

mtp
global
solutions



An Amazing
Breakthrough
in Antimicrobial
Technology



Introducing... Micro-Textpur

How it works in brief

Microscopic positively charged polymers are sprayed onto a surface or fabric, and dry to form a structural bond that won't wash off or otherwise find its way into the environment.

There are no poisons, no heavy metals, no caustic substances of any kind involved - just billions of hard-working, relentless nanostructures inhibiting the growth and transfer of bacteria that cause odours, staining and deterioration.

And because they're structurally bonded to the surface or fabric, they keep on inhibiting microbes.

Benefits at a glance

- Up to 99.99% reduction in microbes like Staph A and E.Coli in one wash/spray
- Antimicrobial effect lasts months without reapplication, or the life of a garment
- No "zone of inhibition" where microbes can adapt, mutate and reproduce
- No environmental impact similar to silver-ion's flaking and leaking
- No time or effort impact on typical laundry practices and processes
- No additional cost – in fact, we believe that the long-term avoidance of claims for cross-infection will see Micro-Textpur save organisations £millions

Industries that benefit

- Hospitals
- Hotels
- Laundries
- Healthcare
- Military
- Sports
- Food
- Airlines
- Cruise Ships
- Veterinary
- Equestrian
- Domestic
- Textiles
- Oil & Gas



An Amazing Breakthrough in Antimicrobial Technology

Up to 99.99% Bacterial Reduction Proven at UK Hospital and in US Research

You run a Hospital Trust. You're in charge of health and safety for a food producer. You consult on cleanliness for the MOD. You have a large laundry contract for a leading sports club.

Whatever your interest in cleanliness, you know that there are problems. Superbugs in hospitals. Germs creeping into food production and packaging. Infections caused by army clothing.

Micro-Textpur is the solution to those problems and represents the most significant breakthrough in cleanliness for decades.

Micro-Textpur's nanotechnology inhibits the growth and transfer of microbes rather than poisoning them, so that they don't have a chance to recover, adapt, mutate and reproduce.

Bottom line: no superbugs!

Tested at a UK Hospital Trust and trialled extensively in a US Research Department, Micro-Textpur is an amazing breakthrough in cleanliness. Its application is limited only by our imaginations. The health sector, the food sector, the military, sports organisations, any office and any retail outlet – all can benefit in hugely significant ways.

Micro-Textpur will not only keep you, your staff, your patients, your customers, your members and your visitors safe, it will also guard against the costly legal battles that could have resulted from cross-infection.

Micro-Textpur is a product you should be looking at now. Please call us today for a detailed, confidential and without-obligation discussion of your situation and your needs.

A Product Proven to Protect

Trials at UK Hospital Trust and Leading Research Department Prove Performance of Enormous Worldwide Significance

The Background

Today's antimicrobial technologies try to solve the problem of microbes by poisoning them – usually with a formula that includes a heavy metal like silver – and leaving them to die.

The Challenge

The flaw in this plan is that this process can take as long as 24 hours and almost always leaves what is known as a “zone of inhibition.” What this means is that some microbes stay alive long enough to adapt or mutate, often producing stronger, more antimicrobial-resistant offspring, such as MRSA.

The Additional Problem

This happens with the “silver-ion process.” An additional problem is that silver-ion products can flake off fabrics and leak into the environment, killing beneficial species and affecting people who are allergic to these heavy metals.

The Solution

Micro-Texpur is the solution. Micro-Texpur's technology is based on an exhaustive study of important scientific literature, which shows that the surface of bacteria has a negative electrical charge. This means that if the bacteria can be brought into contact with a positively charged surface, it can be immobilised.

Further study reveals that the positively charged surfaces of some polymers not only attracted bacteria but ruptured their cell walls on contact, inhibiting their growth and transfer immediately and leaving no zone of inhibition – and thus no chance for them to mutate, adapt or reproduce.

Because of its unique ion-bonding technology (co-polymerised monomers of ammonium chloride salt combined with silane (SiH4)), Micro-Texpur stays where you put it, inhibits the growth and transfer of odour-causing bacteria instantly upon contact, and, most importantly, keeps on inhibiting microbes for many months before reapplication is necessary. On textiles, Micro-Texpur will not wash off and will last the life of the fabric.

The Testing

The Department of Biology at The University of North Carolina at Pembroke is one of the leading micro-biology testing laboratories in the United States.

We asked Biology Department Chairman Dr. Andrew Ash and Principal Investigator Dr. Marilu E. Santos to measure Micro-Texpur's performance in rigorous blind tests against other antimicrobial products - as well as against untreated surfaces.

Dr. Santos describes the project: “It has been recognised in the antimicrobial industry that a product was required which killed microbes instantly without establishing a zone of inhibition which would produce ‘super microbes’ and which would not leach into the environment and kill beneficial species. Micro-Texpur LLC has developed an antimicrobial product with such desirable properties. The product needs to be tested for antimicrobial activity using the American Standard Testing Methods (ASTM) by an independent party.”

The Results

In the AATCC 100 and AATCC 147 tests, the Micro-Texpur product inhibited the growth and transfer of 99.99% of all microbes. No product tested outperformed Micro-Texpur on any AATCC test.

And in the all-important ASTM - E test, Micro-Texpur inhibited the growth and transfer of every single microbe on contact, whilst no silver-ion product could pass the ASTM standard even after a full two hours.

The Corroboration

Micro-Texpur has also been tested in the UK. It was applied in the tunnel washers at an NHS Hospital, with the following results:

- The washer system did not need to be modified to accommodate Micro-Texpur's introduction;
- The cost was approximately the same as using a premium detergent;
- Samples washed with Micro-Texpur showed reductions in Staph A and E.Coli of between 92% and 99.99% on the first application;*
- A control sample washed without Micro-Texpur showed an increase in bacteria of 47%.

