



# SAFE RETURNS

Return to **Work** // **School** // **Worship** // **Play**



# SAFE RETURNS



Entry  
Screening  
Solutions



Disinfection  
and Surface  
Protection



Signage



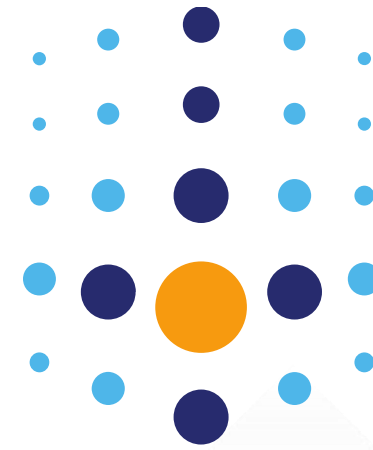
Spacing,  
Barriers and  
Masking



Policy, Documentation, and Communication



SUMNER ONE



PROTECT

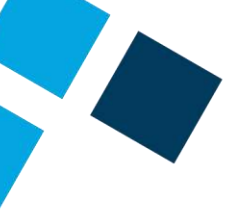
# Introducing AEGIS Microbe Shield Technology

Colin Dickey, President of Protect Technologies, Inc.

aegis<sup>®</sup> 

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- 2. AEGIS Microbe Shield**
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# Protecting from Algae



24/7

365

Surface  
Protection

aegis<sup>®</sup> 

 SUMNERONE

Safe

Durable

Effective

# Let's Clear the Surface



## Durable Antimicrobial

- Governed By EPA
- Protect Surfaces
- Long Lasting
- Effective against Microbes
  - Bacteria, Mold, Mildew, Fungi, Algae
- **Cannot Legally Make Viral Claims**

## Disinfectant

- Governed by EPA (FDA)
- Protect People
- Short Term
- Effective Against Bacteria And Viruses
- **Cannot Legally Make Durable Claims**

# Conventional Disinfectants



- Disinfectants limited **once dry**
- Correct Chemical, Concentration, Dwell Time, Application Technique
  - Time, Costs, Practicality
  - Effective and Acute
  - No ongoing protection
- Microbes begin growing on surfaces once touched
- Bio – Film and microbial hosts





# Original and Authentic

**AEGIS Microbe Shield®** originates to 1970's at Dow Corning Labs – licensed to a licensee, eventually purchased by licensee, and then purchased by Microban® International. With a half a century of continuity, studies and data, AEGIS is the most Globally registered & Globally Trusted antimicrobial in the market.

