

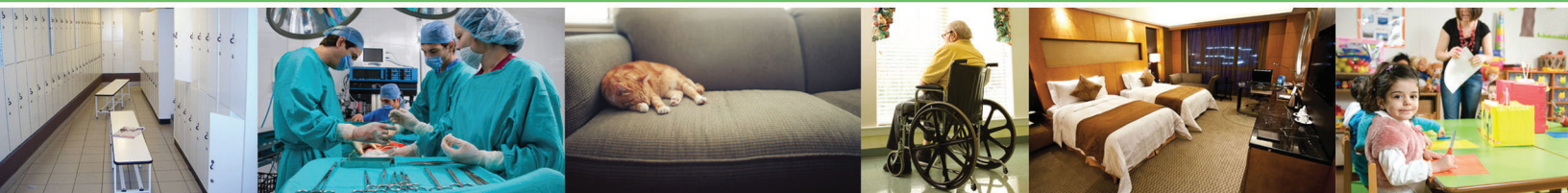
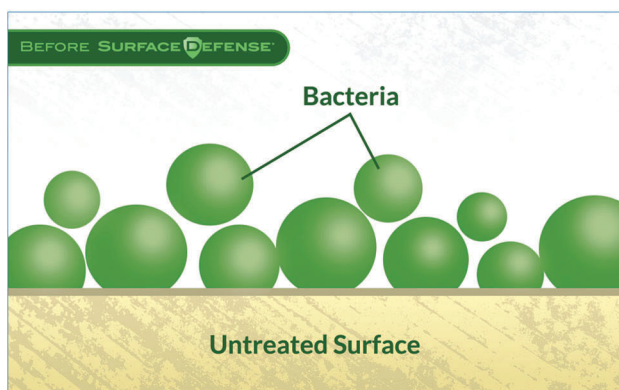
SURFACE DEFENSE®

BIOSWEEP® Surface Defense® offers unparalleled broad spectrum antimicrobial protection for all treated surfaces against harmful viruses and bacteria such as Staph and E.Coli. The antimicrobial barrier can be certified for up to one year when properly applied by your local BIOSWEEP® Provider.

BIOSWEEP® Surface Defense® is powered by MonoFoil®, an industry leading organo-functional silane technology that disrupts the target organism's cell membrane on contact. Our product molecularly bonds to any treated substrate making the entire treated area antimicrobial.

BIOSWEEP® Surface Defense® provides durable surface protection, continuously working 24/7, to inhibit the growth of microbes which can lead to sickness, stains, odors or deterioration of products.

BIOSWEEP® Surface Defense® is non-toxic, non-leaching and safe for use on all surfaces including plastic, fiberglass, metals, glass, wood, ceramics, stone, natural material and composites. Our product can also be easily applied to carpet and carpet underlay, fabric (natural and synthetic, woven and non-woven), leather, linens and all types of upholstery.



BIOSWEEP® Surface Defense® applications may include but are not limited to:

- **Athletic Gear & Apparel**
- **Wrestling & Gym Mats**
- **Locker Rooms & Training Equipment**
- **Flooring & Carpets**
- **Countertops, Cabinets & Fixtures**
- **Furniture**
- **Mattresses & Bedding**
- **Curtains & Linens**
- **Vehicle Interiors**

BIOSWEEP® Surface Defense® will not wash off or wear away for up to twelve months and can be easily reapplied as needed. Our exclusive BIOSWEEP® Surface Defense® Application Program offers periodic onsite product performance monitoring of your treated surfaces to insure lasting antimicrobial protection.

- **Resistant to all organic solvents**
- **Resistant to strong acids and bases**
- **Does not leach in water, salt or sweat**
- **Thermally stable to 550° F**
- **Colorless & Odorless**

Methicillian Resistant Staphylococcus aureus (MRSA)

	Initial Concentration	Final Concentration	Percent Reduction
Untreated Sample	2.52 x 10 ⁵ /ml	1.6 x 10 ⁵ /ml	0%
Treated Sample	1.52 x 10 ⁵ /ml	<1.0 x 10 ¹ /ml	>99.99%

(Test Method: ASTM E2149-01)

Escherichia coli (E.coli)

	Initial Concentration	Final Concentration	Test Results (cfu/ml)
Untreated Sample	100,000,000 cfu/ml (1x10 ⁸)	1000 cfu/ml (1x10 ³)	2270
Treated Sample	100,000,000 cfu/ml (1x10 ⁸)	1000 cfu/ml (1x10 ³)	<1

(Test Method: ASTM-D 4783-98a USP 51 & 61 Guidelines)

