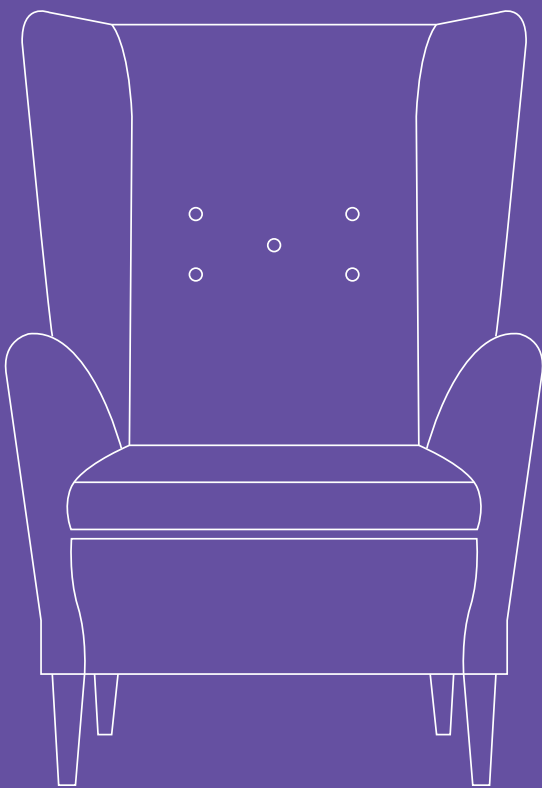


FAUX LEATHER AND VINYL WITH PROTECTIVE TEXTILE TECHNOLOGY



Acryltron[™]
technology



shieldplus[™]
technology

'At the core of the Panaz philosophy is the desire to innovate, to develop fabrics which outperform their competition, solve our clients' problems and continually enhance the features and benefits of our products.

Specifically, recent developments include our faux leather protective technologies: Shield Plus and Acryltron.



It is true that most healthcare upholsteries include an anti-microbial agent to inhibit the growth of bacteria and spread of infection.

That said, like everything in life, 'not all antimicrobials are created equal'.

The question is: does that anti-microbial just tick boxes or is it truly effective in reducing the routes to infection and cross contamination?

Shield Plus is a revolutionary fabric technology unlike all others in the market place. Unlike silver and other inorganic anti-microbials, it is a non-leaching, non-depleting anti-microbial which inhibits bacteria with immediate effect.

It is enduring and active for the life of the fabric - thus eliminating the risk of adaptive organisms. Moreover it targets the broadest spectrum of microbes and is effective even against the C Diff **Spore**.

The logo for Acryltron Technology, featuring the word 'Acryltron' in a pink, sans-serif font with a trademark symbol, and 'technology' in a smaller, white, sans-serif font below it.

A lot is expected of faux leather and vinyl upholsteries. They are the upholstery of choice in high traffic areas or extreme healthcare environments.

The many and varied staining substances and the detrimental effects of chemical cleaning fluids are a constant challenge.

In answer to this, Panaz developed Acryltron for our faux leather and vinyl upholsteries. The benefit is a more resilient and durable coating. Invisible and undetectable, Acryltron provides an unparalleled level of performance.



Studies show that the environment is the largest source of cross infection within hospitals, reporting between 19-40% happening in the cubicle area from seating, lockers, drapes etc. Prominent within this area is patient and hospital visitor seating.

Panaz Cadet, Vyflex, Aston, Stingray and Brookland are now protected with Shield Plus™ technology. This antimicrobial is effective against the broadest spectrum of bacteria : even the Clostridium Difficile spore.

Most anti-microbials can counter C Diff in its vegetative state: it is anaerobic and fragile in the environment. However, Shield Plus™ technology is unique in its ability to inhibit even the C Diff **spore**.

Please refer to the independent certificate on page 5.

