AEGIS Environmental Management, Inc. 3106 Swede Avenue Midland, OH 48642-3843

FEB - 9 1999

Subject:

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Dow Corning 5772 Antimicrobial Agent

EPA Registration No. 64881-2 Notification Per PR Notice 98-10 Your Notification Dated: 1/22/99

Attention:

Mr. Hal Locker,

President

This letter acknowledges receipt of your notification to change the primary brand name to AEM 5772 Antimicrobial, submitted under the provisions of FIFRA sec. 3(c)(9). Based on a review of the submitted materials, the notification is acceptable and apart of the records for this file.

If you have any questions regarding this letter, please contact Jacqueline Campbell at (703) 308-6416.

elma Noble

**Product Manager 31** 

Regulatory Management Branch I Antimicrobials Divisions (7510C)

CONCURRENCES										
SYMBOL 7570C										
SURNAME COMPANY										
DATE 219199		***************************************								
EPA Form 1320-1A (1/90)	<del> </del>		<u> </u>		OFFICE	AL FILE COPY				

Printed on Recycled Paper

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Please read instructions on reverse	before comple	atina form.		Form Appro	ved. OMB No. 2	2070-006	رم ک 0, Approval expires 5-31-98			
United States Environmental Protection Agen Washington, DC 20460				X	Registration Amendme Other	on	OPP Identifier Number			
Application for Pesticide - Section I										
1. Company/Product Number 64881 - 2				2. EPA Product Manager Velma Noble			Proposed Classification     None Restricted			
4. Company/Product (Name) AEM 5772 Antimicrobial				PM # X None Restricted						
5. Name and Address of Applicant (Include ZIP Code) AEGIS Environmental Management, Inc. 3106 Swede Avenue Midland, MI 48642-3843				Expedited Review. In accordance with FIFRA Section 3(c)(3)     (b)(i), my product is similar or identical in composition and labeling to:      EPA Reg. No						
Check if this is a new address				Product Name						
Section - II										
Amendment - Explain below.  Resubmission in response to Agency letter dated  X Notification - Explain below.				Final printed labels in response to Agency letter dated "Me Too" Application.  Other - Explain below.						
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Yes Yes No No No. per If "Yes" No. per If "Yes"			Water Soluble Pa	No Plastic Glass Paper Other (Continue)						
3. Location of Net Contents Information 4. Size(s) Re		4. Size(s) Retai	!   On Label		On Label		ying product			
6. Manner in Which Label is Affixed to Product Paper Stencil			ph Otherued							
		-	Section - IV							
1. Contact Person (Complete items of	lirectly below for	-		ntacted, if necessar	· · · · · · · · · · · · · · · · · · ·		7.1.1.1.1			
			ide President				Telephone No. (Include Area Code) 517-832-8180			
I certify that the statements I I acknowledge that any know both under applicable law.			l attachments ther			ete.	6. Date Application Received  (Stamped)			
2. Signature	1 )		.Title President				, , , , , , , , , , , , , , , , , , , ,			

5. Date

January 22, 1999

EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete.

5. Typed Name

Hal A. Locker

White - EPA File Copy (original)

Yellow - Applicant Copy

## ATTACHMENT TO NOTIFICATION PRODUCT 64881- 2

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504C
U.S. Environmental Protection Agency
401 M Street S.W.
Washington, D.C. 20470-0001

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling of the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section - II Explanation:

Change of Primary Brand Name

1-22-99

## Specimen Label

# AEM 5772 Antimicrobial

#### A SILANE QUATERNARY AMMONIUM SALT

EPA Reg. No. 64881-2 EPA Est. 34292-MI-01

**CONTAINS OVER 12% METHANOL** 

#### **KEEP OUT OF REACH OF CHILDREN**

DANGER! POISON CAUSES EYE DAMAGE

METHANOL MAY CAUSE
BLINDNESS • HARMFUL OR FATAL
IF SWALLOWED • VAPOR HARMFUL • AVOID BREATHING SPRAY
MIST OR VAPORS • AVOID CONTACT WITH SKIN • FLAMMABLE

#### STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Drink large quantity of water. Have patient lie down and keep warm. Cover eyes to exclude light, call a physician and/or poison control center. IF INHALED: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. IF ON SKIN: Flush with copious amounts of water for at least 15 minutes. IF IN EYES: Flush with copious amounts of water for at least 15 minutes and get immediate medical attention.

#### PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS (& DOMESTIC ANIMALS)

## DANGER! CORROSIVE. CAUSES EYE DAMAGE AND SKIN IRRITATION.

Keep out of reach of children. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Use with adequate ventilation. Vapor harmful. Avoid breathing of vapor. Harmful or fatal if swallowed. Avoid contamination of food. Methanol may cause blindness.