## EPA

- 64881-1
- 64881-7

## Health Canada

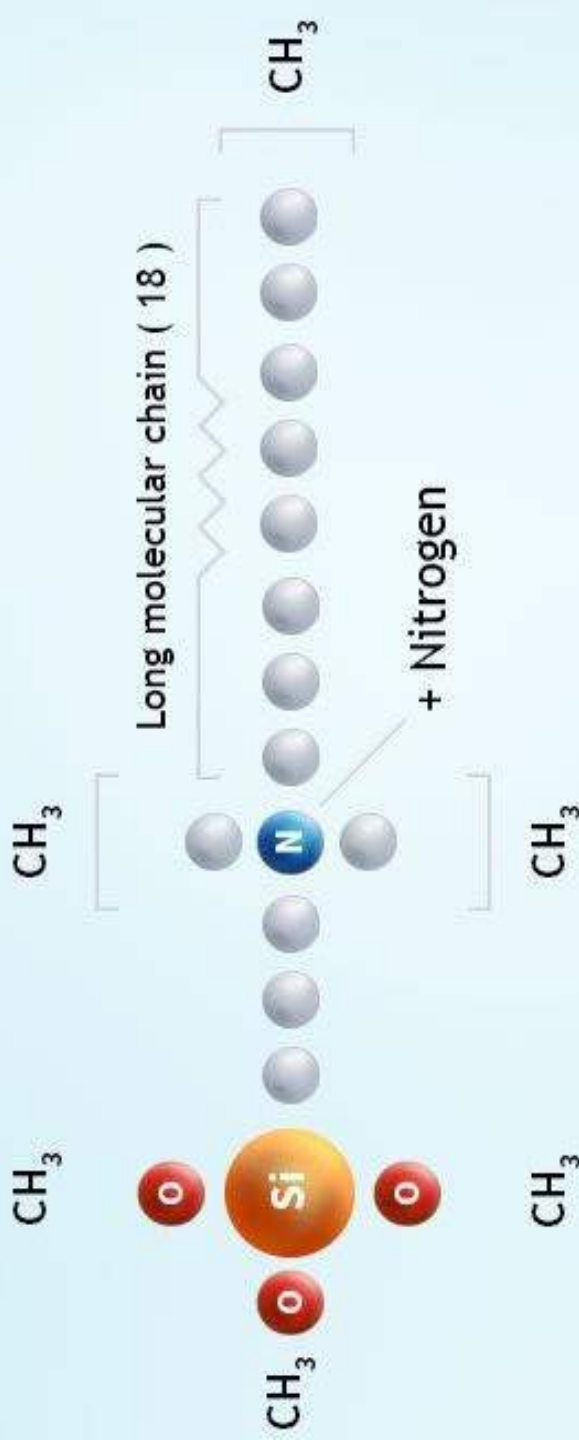
- 15133

## Europe

- BPR – EC528/2012 –  
Compliant REACH
- PT: 7, 9

# What is aegis<sup>®</sup> made of?

## 3-(trimethoxysilyl) propyldimethyloctadecyl ammonium chloride



- The active ingredient in AEGIS<sup>®</sup> forms a colorless, odorless, protective coating that is positively charged which molecularly bonds with products upon application forming a durable antimicrobial surface protectant.
- Organo Silane Quaternary Ammonium Salt (Compound) with a Covalent Bound

**Silicon (SI) , Oxygen (O), Nitrogen (N), and Carbon (C)**

# What does aegis<sup>®</sup> do?



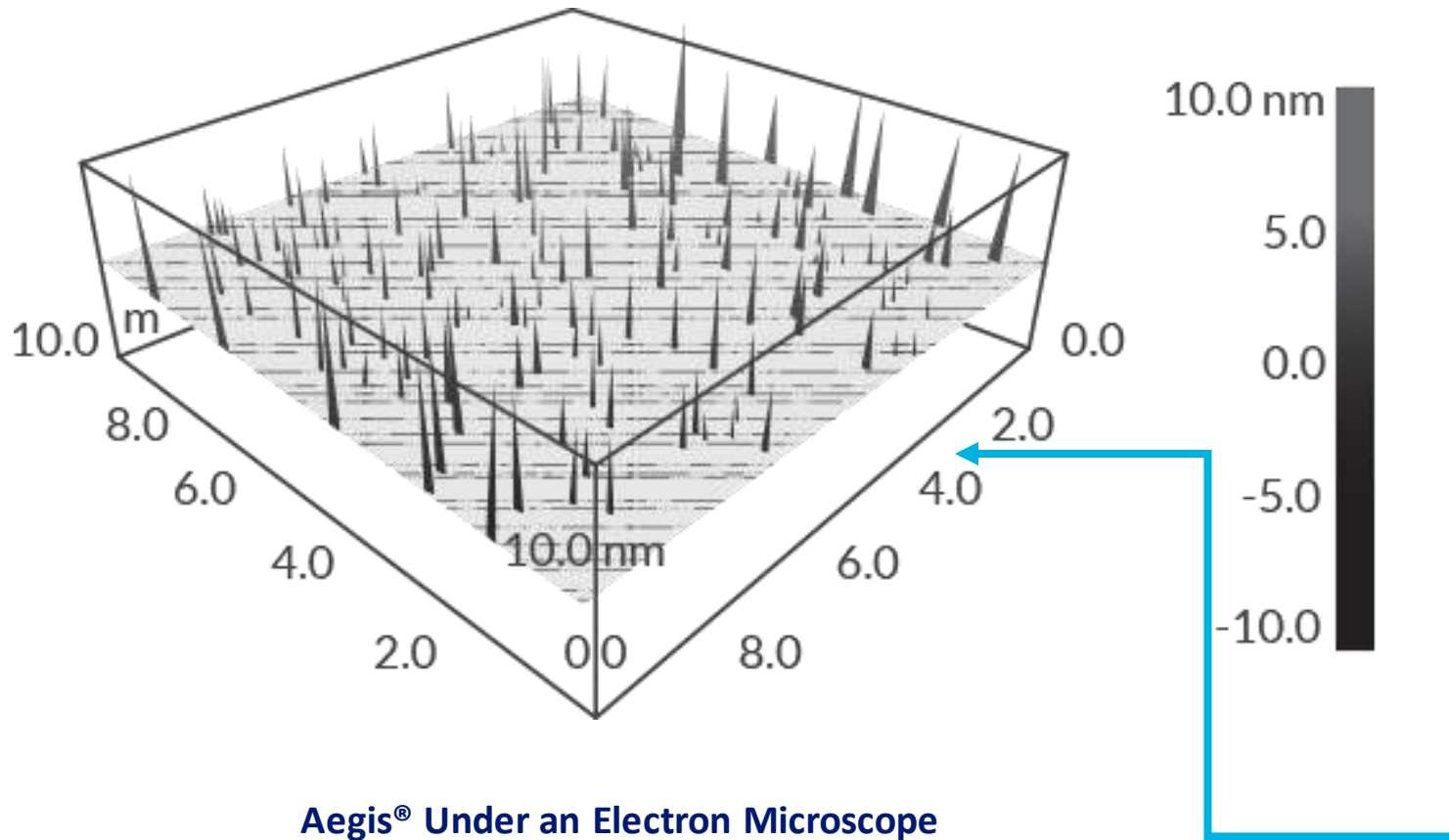
AEGIS<sup>®</sup> inhibits the growth of microbes on surfaces by utilizing a charge disruption mode of action.