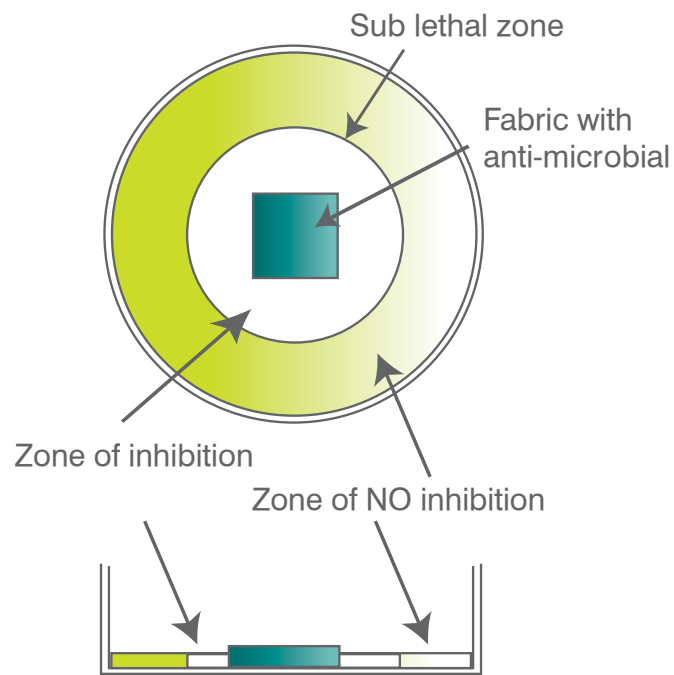
This protective treatment from Panaz employs a non-migrating (non-leaching) anti-microbial protection that acts on the physical structure of the cell by piercing the cell wall. This non-migrating, non-leaching antimicrobial does **NOT DEplete** and remains bonded and durable upon the upholstery for the lifetime of the fabric.

NON MIGRATING

- Anti-microbial acts by a mechanical process which attracts the bacteria and stabs the cell wall and electrocutes the biochemicals within
- Does not migrate or deplete
- Does not cause adaptive cells
- Does not create immunity to the agent
- Kills bacteria on contact
- Remains effective for the life of the product

// THE PROBLEM
/ MIGRATING / LEACHING ANTI-MICROBIALS

// THE SOLUTION
/ NON-MIGRATING / NON-LEACHING ANTI-MICROBIALS

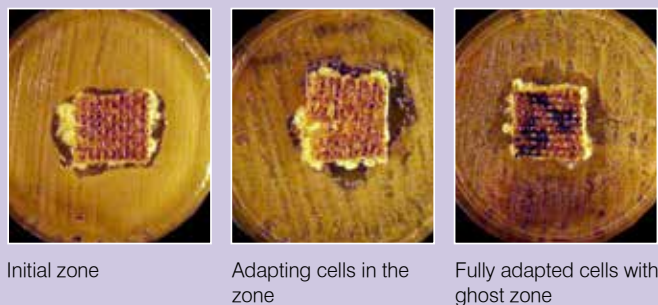


Migrating anti-microbials are initially effective but are used up and depleted during the course of working.

This migrating action is clearly demonstrated by the AATCC 147 test which produces the 'Zone of inhibition' shown left:

Products employing migrating technologies include: BioCote, Cliniweave, Irguard, See it Safe, BioActive and Enduracide which is used in many disposable curtains.

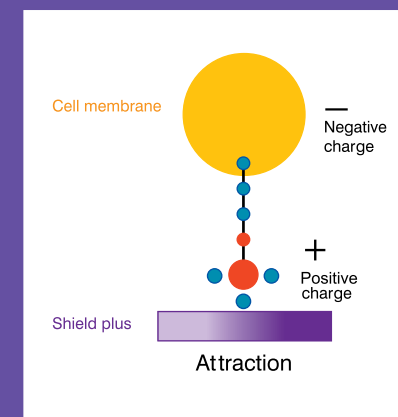
Potential to create adaptive cells and immunity



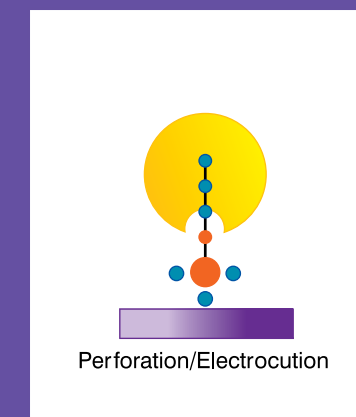
The 'zone of inhibition' is created by a migrating anti-microbial and clearly denotes the area where the anti-microbial has leached from the treated fabric to kill the surrounding micro-organisms.

