BioShield 75
What is BioShield® 75 antimicrobial protection?

- IndusCo, LTD has introduced BioShield® 75, a patented, EPA Registered and USDA accepted, innovative new product.

- BioShield® 75 is a totally new approach to providing long lasting Antimicrobial Protection. It is a spray-on antimicrobial protectant for both porous and non-porous surfaces.

- BioShield® 75 prevents the growth of an amazingly wide array of bacteria, mold, mildew, algae and yeast. BioShield® 75 acts like a bed of microscopic spikes that pierce the cell walls of microbes. Visualize it as the fuzz on a peach.
How does BioShield® 75 work?

- The active ingredient in BioShield® 75 (Organosilane) forms a colorless, odorless, positively charged polymer, which chemically bonds to a surface.

- When a microorganism comes in contact with the treated surface, the quaternary amine sword punctures the cell membrane and the electrical charge shocks the cell.
**Silane Technology**
Si (Silicon) molecule plus O (Oxygen) molecules

**Nitrogen Technology**
N⁺ (Nitrogen +) molecule & C (Carbon) long chain molecules

**Organo Silane Technology**
Silane plus Nitrogen Technology N⁺ & Long chain molecules

**Polymerization Technology**
Organo Silane makes a durable & long lasting bond to most surfaces, porous & non-porous

**Microbial Attraction**
Microbes are attracted to the surface and the “positively” charged Nitrogen

**Microbial Penetration**
Microbes are pierced by the “long chain” of molecules.

**Microbial Destruction**
Microbes are destroyed by the combination of breaking the cell wall and the N⁺ charge
BioShield® 75

How does BioShield® 75 work?

- BioShield® 75 gives substrates an added level of protection against damaging microbes. Some examples are: bacteria, mold and mildew, these can cause stains, odors and in some cases - deterioration.

- Note - In order for BioShield® 75 to continue it’s effectiveness, normal cleaning of treated surfaces is necessary.
BioShield® 75

Biofilm
BioShield® 75

What is Biofilm?

- Biofilm is a community of single-celled microorganisms that forms on surfaces.
- A wide range of microorganisms can function, even thrive, in a community setting.
Biofilm is a major cause of antimicrobial resistance

Layers of microorganisms have an insulating effect from cleaners with the outermost reaches protecting the layers of organisms underneath

80% of all human infections are caused by some sort of biofilm
BioShield® 75

Forming Biofilm

- Reversible Adsorption of Bacteria (sec.)
- Irreversible Attachment of Bacteria (sec.-min.)
- Growth & Division of Bacteria (hrs.-days)
- Exopolymer Production & Biofilm Formation (hrs.-days)
- Attachment of Other Organisms to Biofilm (days-months)
BioShield® 75

Biofilm in action
BioShield® 75

Staphylococcus Aureus
BioShield® 75

Why should I use BioShield® 75?

- Each of us are affected by microbes in some way on a daily basis. Every object we touch can have substantial microbe infestation.

- You can now limit the amount of microbial contamination that you breathe and touch.

- BioShield® 75 is non-poisonous, non-heavy metal based and proven to protect against microbial growth.
BioShield® 75

What benefits can be expected from surfaces that are treated with BioShield® 75?

- BioShield® 75 protection continuously fights the growth of microbes that can cause stains, odors and product degradation.

- BioShield® 75 protection makes the surfaces in your business easier to clean and keeps them cleaner and fresher between cleanings.
BioShield® 75

**Once BioShield® 75 is applied do I have to clean as often or as carefully?**

- BioShield® 75 helps make surfaces easier to clean and helps keep them clean!

- However, we cannot stress enough that “**standard cleaning practices should always be maintained.**”
BioShield® 75

How long does BioShield® 75 protection work?

- BioShield® 75 is engineered to provide continuous antimicrobial product protection for ninety (90) days or greater, keeping the surfaces in your home or business cleaner and fresher for longer than ever before.

- Once BioShield® 75 is applied to the surface it will not wash off.
Conventional antimicrobial products penetrate living cells by poisoning the organism. They are designed to act and dissipate quickly to avoid adverse effects to humans and animals due to their toxic ingredients.
BioShield® 75

What is the difference between BioShield® 75 and antimicrobials with similar claims?

- BioShield® 75 takes a totally unique approach.
- Effective initial microbial elimination occurs when applied, like the conventional methods.
- The long-term control of growth on treated surfaces the remains for the life of that surface.
- The surface itself is modified to make it antimicrobial active.
BioShield® 75

Program Summary

- 25 Years of safe use
- 8-EPA Registrations
- USDA (accepted for use on food contact surfaces)
- US Patents (5)
BioShield® 75

Program Summary

- BioShield 75 controls microbes
- Microbes are bacteria, fungi or algae
- Microbes damage surfaces
- Microbes can be harmful to health
- Microbes can be unsightly and odorous
- Microbes can multiply rapidly
- Microbes are difficult to control
BioShield® 75

Program Summary

- BioShield® 75 is unique - it works by dealing a “double whammy” to microbes:
  - First it punctures the microbes PHYSICALLY
  - Then ELECTROCUTES them
BioShield® 75

Program Summary

- PHYSICALLY – it prevents microbes from laying down an efficient biofilm
- This stops microbes from reproducing
- This creates an easier to clean surface
BioShield® 75

Program Summary

- BioShield® 75 is SAFE & Non-Toxic
- Prevents the formation of Biofilm
- It does not leach poisons
- It does not cause “superbug” mutations
- It is not a disinfectant
- BioShield® 75 is a PROTECTANT
BioShield® 75

Program Summary

- BioShield® 75 has produced excellent results in independent performance testing – which means it is EFFECTIVE TO USE.

- BioShield has produced excellent results in independent toxicology testing – which means it is SAFE TO USE.
BioShield® 75

Consider the markets where users of BioShield® 75 would benefit

- Healthcare
- Dental
- Hospitality
- Education
- Corrections
- Sports
- Government
- Food Processing
- Travel
- Among many, many others
BioShield® 75

Geerpres® treats many items with BioShield® 75 prior to shipment to customers as an added value

- Stainless Steel Escort® and Escort RX™ carts
- Epoxy Coated Escort® carts
- Ergonomic Stainless Steel Downpress Wringer
- Stainless Steel Buckets
- Escort® and Escort RX™ Microfiber Carts
- Wagon Master® Housekeeping Carts
- Waste Wagon® Refuse & Soiled Linen Carts
- Side-Kick® Housekeeping Carts
- Stainless Steel Half Round Buckets
Thank you!