Bacteria is attracted to the coating's positive charge, and upon coming into contact with the treated surface, they quickly die.

(Process of Lysis)

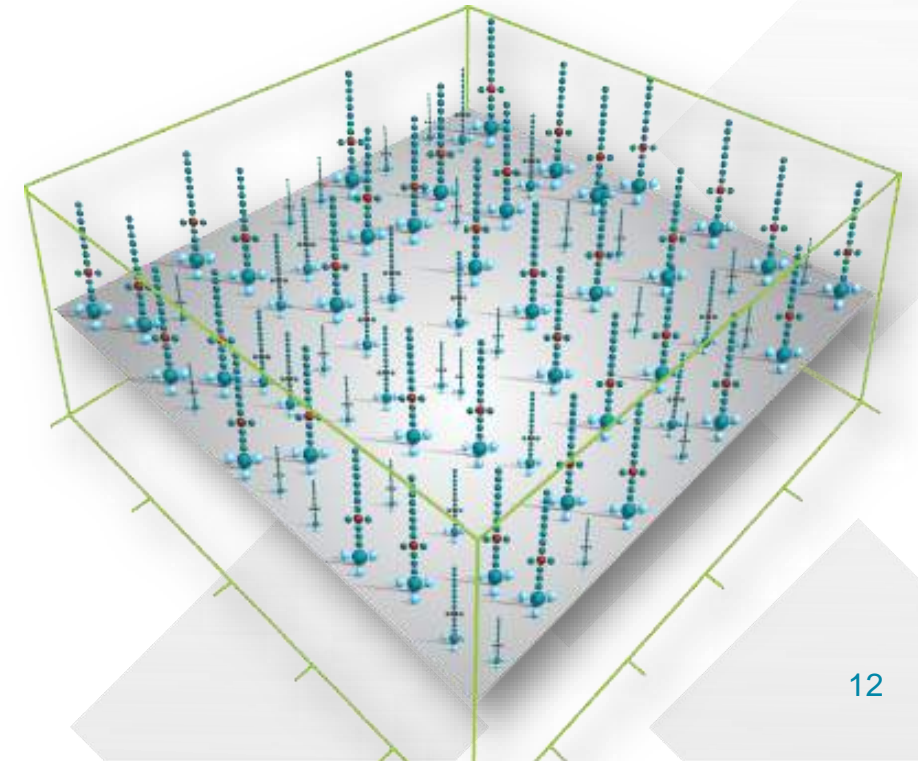
- Durable Antimicrobial Surface and Material Protectant
- Not a Disinfectant