The outermost edge of the zone is where resistant microbes produced by the leaching process can be found. The exposure of the microbe to a depleted dose (or sub-lethal dose) of an anti-microbial can cause mutation of their genetic materials allowing for resistance. This replicates through the reproductive process creating generations of micro-organisms that are no longer affected by the chemistry.

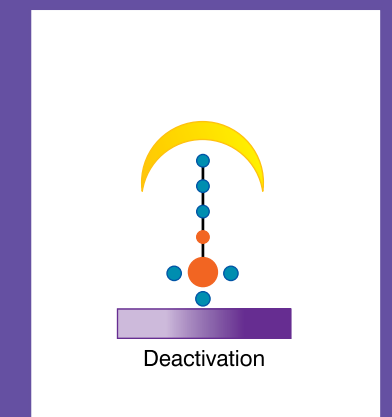
Shield Plus™ is a non-migrating technology. This technology, is based upon the permanent application of a non-migrating molecular treatment in the vinyl. This destroys bacteria on contact. It is permanently bonded within the fabric and does not act by 'poisoning' the microbe but, on a molecular scale, physically stabs the membrane and electrocutes the biochemicals within it.



The micro-organisms are attracted by the Shield Plus™ molecular coating by a negative and positive charge.



Upon contact, the cell membrane is punctured. This piercing mechanism deactivates, preventing growth and proliferation.



A safe and optimal anti-microbial protection is provided, even after frequent washes at thermal disinfectant temperatures.

// **PROVEN**
/ INDEPENDENT TESTING

TEST REPORT
AATCC 147-2004



Lab ref – 4536a
Prepared by – D.Mellors

Report date – 26/4/12
On behalf of - Panaz Ltd
Address – Spring Mill
Fence, N r Burnley,
Lancashire
BB12 9HP

Page – 1 of 2

Period of analysis – 30/01/12 – 03/02/12

Test Sample: Panaz Aston (coated surface in contact with the agar)

Control Sample: Not provided

Test Method: AATCC 147-2004

Aim:

The object of the test is to determine whether the test textile has bacteriostatic activity.

Test Organisms: MRSA NCTC 12493, *Klebsiella pneumonia* ATCC 4352, *E. coli* NCTC 10418 and *Clostridium difficile* spores NCTC 11209.

Results:

Organism	Product	Visible Growth Under the Fabric
MRSA	Panaz Aston	No Visible Growth
Kl. pneumoniae	Panaz Aston	No Visible Growth
E.coli	Panaz Aston	No Visible Growth
Cl. diff spores	Panaz Aston	No Visible Growth

Discussion:

According to the standard to constitute acceptable bacteriostatic activity there must be no bacterial colonies directly under the sample in the contact area.

From the results obtained the fabric would be considered to have bacteriostatic activity against the test organisms.

No inhibition was noted around the fabric and hence it can be concluded that the antibacterial agent did not diffuse into the surrounding area.

// **Acryltron™ TECHNOLOGY**
/ MORE RESISTANT & RESILIENT THAN STANDARD
FAUX LEATHER AND VINYL UPHOLSTERIES

Acryltron™
technology

Market leading faux leathers, Aston and Brookland, are now protected by Acryltron™.

Independent comparative performance tests on Aston with Acryltron™, and close rival faux leathers, showed that Aston with Acryltron™ has improved resilience to staining and cleaning achieving full marks (Rating 5) on the Grey Scale.

Acryltron™ provides a more resilient and durable coating for faux leathers which, whilst invisible and undetectable, provides an unparalleled level of performance.

Another innovation from

Panaz®
Innovation in contract fabrics



Certificate No: 2358



Innovation in contract fabrics

NHS Contract Number
FAG49 I000

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