain(s), draperies, shower curtain(s), bedding, and blanket(s)).

Packaging

3M™ Quat Disinfectant Cleaner Concentrate 5A

- 0.5-gallon bottle
- 4 bottles per case

Each 0.5-gallon bottle typically yields 107 ready to-use gallons (1:256 dilution ratio)

3M™ Quat Disinfectant Cleaner Concentrate 5L/5H

- 0.528-gallon bottle
- 6 bottles per case

Each 0.528-gallon bottle typically yields 127 ready to-use gallons (1:256 dilution ratio)

General Use Directions

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Refer to ready-to-use SDS for personal protective equipment (PPE) recommendations. Dispense 3M™ Quat Disinfectant Cleaner Concentrate 5A, 5L/5H using one of the 3M™ Chemical

Management Systems. Dispense into a properly labeled bottle or mop bucket.

Disinfection/Virucidal*/Fungicidal/Mold and Mildew Control Directions

Apply use-dilution to hard, non-porous surfaces, thoroughly wetting the surface with a cloth, mop, sponge, sprayer, or by immersion. Treated surfaces must remain wet for 10 minutes.

Wipe dry with a cloth, sponge, mop or allow to air dry. For heavily soiled areas, a preliminary cleaning is required. For sprayer applications, use a coarse spray device. Spray 6-8 inches from the surface; rub with a brush, sponge or cloth. Do not breathe spray. Rinse all surfaces that come in contact with food, such as countertops, exteriors of appliances, tables and stovetops with potable water before reuse. Do not use on utensils, glassware and dishes.

For fungicidal activity, this product is an effective fungicide against Trichophyton mentagrophytes [the athlete's foot fungus] or Aspergillus fumigatus in areas such as locker rooms, dressing rooms, shower and bath areas, and exercise facilities. Dilute at ½ oz. per gallon in 200 ppm hard water and allow surface to remain wet for 10 minutes. **For mold and mildew:** At 1/2 oz. per gallon of water, this product will effectively inhibit the growth of mold and mildew and the odors caused by them when applied to hard, non-porous surfaces. Follow disinfection instructions. Repeat treatment every seven days, or more often if new growth appears.

Bactericidal Stability of Use-Dilution

Tests confirm that the use-dilution of this product, when stored in a sealed container such as a spray bottle, remains effective for up to 1 year. If product becomes visibly dirty or contaminated, the use-dilution must be discarded and fresh product prepared. Always use clean, properly labeled containers when diluting this product. Bactericidal stability of the use-dilution does not apply to open containers such as buckets or pails. This product is not to be used as a terminal sterilant or high-level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body (2) contacts intact mucous membranes, but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. This product may be used to pre-clean or decontaminate critical or semi-critical devices prior to sterilization or high-level disinfection.

TO SANITIZE SOFT SURFACES: Mix ½ oz. per gallon of water, 1:256. Apply use-solution with a sprayer. Hold bottle 6"-8" from surface and spray until fabric is wet. Fabric must remain wet for 5 minutes. Allow fabric to air dry. Heavily soiled areas must be cleaned prior to sanitizing.

***KILLS HIV AND HBV AND HCV ON PRE-CLEANED ENVIRONMENTAL SURFACES/OBJECTS PREVIOUSLY SOILED WITH BLOOD OR BODY FLUIDS** in health care settings or other settings in which there is an expected likelihood of soiling of inanimate surfaces/objects with blood or body fluids, and in which the surfaces/objects likely to be soiled with blood or body fluids can be associated with the potential for transmission of Human Immunodeficiency Virus Type 1 (Hiv-1) (associated with AIDS) or Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV).