# Technology behind aegis®

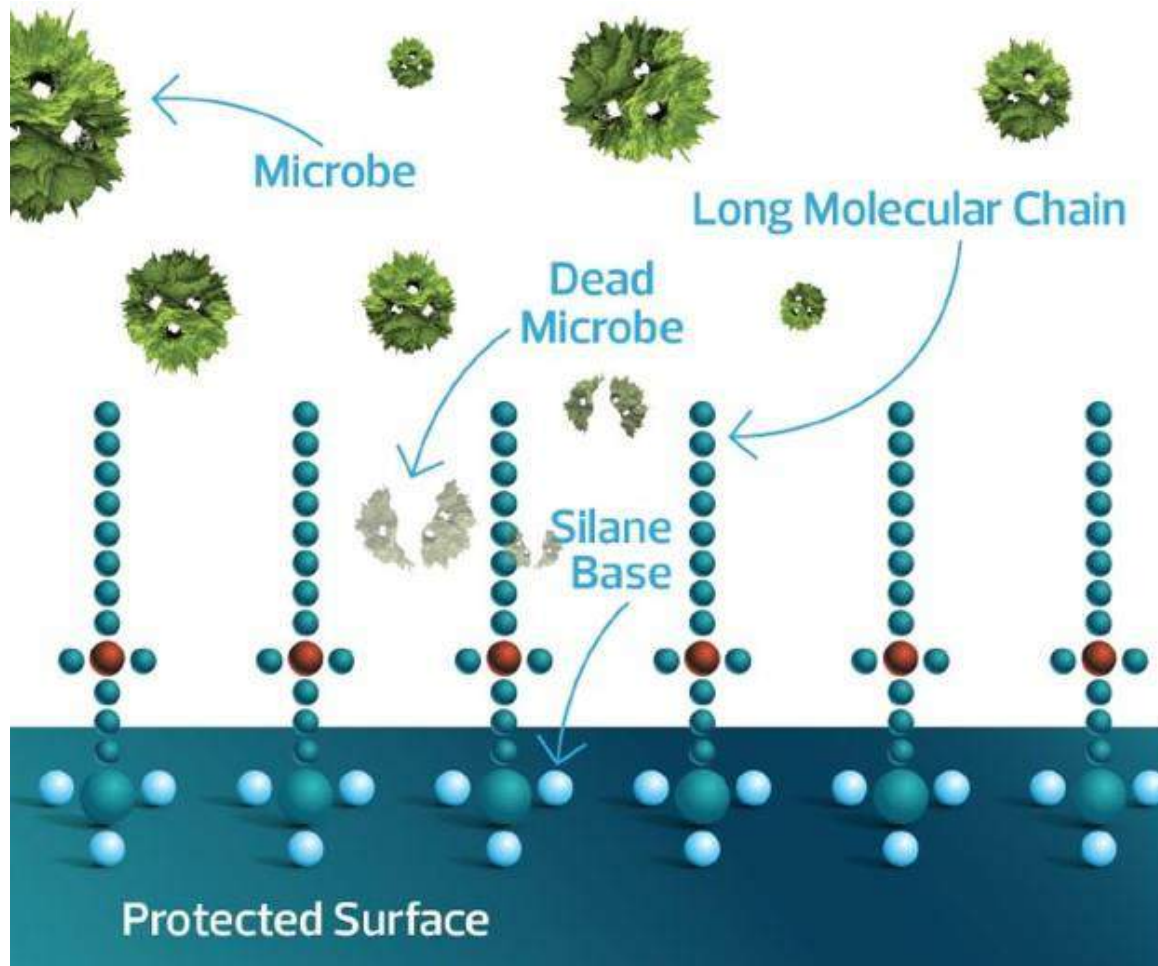


Aegis® Under an Electron Microscope

- Bonding antimicrobial
- Modifies surface → Spikes Effective 24/7



# How aegis® works

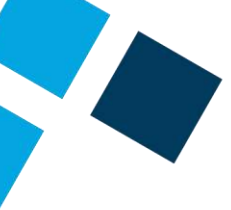


Process → Lysis