#### **ENVIRONMENTAL HAZARDS:**

This pesticide is toxic to aquatic organisms. 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 to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

### PHYSICAL OR CHEMICAL HAZARDS Flammable. Keep away from heat and open flame.

It is a violation of Federal Law to use this product in a manner inconsistent with its label.

FOR INDUSTRIAL USE ONLY, AS A FINAL BACTERIOSTATIC, FUNGISTATIC, PRESERVATIVE FINISH IN THE PRESENCE OF MOISTURE

AEM 5772 Antimicrobial is to be used only as directed in AEGIS' Technical Bulletins

#### STORAGE AND DISPOSAL

STORAGE: Moisture sensitive. Keep tightly closed until ready to use. Reclose tightly after each use.

DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Do not reuse containers. Do not cut or weld containers. Triple rinse (or equivalent) empty containers. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

NOTICE: AEGIS warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated in the bulletin when used in accordance with directions under normal conditions of use; but this warranty of fitness for a particular purpose does not extend to the use of this product contrary to bulletin instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use. AEGIS ENVIRONMENTAL MANAGEMENT, INC. SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY, INCLUDING THE WARRANTY OF MERCHANTABILITY.

**ATTENTIONI** This container will have vapor and/or product residues when emptied. All hazard precautions on label must be observed when handling emptied container.





Sold by:
AEGIS ENVIRONMENTAL
MANAGEMENT, INC.
3106 SWEDE AVENUE
MIDLAND, MICHIGAN 48642
1-517-832,8180, U.S.A.

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MADE IN U.S.A.

SPECIMEN LABEL 1658531

DATE CODE 0198

1658531 PRINTED IN U.S.A. IN JANUARY 1998 RE-PLACES SPECIMEN LABEL 1658531 PRINTED IN SEPTEMBER 1995. DISCARD PREVIOUS SPECIMEN LABELS. REVISIONS INCLUDE: PRODUCT NAME CHANGE, REGISTRATION NUMBER, SELLER NAME AND ADDRESS.

# ÆGIS MICROBE SHIELD<sup>TM</sup> PROGRAM TECHNICAL BULLETIN

#### DESCRIPTION

AEM 5772 Antimicrobial is 3-(trimethoxysilyl) propyldimethyloctadecyl ammonium chloride containing 72 percent active ingredient by weight in methanol.

#### **FEATURES**

Good durability — AEM 5772 Antimicrobial imparts durable, broad spectrum antimicrobial activity to the surface of a wide variety of substrates; it is leach-resistant and non-migrating and is not consumed by microorganisms

Broad-spectrum activity — effective against gram(+) and gram(-) bacteria, fungi, algae and yeasts; antimicrobial action is exhibited on contact in the presence of moisture

Increased efficiency — through proper application, durable bacteriostatic, fungistatic and algistatic surfaces can be attained with a minimum amount of AEM 5772 Antimicrobial

#### BENEFITS

Prevents deterioration and discoloration caused by bacteria, fungi, algae and yeasts

Retains the "freshness" of an article by inhibiting or resisting the growth of odor-causing bacteria and mildew (fungus)

Prolongs the life of an article by inhibiting the growth of bacteria and mildew

Provides hygienic freshness

Provides a treatment that is not destroyed by repeated cleaning/washing

Resists odors through chemical protection

Compatible with substrates and processes listed under approved uses

#### **AEM 5772 ANTIMICROBIAL**

#### APPROVED USES

AEM 5772 Antimicrobial can be used to impart durable, broad-spectrum, antimicrobial protection to substrates for the following applications:

- Air filters/materials
- Aquarium filter material
- Bed sheets, blankets and bedspreads
- Buffer pads (abrasive and polishing)
- Carpet, draperies and uphoistery
- Fiberfill for upholstery, sleeping bags, apparel, etc,
- Fiberglass ductboard
- Fire hose fabric
- Humidifier belts
- Mattress pads and ticking
- Men's underwear and outerwear
- Nonwoven disposable diapers
- Nonwoven polyester
- Outerwear apparel
- Polyurethane and polyethylene foam, when covered
- Polyurethane foam for household, industrial and institutional sponges and mops
- Polyurethane foam for packaging and cushioning in non-food contact applications
- Disposable polyurethane foam cushions for Lapidus Airfloat Systems
- Polyurethane foam used as a growth medium for non-food crops and plants
- Roofing materials
- Sand bags, tents, tarpaulins, sails and ropes
- Athletic and casual shoes

- Shoe insoles
- Shower curtains
- Socks
- Throw rugs
- Toweling
- Toilet tank and seat covers
- Umbrellas
- Vacuum cleaner bags and filters
- Vinyl paper-wallpaper for nonfood contact surfaces
- Wiping cloths, premoistened towelettes and tissue wipes (these do not impart pesticidal properties)
- Women's hosiery
- Women's intimate apparel

AEM 5772 Antimicrobial provides residual self-sanitizing activity against athlete's foot fungus (*Trichophyton mentagrophytes*) on treated socks. Durable for up to 10 repeated washings; prevents 99.9% of the growth of athlete's foot fungus on the sock.