Special instructions for cleaning and decontamination against HIV-1 or HBV or HCV on surfaces/objects soiled with blood/ body fluids: **Personal Protection:** Clean-up must always be done wearing protective gloves, gowns, masks and eye protection. **Cleaning Procedure:** Blood and other body fluids containing HIV or HBV or HCV must be

thoroughly cleaned from surfaces and objects before application of this product. **Contact Time:** Leave surface wet for 60 seconds for HIV-1 and 10 minutes for HBV and HCV with 1/2 oz. per gallon use-dilution. Use a 10-minute contact time for disinfection against all other viruses, bacteria and fungi claimed.

Disposal of Infectious Material: Blood, body fluids, cleaning materials and clothing must be autoclaved and disposed of according to local regulations for infectious waste disposal.

Non-Acid Toilet Bowl and URINAL Disinfectant/Cleaner Directions:

Remove gross filth prior to disinfection. **From use-dilution:** empty toilet bowl or urinal and apply 1/2 oz. per gallon use-dilution to exposed surfaces and under the rim with a cloth, mop, sponge, or mechanical spray. Allow to stand for 10 minutes and flush.

To clean and deodorize: Use 1/2 oz. of this product per gallon of water to clean and deodorize surfaces. Apply using a cloth, mop, sponge or sprayer. Wipe or allow to air dry.

Veterinary Practice/Animal Care/Animal Laboratory/Zoos/Pet Shop/Kennels Disinfection

Directions: For cleaning and disinfecting hard non-porous surfaces: equipment used for feeding or watering animals, utensils, instruments, cages, kennels, stables, and catteries. Remove all animals and feeds from premises, animal transportation vehicles, crates, etc. Remove all litter, droppings, and manure from floors, walls, and surfaces of facilities occupied or traversed by animals. Empty all feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with a use solution of ½ oz. of this product per gallon of water for a period of 10 minutes. Use 2 oz. per gallon of water to kill Adenovirus type 5 and 7. Use 8 oz. per gallon of water to kill Feline Panleukopenia Virus. For Murine Norovirus use dilution must be made with deionized water. Wipe or allow to air dry. Immerse all animal handling and restraining equipment as well as forks, shovels, and scrapers used to remove litter and manure. Thoroughly scrub all

treated surfaces, then rinse all surfaces that come in contact with food, including equipment used for feeding or watering, with potable water before reuse. Ventilate buildings, animal enclosure, and other closed spaces. Do not house animals or employ equipment until treatment has been absorbed, set, or dried.

Efficacy

When diluted and dispensed using the 3M™ Flow Control System Wall Mount Dispenser or the 3M™ Flow Control System Portable Dispenser or 3M™ Twist 'n Fill™ dispenser and used according to directions contained on the product label, 3M™ Quat Disinfectant Cleaner is a Hospital Use disinfectant; Bactericidal according to the current AOAC Use-Dilution Test Method and Virucidal* according to the virucidal qualification modified in the presence of 200 ppm hard water plus 5% organic serum against:

Bacteria

- *Acinetobacter baumannii*
- *Burkholderia capacia*
- *Campylobacter jejuni*
- *Enterobacter aerogenes*
- *Enterobacter cloacae* NDM-1 positive
- *Enterococcus faecalis*
- *Enterococcus faecalis* – VRE (Vancomycin-Resistant)
- *ESBL Escherichia coli* – (Extended spectrum beta-lactamase producing *E. coli*)
- *Escherichia coli* (*E. coli*)
- *Escherichia coli*, New Dehli Metallo-Beta Lactamase (NDM-1)
- *Klebsiella pneumoniae*
- *Legionella pneumophila*
- *Pseudomonas aeruginosa*
- *Salmonella enterica*
- *Salmonella schottmuelleri*
- *Salmonella typhi*
- *Serratia marcescens*
- *Shigella dysenteriae*
- *Staphylococcus aureus*
- *Staphylococcus aureus* – MRSA (Methicillin Resistant)
- *Staphylococcus aureus* – MDR (Multi-Drug Resistant)

- *Staphylococcus aureus* – VISA
(Vancomycin Intermediate Resistant)
- *Streptococcus pyogenes*
- *Vibrio cholerae*