Positively charged polymer ruptures then electrocutes microbes

**AEGIS Treatment is:**

- Clear
- Colorless
- Odorless

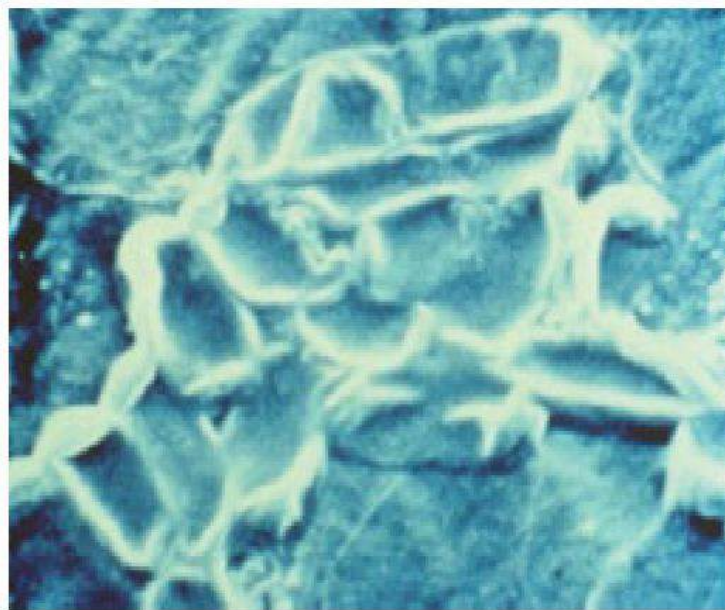


# How aegis<sup>®</sup> works

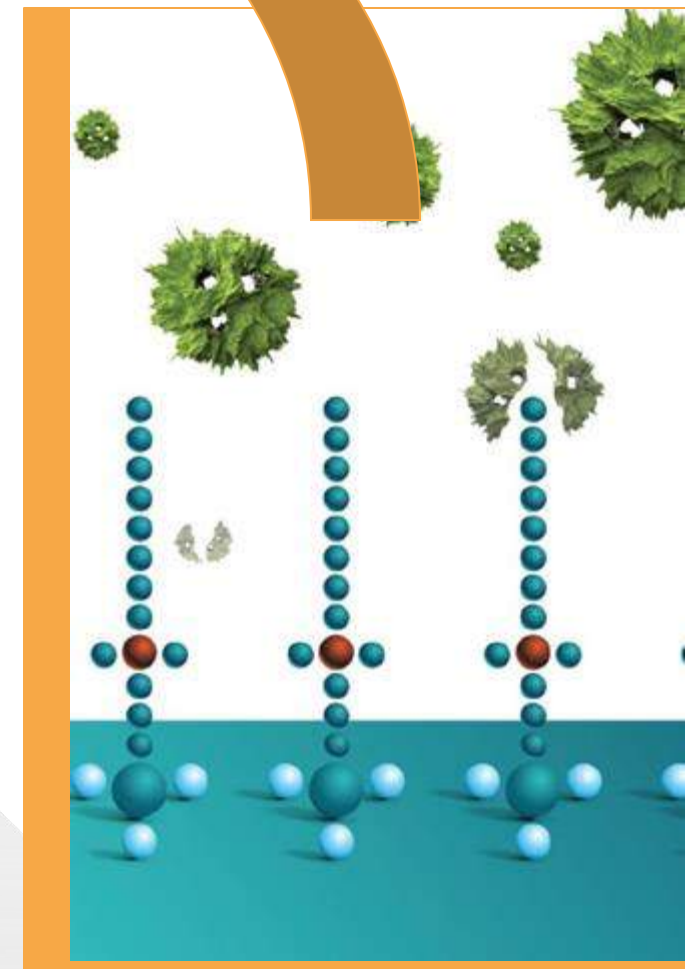
Process of → **Lysis**



Normal *E. coli* cells on untreated surface.

