aegis®

LONG LASTING ANTIMICROBIAL SURFACE PROTECTION

AEGIS® OVERVIEW

A Quick Information Guide about AEGIS®

Safe | Durable | Effective

Bactraban

PROTECT YOUR BUSINESS FROM INVASIVE MICROBES

SOLE DISTRIBUTOR OF AEGIS® IN SOUTH AFRICA

www.bactraban.com

Contents

1 Overview

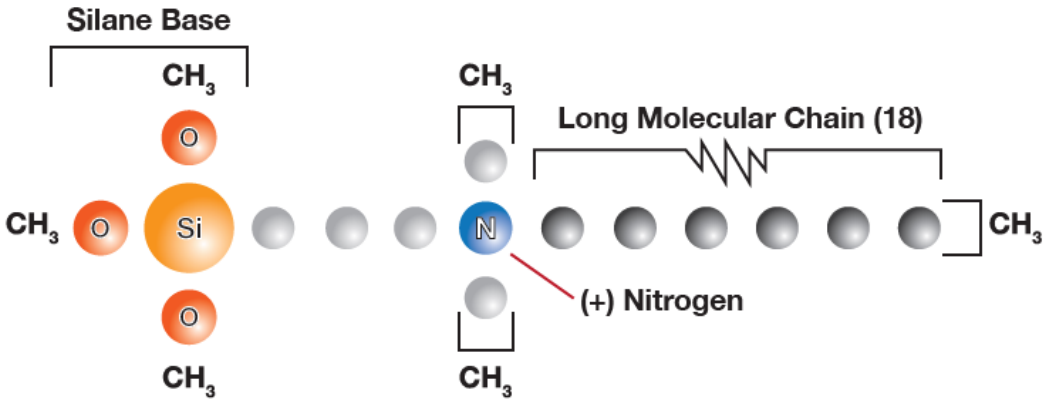
For over 45 years, AEGIS® (AEM 5700) has been the world's most widely used enduring antimicrobial surface protectant and coating. AEGIS® products are proven safe for their intended end use, durability, and efficacious.

Backed by more than 45 years of testing, AEGIS® technology has a long history of safe use. AEGIS Microbe Shield® is a durable and effective way to control a wide range of microbes, including bacteria, mould, mildew, fungi, yeast and algae on surfaces found in transportation, commercial, and other public settings.

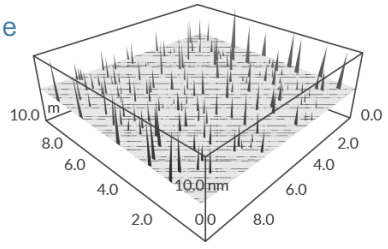
2 Technology Overview

AEGIS® forms a protective coating that can molecularly bond with surfaces upon application. Microbes are attracted to the coating's positive charge. When applied to surfaces, AEGIS® forms a colourless, odourless, positively charged barrier that attracts, then electrocutes and disrupts their negatively charged cell membranes. AEGIS® contributes to enduring clean surfaces by utilising a charge disruption mode of action.

AEGIS® has a long history of delivering durable, long-lasting antimicrobial efficacy to protect treated surfaces.



AEGIS® Active Ingredient: 3-trimethoxsilyl propyldimethyloctadecyl ammonium chloride



During the application process stable bonds between OH- sites on the AEM 5700 molecule and the positive charge on the nitrogen atoms (N+) form. The result of this chemical process is the creation of a large co-polymer chemically bonding AEGIS® to the target substrate.

Positively Charged Nitrogen

The positively charged nitrogen atom attracts the negatively charged cell walls of microbes.

Silane Base

Enables the antimicrobial to anchor securely onto the substrate providing long-lasting antimicrobial product protection.

Long Molecular Chain

The long molecular chain or "spike" is the part that comes into contact and disrupts the cell membranes.

3 Why AEGIS® is Different

AEGIS® is not a disinfectant or a cleaner, it is an antimicrobial protectant that is designed to support, not replace, your existing cleaning and disinfection protocols. Compared to traditional products AEGIS® has many benefits:

- AEGIS® does not leave the surface when applied. Conventional products penetrate living cells and kill by way of poisoning the organism or disrupting a vital life process - they are designed to act and dissipate quickly.
- AEGIS® creates an inhospitable environment for microbes to live on and will not create resistant organisms.
- AEGIS® can be expected to remain on a surface from 90 days to up to a year. The expertise of the applicator, type of surface, wear and tear associated with the surface, and type of cleaning chemicals can all decrease the expected durability of AEGIS®.
- AEGIS® has been tested to be effective on many surfaces including glass, fabric, metal, and plastic.
- AEGIS® is the only globally registered antimicrobial and is used by name-brand manufacturers.

4 Approvals

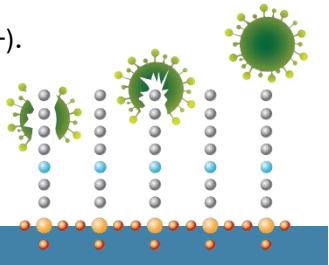
AEGIS® is manufactured by AEGIS Environmental Management Inc. and owned by Microban. AEGIS® and AEGIS Microbe Shield® are trademarks of Microban International. PROTECT Technologies is the global master distributor of AEGIS Microbe Shield®. Bactraban is the master distributor in South Africa. The biocidal active components of AEGIS® are notified with the EU Biocidal Products Regulation (BPR) and registered with the US Environmental Protection Agency (EPA) and Health Canada Pest Management Regulatory Agency (PMRA).

- US Environmental Protection Agency: 64881-1 & 64881-7
- Health Canada: PCP# 15133
- European Union: AEGIS® is listed as PT-7 and PT-9 with the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and as PT-2 in the United Kingdom.

5 AEGIS® Care and Attributes

How to care for AEGIS®:

- AEGIS® bonds instantly and dries in 3 to 5 minutes on high-touch and high-traffic surfaces, and 2 to 24 hours on treated fabrics such as carpets.
- AEGIS® can be weakened or deactivated over time by highly caustic materials (pH 11+).
- Clean AEGIS® treated surfaces with soap and water or non-caustic disinfectants.
- AEGIS® can be removed by abrasion.



Some attributes of AEGIS Microbe Shield® include:

Non-toxic	No odour	No Volatile Organic Compounds
Non-leaching	No colour	Not triclosan-based
Non-transferring	No off-gassing	Cannot be felt by touch
Non-flammable	No heavy metals	Has hydrophobic qualities