Viruses

- *Hepatitis B Virus (HBV)
- *Hepatitis C Virus (HCV)
- *Herpes Simplex Virus Type 1
- *Herpes Simplex Virus Type 2
- *HIV-1 (AIDS virus)
- *Human Coronavirus
- *Influenza Type A/Brazil
- Adenovirus Type 5
- Adenovirus Type 7
- *Norwalk virus [Norovirus]
- *Respiratory Syncytial Virus (RSV)
- Rotavirus
- *SARS Associated Coronavirus
- *Vaccinia

Animal Viruses

- Avian Influenza Virus H3N2
- Avian Influenza Virus H5N1,
- Avian Infectious Bronchitis Virus
- Canine Distemper Virus
- Feline Calicivirus
- Feline Panleukopenia Virus
- Murine Norovirus
- Newcastle's Disease Virus
- Pseudorabies Virus

Fungi

- *Aspergillus niger*
- *Aspergillus fumigatus*
- *Trichophyton mentagrophytes* (the Athlete's Foot Fungus)

Product Specifications

(Typical Values)

Active Ingredients

Octyl decyl dimethyl ammonium chloride
6.510%

Dioctyl dimethyl ammonium chloride
2.604%

Didecyl dimethyl ammonium chloride
3.906%

Alkyl (C₁₄ 50%, C₁₂ 40%, C₁₆ 10%)
dimethyl benzyl ammonium chloride
8.680%

Inert Ingredients: 78%

EPA Registration

EPA Reg. No. 6836-78-10350

EPA Est. No. 10350-WI-001

NOTE:

Refer to product Safety Data Sheet for specific physical properties, health hazard, first aid and precautionary information.

- 17-9553-3 (Concentrate)
- 17-9600-2 (RTU)

3M Branch Sales Offices

ANCHORAGE

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Facsimile 907/522-1645

HONOLULU

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Honolulu, HI 96820

Telephone: 808/422-2721
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Customer Service Department
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Order Entry 1-800-852-9722
Facsimile 1-800-447-0408

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N5V 3G2
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London, Ontario, Canada
N6A 4T1

Telephone: 800/364-3577
Facsimile: 800/479-4453

Important Notice to User

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.



Commercial Solutions Division
St. Paul, MN 55144-1000
1-800-852-9722
www.3M.com/facility

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Warranty and Limited Remedy: 3M warrants that each 3M product will be free from defects in material and manufacture for 90 days from the date of purchase from 3M's authorized distributor. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED



Cordless Roller Cart

EM360™ Electrostatic Disinfectant Sprayer

The EMist EM360 is the most powerful, efficient and cost-effective disinfection treatment available today. Its patented application system places an electrostatic charge to liquid disinfectants as they leave the spray nozzle, which causes them to cling to virtually any surface. And because one gallon of solution can cover up to 54,000 high-touch point square feet of surface area per hour, facility managers can save up to 50% on the cost of solution and 45% on labor.



IONIZED



BioShield™75
Overview

Patented Technology for Elimination of Harmful Surface Bacteria.

- Up to 90 days of protection
- Alcohol free
- Durable bonded antimicrobial
- Odorless and colorless
- Long shelf life
- Highly stable, no special storage requirements

How BioShield 75 works

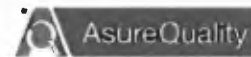
- Bacteriostatic, Fungistatic, and Algaestatic.
- EPA registered food contact surface treatment.
- Durable Antimicrobial lasting up to three months.
- Bonds with almost any surface and inhibits the growth of bacteria.
- Functionalized micro-coating actively inhibits microorganisms in the dry-state, when traditional disinfectants no longer do.

How BioShield 75 is applied

- BioShield™75 is applied to any clean, dry surface by spraying.
- Once dry it forms a covalent bond with the surface forming a protective microbiostatic layer of positively charged long chain molecules.
- Pathogen, spoilage bacteria, and other harmful microorganisms are attracted to the positively charged ion and through lysis of the cell wall the cell is destroyed.
- Since this is a physical disruption, the destroyed cell cannot mutate or replicate. Thus avoiding the possibility of developing antimicrobial resistance.