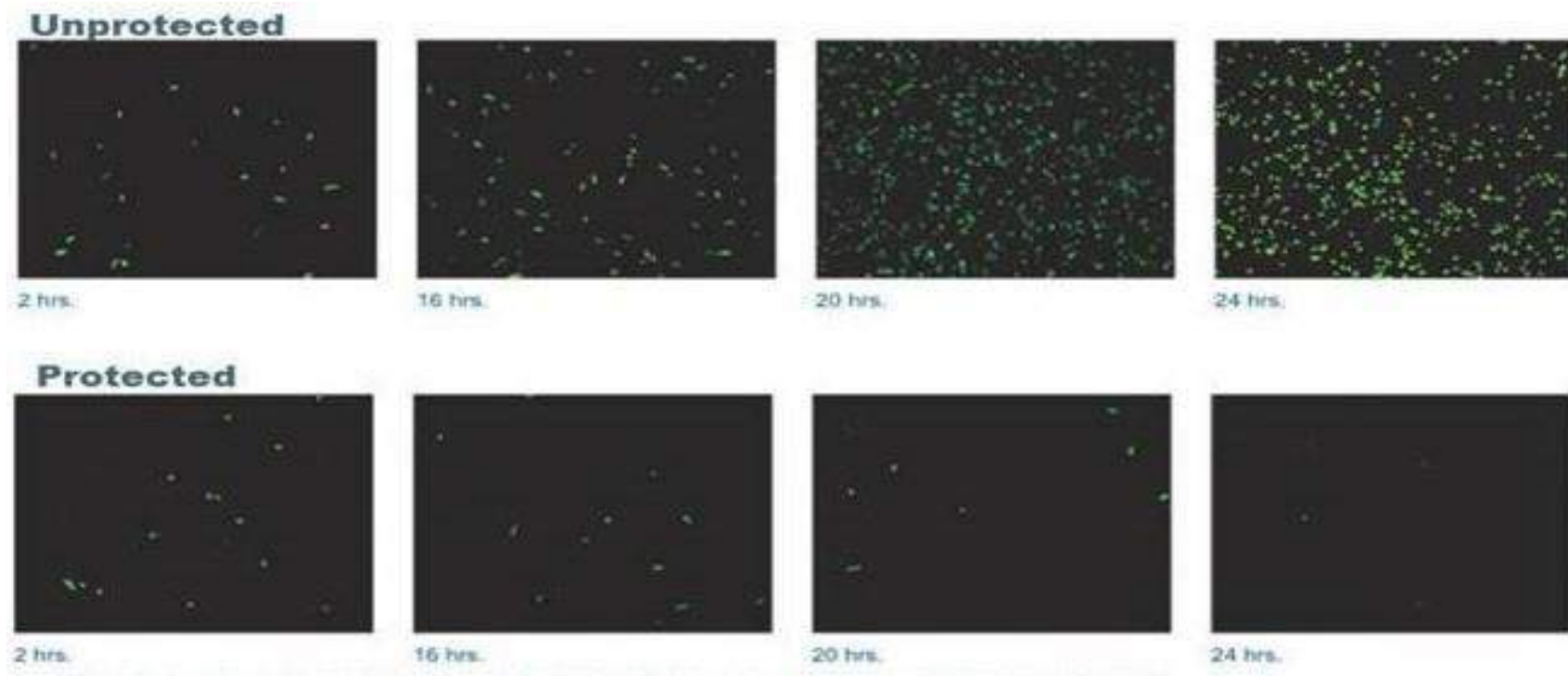


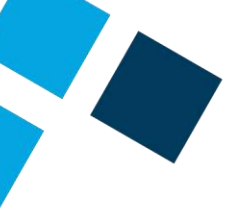
*E. coli* cells ruptured after contact with treated surface.



