PROTECTING THE PRODUCTS THAT PROTECT YOU

WHAT ARE MICROBES?

MICROORGANISMS
(Microbes)
A life form of microscopic size
- Bacteria
- Algae
- Fungi (Mold/Mildew)

WHERE ARE MICROBES?

- In the air we breathe
- In the soil
- On our skin and bodies
- On items we touch everyday
- Everywhere!

HOW DO MICROBES GROW?

Ideal conditions for microbial growth:
- Food (dirt, fiber, perspiration)
- Warm Temperatures
- Moisture (humidity, rain, spills)
- Receptive Surface (skin, fabric)

Basically, the perfect environment for microbial growth is in socks and shoes!

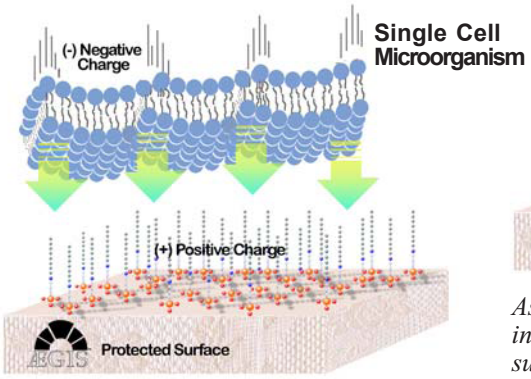
WHAT ARE ANTIMICROBIALS?

Antimicrobials control, destroy or suppress the growth of microorganisms and their negative effects of contamination, staining and deterioration.

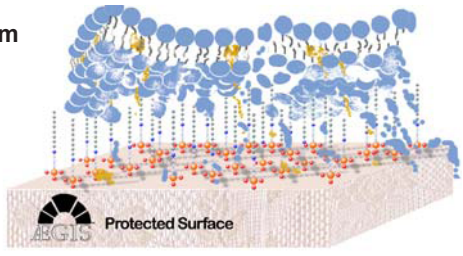
THE **mPale Difference** Quality. Safety. Durability. Effectiveness.

- Applicable to virtually all surfaces including natural and synthetic fibers, metals, masonry and building materials.
- Bonds to the surface onto which it is applied and does not rub off, wear off, wear out, or migrate from that treated surface.
- Controls or eliminates objectionable odors, unsightly stains, product deterioration, and product contamination.
- Does not create an environment that causes adaptive microorganisms.
- No arsenic, tin, heavy metals, or polychlorinated phenols (PCB's). Works via a physical disruption vs a chemical poisoning.
- Registered with the government regulatory agencies in U.S. (EPA), Canada & Europe.
- The confidence of using a product that has proven its safe and effective use since 1976.
- Unsurpassed technical, scientific, marketing and sales support that includes a professional microbiology laboratory.
- Verification: quick and easily verifiable.
- Used successfully in performance applications where safety and protection are paramount such as clean room garments, nonwoven bandages, other non-woven medical fabrics, and military litters.

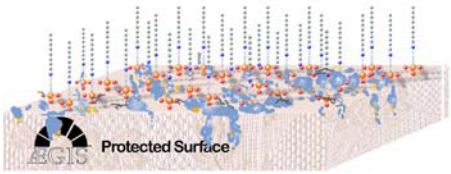
THE **mPale** UNIQUE MODE OF OPERATION



Negatively charged single cell microorganism is attracted to the positively charged mPale barrier at the surface/point of protection.



As the single cell microorganism comes into contact with the mPale protected surface, the mPale spikes pucture the cell's membrane and ruptures it. The positive charge then electrocutes the micro-organism thereby immediately disrupting the microorganism's lifecycle.



Microbes are destroyed and the mPale is not weakened or diminished. mPale is ready to fight contamination again and again, protecting that treated surface for the life of the substrate!