What regulatory approvals does BioShield™75 have?

Approved for all food contact and non-food surfaces by:



Ministry for Primary Industries
Manatū Ahu Matua



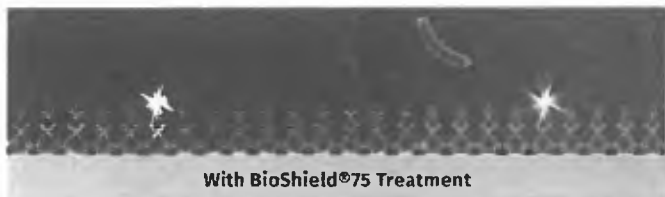
New Zealand Food Safety
Haumaru Kai Aotearoa



Environmental Protection Authority
Te Mana Rauhi Taiao

What microorganisms does BioShield™75 protect against?

Laboratory tests have shown BioShield™75 to protect surfaces against a variety of bacteria and fungi, including but not limited to: *Listeria Monocytogenes*, *E.coli* O157:H7, *Salmonella Enterica*, *Campylobacter*, *Pseudomonas Aeruginosa*, *Staphylococcus Aureus*, *Aspergillus Niger/Flavus*, *Cladosporium*, and *Penicillium Funiculosum*.



With BioShield™75 Treatment



Without Treatment

EnviroSystems

Telephone: 336.375.7555 | Fax: 336.375.0826
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Antimicrobial coating is associated with significantly lower aerobic colony counts in high-touch areas in an orthopedic ward environment.

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Introduction

From December 2017 to February 2018, HAIs were registered on two orthopedic wards in a non-randomized controlled trial. A second registration was performed from December 2018 to February 2019. At the second occasion, an antimicrobial organosilane coating was applied just before the study period and thereafter a weekly hand spraying of the high-touch areas was performed in one ward, while the other ward served as a control. Twenty defined high-touch areas on each ward were cultured before treatment and after 1, 2, 4, 8, 12, 14 and 16 weeks. All high-touch areas on both wards underwent standard alcohol wiping during the study period. Samples were cultured for aerobic colony counts, staphylococcus aureus and E. coli using Petrifilm™ plates.



Initial treatment of the ward with the organosilane compound using the electrostatic sprayers.

Hospital acquired infections (HAI) are the most common complication found in the hospital environment and they result in significant patient morbidity and mortality. Despite careful hygiene routines and the more restrictive use of antibiotics, there is an increasing problem with serious infections and resistance to antibiotics. The aim of the study was to examine whether the use of an antimicrobial coating in high-touch areas in an orthopedic ward could reduce bacterial growth and HAI.

Results

In Table 1 the total number of aerobic colony counts are reported and in Table 2 the incidence of HAI. The total aerobic colony counts were 47% lower in the treated ward compared with the untreated ward over the study period ($p=0.02$). The colony counts for staphylococcus aureus and E.coli were low in both wards. During the first registration period the incidence of HAI in the wards was 21.3% and 20.7% in the non-treated and treated ward respectively. At the second occasion, after treatment, the incidence was 23.7% in the untreated ward and 11.2% in the treated ward respectively ($p=0.0001$).