# Cleaner between Cleaning

99% less microbes between effective cleaning practices



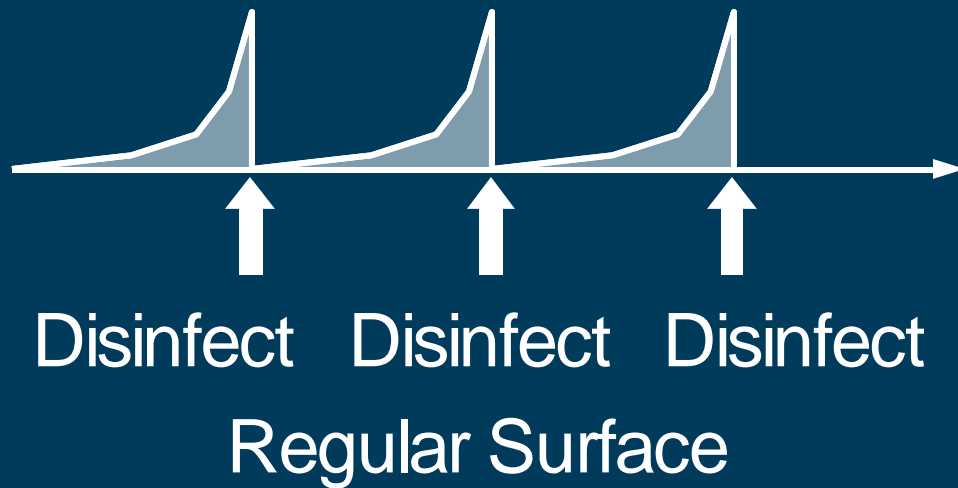


# Cleaner between Cleaning



99% less microbes between effective cleaning practices

## Typical Disinfection Protocol



AEGIS = Up to 99.99%  
Reduction in Microbes







# The Added Layer

- Durable and Effective
- Treatments effective for up to 1 Year\*
  - 6 month touch up on extremely high-touch locations
- Surfaces are easier to clean by AEGIS® inhibiting the ability for microbes to form Bio-Film
- Improves feeling of cleanliness-smoother surfaces



# Real World Testing



**New York City Transit**

**BOMBARDIER**  
*TRANSPORTATION*



 **METROLINX**



# Test Protocol – Confirmation of Effect

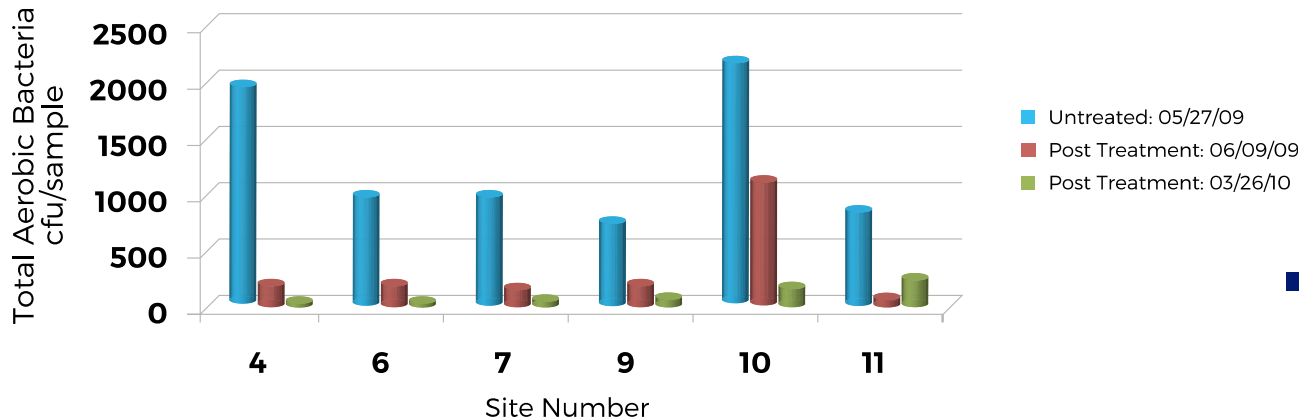


- Hygiena ATP meter
  - professional grade instrument used to measure how clean surfaces are.
  - Ranges can be set, but generally speaking “0” is sterile, anything over “30” is a fail.



# Proven Durability

Total Heterotrophic Bacteria - Street Car #4154  
Treated Sites: 500 > cfu/sample



- Street Car Transit Vehicle Follow-up Study Aegis Completed by Bombardier 2009-2010
- 96.4% Effectiveness after 10 months
  - Baseline **05/27/09**
  - Post Treatment **06/09/09**
  - 9 Months Post Treatment **03/26/10**

# Stamp of Approval



**PROTECT Surface Protection Program™** decal and certificate of completion. Custom designs can be arranged for your company ensuring the correct messaging, company colors and branding.

Utilizing the AEGIS® Logo and Microban® Logo, known worldwide for being in products & locations such as:

- Nike,
- Adidas,
- Under Armor.
- CN Towner,
- TTC,
- GO Transit,
- SEPTA Transit,
- Sunwing Travel,
- New York Transit

# Everyone Know



# Cleaning After aegis<sup>®</sup>

## Safe Products:

- Orange or green cleaner
- Bleach mixed at manufacture specs of 1:10
- Hydrogen Peroxide based cleaners
- Glass Cleaner Windex
- Regular detergents
- Ozone, UVL , Oxidizers

## Safe Techniques:

- Steam Cleaning
- Scrubbing
- Cleaning

## Not Safe:

- Items with pH 11.5+
- Industrial acids
- Surface removers
- Abrasives

Want to know more about AEGIS Microbe Shield  
Technology?

Let's talk.

info@sumnerone.com

**800.325.0985**

www.SumnerOne.com