#### **HOW TO USE**

Incorporate AEM 5772 Antimicrobial directly into formulations used to make the end-use products listed above, or dilute with water or with organic solvents such as alcohols, ketones, esters, hydrocarbons and chlorinated hydrocarbons and then apply it to the organic and inorganic surfaces to give 0.1 to 3.0 percent by, weight of active ingredient. Prepare 1, the solutions by adding the antimicrobial agent to the solvent with stirring.

NOTICE: Poor agitation when adding this silane to water can result in locally high concentrations, which may form gel particles.

Substrates can be treated by brushing, dipping, padding, soaking, spraying, fogging or by using foam finishing techniques.

After applying the antimicrobial agent, dry the substrate at temperatures from ambient to a maximum of 160 C (320 F) to effect complete condensation of silanol groups and to remove water, solvents and/or traces of methanol from hydrolysis. Optimum application and drying conditions, such as time and temperature, should be determined for each application before use in a commercial process.

#### STORAGE, HANDLING AND PRE-CAUTIONARY INFORMATION

This product is "flammable" and "poisonous." Keep away from heat and open flame.

#### Storage and Shelf Life

When stored in original, unopened containers at or below 25 C (77F), AEM 5772 Antimicrobial has a minimum shelf life of 12 months from date of shipment. Since this material is moisture-sensitive, keep containers tightly closed after each use.

#### Handling (Danger)

Wear goggles or face shield and rubber gloves when handling the concentrated material.

AEM 5772 Antimicrobial, if ingested in amounts incidental to industrial handling, should pose no significant adverse health hazard. Direct contact of the undiluted material with eyes may cause serious injury or blindness. Particular care must be taken to prevent eye contact. In case of contact with eyes, immediately flush eyes with large amounts of water for at least 15 minutes and get prompt medical attention.

Single, short-term skin exposure to

concentrate may cause slight irritation. Contact over several days may cause blistering and a superficial burn. Precautions should be taken to avoid prolonged or repeated skin contact.

Undiluted AEM 5772 Antimicrobial contains 12 percent methanol. Keep away from heat and open flame. Appropriate measures should be taken to prevent the accumulation of hazardous concentrations of methanol vapors in the work area. Avoid breathing vapors.

## Neutralization and Environmental Protection

AEM 5772 Antimicrobial is toxic to aquatic organisms. This antimicrobial agent, by standard BOD (biological oxygen demand) and TOD (total oxygen demand) determination, does not appear to be biodegradable. Potential harm to the environment is minimized, however, because of the minimal amount of chemical applied and its durable coupling to surfaces. Inactivation of solutions containing AEM 5772 Antimicrobial may be accomplished by addition of an anionic surfactant or detergent in quantity equivalent to that of AEM 5772 Antimicrobial in solution.

Every effort should be made to contain accidental spills of concentrate to the immediate area. This may be accomplished by the use of sandbags or barrier material to confine the spill to facilitate cleanup and disposal. Contaminated sand or barrier material may then be disposed of by burial in an approved landfill. Many spills may be cleaned up with rags or other absorbent materials by wiping, soaking and/or mopping and allowing the liquid to absorb onto the material. The absorbent material may then be disposed of by incineration or landfill.

Floor drains in areas of material use should be protected with absorbent

material or barrier material to contain accidental spills.

#### **MSDS INFORMATION**

HANDLING. **BEFORE** READ **PRODUCT** AND MATERIAL SAFETY DATA SHEETS AND CON-TAINER LABELS FOR SAFE USE. PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET CAN BE OB-TAINED BY WRITING TO AEGIS **ENVIRONMENTS OR BY CALLING** (517) 832-8180. A MATERIAL SAFÉTY DATA SHEET FOR A TYPICAL USE DILUTION AQUE-OUS SOLUTION IS ALSO AVAIL-ABLE.

#### **Shipping Limitations**

DOT Classification: Flammable.

#### **Packaging**

AEM 5772 Antimicrobial is supplied in 35-, and 400-lb (15.9- and 181.4-kg) containers, net weight.

## IMPORTANT: WARRANTY AND DISCLAIMER INFORMATION

ÆGIS Environmental Management, Inc. warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated in this bulletin when used in accordance with directions under normal conditions of use; but this warranty of fitness for a particular purpose does not extend to the use of this product contrary to bulletin instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

ÆGIS ENVIRONMENTAL MAN-AGEMENT, INC. SPECIFICALLY DISCLAIMS ANY CTHER EX-PRESS OR IMPLIED WARRANTY, INCLUDING THE WARRANTY OF MERCHANTABILITY.

ÆGIS ENVIRONMENTS

3106 Swede Avenue Midland, Michigan 48642-3843 517-832-8180 Protected by The

AEGIS

Microbe Shield