**The evaluation was designed to add a small amount of antimicrobial to each wash and achieve a 3 to 4 log reduction (99.9 to 99.99%) by the third to fourth wash. We achieved these results on the FIRST application of Micro-Texpur.*

The Product

Micro-Texpur is available in liquid and spray form, and in a variety of sizes, depending on the nature and volume of your requirements.

What are your cleanliness challenges? How can we help your organisation or your industry? For a detailed, confidential and without-obligation discussion of your situation and your needs, please do not hesitate to contact us now.



A New World of Cleanliness; a Whole Galaxy of Applications

Micro-Textpur is a product whose function is so basic and yet whose performance is so beneficial, that its usefulness and value are unlimited

Once you really start to think about the difference that Micro-Textpur makes – cleanliness that is instant, cleanliness that does not harbour or incubate its opposite, cleanliness that does not pollute as a by-product, and cleanliness that lasts – its usefulness and its potential value are endless.

It's an entirely new prescription, if you will, for the health and safety side of Healthcare. It's a new recipe for Food preparation standards. And it should be more than a passing fashion for Apparel manufacturers and users. It can be used in the Military, Police, Sports (in fact, anyone who wears a uniform) to guard against infections.

Exploring the Healthcare applications, as an example, will show us just some of its benefits in more detail.

Healthcare: a microcosm of the microbial world

One of the most significant threats to Healthcare today comes from nosocomial infections, which can be caused by microorganisms on surfaces and other materials in the hospital or healthcare provider. In fact, many people put off needed visits to a healthcare facility just because they're afraid of catching one.

These deadly infections are caused by bacteria, parasites, fungi and other microorganisms, spread, according to infectious disease experts, by inadequate hygiene.

Keeping a healthcare facility (whether it's a hospital, doctor's office, drugstore or veterinary clinic) clean and sterile can be almost impossible.

That is because, until recently, even the most expensive antimicrobial cleaner didn't actually kill the microbes on contact, but just poison them. This could take as long as 24 hours and almost always left a "zone of inhibition," which meant that some of the microbes stayed alive long enough to adapt, mutate or reproduce.

This allows quick evolution permitting the microbe to produce offspring that have a stronger tolerance to the poison. Eventually they can become completely resistant to it and a super bug like MRSA is created.

In trials in the UK and in the US, Micro-Textpur has been seen to inhibit the growth and transfer of up to 99.99% of microbes on one application (be it added to the wash or sprayed on a door handle). Micro-Textpur keeps on protecting for months before reapplication is necessary. Micro-Textpur does not produce a "zone of inhibition" that allows the bug to mutate and grow. It does not pollute the surrounding environment like silver-ion solutions do. It does not impact on existing cleaning practices and processes. And it is no more expensive than detergent.

If Micro-Textpur can solve the hospital superbug problem, what could it do for your challenges, your organisation, your industry?

A Tradition of Textile Expertise you can Trust

Listening to our clients – and learning from clinical research – produced the solution that is Micro-Textpur

Micro-Textpur is the result of over 30 years of research and innovation in the hi-tech textile, antibacterial, antimicrobial and associated health markets.

Micro-Textpur is a division of the Supreme Corporation, one of the world's largest high performance engineered textile producers, an organisation whose mission is to work closely with our clients to develop innovative products that exactly meet their needs.

Through our work in the food processing industry, we perfected our unique application technique to textiles which resulted in our 2011 USA Patent. We are experts in the application of our green antimicrobial to textiles and hard/soft surfaces and can apply our eco-friendly antimicrobial in the most cost effective way possible.

This “team approach” allows us to use the correct amount of antimicrobial to achieve the result required by the customer. This ranges from the reduction of odours to the inhibition and transfer of infectious microbes.

Merely wounding microbes precipitates even more drug-resistant generations

Our clients told us how concerned they were about dangerous odour-causing bacteria and how existing antibacterial and antimicrobial products were not eradicating the problem. They were not eliminating the microbes on contact, merely wounding them. This shortcoming precipitated an even more threatening scenario, as the surviving microbes, once recovered, would mutate, adapt and reproduce, and their offspring would be even more antimicrobial-resistant.

It therefore became Supreme Corporation's mission to solve this problem – to create a product that would inhibit the growth and transfer of microbes on contact, without leaving a zone of inhibition which would allow the microbe to mutate into a drug-resistant form.

The result is Micro-Textpur – the climax of many years of research, testing and retesting with confirmations performed by the University of North Carolina at Pembroke, NC, USA, and independent tests at an NHS Trust Hospital in the UK.

Micro-Textpur currently applies antimicrobial to food processing and industrial safety apparel, in healthcare institutions and in resort and vacation properties in the United States. Based in Hickory, North Carolina, our company is ready to meet the challenges faced by your organisation and will provide “turn-key” antimicrobial solutions tailored to your environment and substrate.



What are your cleanliness challenges?

How can we help your organisation or your industry?
For a detailed, confidential and without-obligation
discussion of your situation and your needs,
please do not hesitate to contact us now.

mtp
global
solutions

MTP Global Solutions Ltd.

Manor Farm, Chilcomb,
Winchester, Hampshire,
SO21 1HR, UK

London: +44 (0)203 651 3908

Edinburgh: +44 (0)131 563 7289

Manchester: +44 (0)161 300 4865

Winchester: +44 (0)1962 710 503

Email: info@mtp-globalsolutions.com

Web: mtp-globalsolutions.com