Total aerobic colony counts (ACC) CFU/cm²

| Ward | Before Treatment | | After Treatment | | | | | | | Total CFU/cm ² |
|-----------|------------------|--------|-----------------|--------|--------|---------|---------|---------|-------|---------------------------|
| | Week 0 | Week 1 | Week 2 | Week 4 | Week 8 | Week 12 | Week 14 | Week 16 | | |
| Untreated | 3507 | 5595 | 2860 | 3788 | 1335 | 3735 | 2496 | 4013 | 27329 | |
| Treated | 1218 | 1704 | 2373 | 3198 | 2336 | 1776 | 796 | 1041 | 15842 | |

Incidence of HAI during 3-month period, 2017/2018 and 2018/2019

Table 2

| Ward | 2017/2018 | Ward | 2018/2019 |
|-----------|-----------|-----------|-----------|
| Untreated | 21.3% | Untreated | 23.7% |
| Untreated | 20.7% | Treated | 11.2% |

Contact lars.ejerhed@vgregion.se



Conclusions

The use of a long-lasting antimicrobial organosilane coating appears to reduce the bio burden and reduce HAI. Since the incidence of HAI varies substantially over time, longer observation times are needed.

**UP TO
90
DAYS**

1 | BioShield® 75 Basics

Normal cleaning and disinfecting practices only provide protection until the next contamination event. Once dry, the surfaces are no longer protected against microbes.

BioShield® 75 was developed to address this deficiency in available technologies. BioShield® 75 is a revolutionary broad-spectrum antimicrobial that provides protection against a wide range of microorganisms including bacteria and fungi. Once dry, the BioShield® layer polymerizes onto the surface, leaving a microbiostatic layer that is effective for up to 90 days. BioShield® 75 is EPA registered and approved for food contact surfaces and hospital use.



2 | Equipment and Coverage Rates

Equipment will vary according to the environment and time constraints. The most common method of application for BioShield® 75 is by spraying with a trigger sprayer, pump-up sprayer or backpack sprayer. Coverage will vary between 200 and 1,200 square feet per gallon.

The most efficient way to spray and cover ALL surfaces in a room is by electrostatic sprayer such as E-mist 360 or a mister such as the Karcher PS 4/7 Bp. The efficiency of the electrostatic spray and mister yields coverage in the range of 1,500 and 3,500 squarefeet per gallon depending on calibration.

NOTE: When computing total gallons needed, do not use square feet of the facility as a guide. This is only the footprint. Calculate ALL surface area to be treated, that includes floors, walls, ceilings and an estimate of equipment within each area. Consider walls and ceilings the last areas to be treated.



3 | Storage and Handling

The user should be familiar with all the cautions listed on the label of the BioShield® 75 packaging. Proper PPE is recommended, including an N95 mask, eye protection, and latex or nitrile gloves. Refer to the SDS (Safety Data Sheet) for proper handling instructions.

Stored BioShield® 75 should be kept at a temperature between 32 °F to 100 °F (0.5 °C to 38 °C). Do not allow the product to freeze. If the product does freeze, allow it to thaw and mix thoroughly before using. Refer to the SDS (Safety Data Sheet) for proper storage instructions.



4 | Pre-application Requirements

The bonding technology of BioShield® 75, requires certain surface conditions. All surfaces to be treated must be clean and dry before application.

Surfaces previously cleaned with any detergent and/or sanitizing product should be rinsed with water prior to the application of BioShield® 75. This must be done to remove any residual.



5 | Applying BioShield® 75

Deep Clean

Apply a coat of EnviroSystems® 420-4 Green Kleen by sprayer and allow to soak for 15 minutes, then wipe off using clean cloths. The surfaces should then be rinsed with clean water and allowed to thoroughly dry. This process will remove all cleaning product residues, leaving the surface properly prepared for the application of BioShield® 75.

For environments requiring a sanitizer step (such as food service, food processing, healthcare, etc.), apply EnviroSystems Santizer 440 at 3.5 oz//5-gallons of water and allow a minimum of 10-minute contact time (do not rinse or wipe). The surface must be dry before applying BioShield® 75.



Apply BioShield® 75 for long lasting protection

After ensuring all surfaces are thoroughly dry, apply a coating of BioShield® 75 by spraying. Allow to dry, then apply a second coat. (**Note:** two light coats are better than one heavy coat).

Once the treated surfaces are completely dry, BioShield® 75 is active against microorganisms. BioShield® bonds to the surface with a copolymer bond and does not wash off during normal cleaning cycles. However, vigorous abrasion, temperatures above 482 °F (250 °C) and very high pH cleaning chemicals (pH13) may remove the biostatic protective coating in less than 90 days.

Normal cleaning regimes should be continued on the protected surface between applications of BioShield® 75.



6 | Post-Application Process

When at all possible, BioShield® 75 treatment should be allowed to air dry. If the surfaces have been wet with BioShield® 75 for a minimum of ten minutes, the surface may be wiped dry.

Studies show regular daily cleaning helps to extend the efficacy of BioShield® 75. At the same time, high-touch areas may require more frequent applications of BioShield® 75. Ask us how to predict and assess the durability of BioShield® 75 in your facility.

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: EnviroSystems® BioShield® 75 *MICROBAN*
CHEMICAL DESCRIPTION: Organosilane
COMPANY IDENTIFICATION: IndusCo, Ltd.
2319 Joe Brown Drive
Greensboro, NC 27405
EMERGENCY TELEPHONE (800) 262-8200 (24 HOURS) CHEMTREC

2. COMPOSITION/ INFORMATION ON INGREDIENTS

Our hazard evaluation has identified the following chemical substance(s) as hazardous. Consult Section 15 for the nature of the hazard(s).

| Hazardous Substance(s) | CAS NO. | % Weight | OSHA (PEL) | ACGIH (TLV) |
|--|------------|----------|------------|-------------|
| Octadecylaminodimethyltrihydroxysilyl propyl ammonium chloride | 27668-52-6 | 0.75% | None | None |

SECTION 2 NOTES: None

The above information is not intended for use in preparing product specifications.

3. HAZARDS IDENTIFICATION

HMIS Profile: Health 1 Flammability 0 Physical Hazard 0 Personal Protection D

** EMERGENCY OVERVIEW **

Warning:

SLIGHTLY IRRITATING TO THE EYES. HARMFUL IF INGESTED OR INHALED.
Do not get in eyes or on clothing. Avoid contact with skin or clothing, and avoid breathing vapor. Wear protective eyewear (goggles or face shield). Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before use.

PRIMARY ROUTES OF ENTRY: skin contact, ingestion, and eye contact.

POTENTIAL HEALTH EFFECTS:

EYES: Slightly irritating to the eyes.

SKIN: May cause slight irritation.

INGESTION: Harmful if swallowed.

INHALATION: Harmful if inhaled.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Not known.

SECTION 8 NOTES: None

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--------------------------|------------------------|
| PHYSICAL STATE | Liquid |
| APPEARANCE | Clear colorless liquid |
| ODOR | Odorless |
| SPECIFIC GRAVITY | 0.98 – 1.02 |
| SOLUBILITY IN WATER | Complete |
| pH | 5.17 |
| FREEZING POINT | 32°F/0°C |
| BOILING POINT | 212°F/100°C |
| MELTING POINT | Not available |
| VAPOR PRESSURE | Not available |
| VISCOSITY | <85.5mPa·s |
| VOLATILE CONTENT | Not available |
| PERCENT SOLIDS BY WEIGHT | Not available |

SECTION 9 NOTES: None

10. STABILITY AND REACTIVITY

STABILITY: Stable.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Will not occur.

INCOMPATIBLE MATERIALS TO AVOID: Do not mix with cleaners, do not freeze, and avoid heat and direct sunlight.

SECTION 10 NOTES: None

11. TOXICOLOGICAL INFORMATION

The following results are for the product:

TOXICITY: Eye Irritation: Minimally irritating to eyes (Rabbit)

SECTION 11 NOTES: None

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL EFFECTS: This pesticide is toxic to fish. Do not apply to water by cleaning of equipment or disposal of pesticide.

SECTION 12 NOTES: None.

13. DISPOSAL CONSIDERATIONS:

WASTE DISPOSAL METHOD: Waste resulting from the use of this product may be disposed of on site.