



# Ultrafabrics Product Information

Who Is Ultrafabrics?

Benefits

Hydrolysis Testing

Takumi Technology

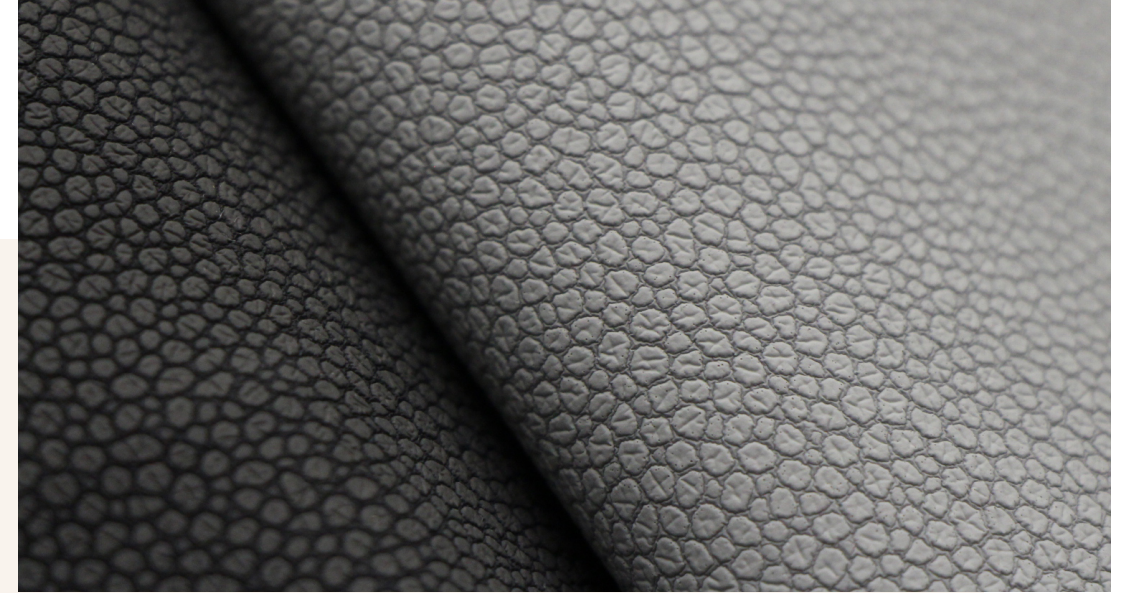
Cleaning

## ABOUT US.

Our company is based on American and Japanese expertise combined and perfected.

We take 5 decades of artisanal tradition and elevate it with future-focused innovation.

With studios and production spanning the US, UK and Japan, we collaborate across cultures to deliver category-changing solutions to a variety of markets.



**MADE  
IN JAPAN.**

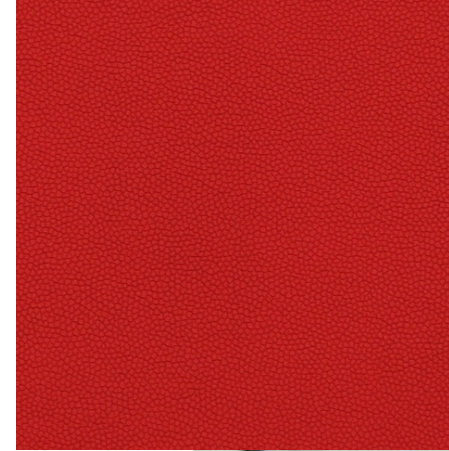
**ENJOYED  
ALL OVER  
THE WORLD.**

# WE ARE THE MILL

This means close collaboration from idea to delivery.

It means complete quality control from machine to market.

Every production is infused with the core elements of our process and philosophy: a passion for possibilities and perfection.



We believe in the spirit of pioneering.  
We foster a culture of curiosity and ambition,  
united in a desire to constantly improve.

Touch the Future is not just our tagline.  
It's our ethos. It guides everything we do.

Touch the Future is about creating fabrics that  
perform - by solving problems and speaking  
to the senses.

We respond to the demands and dreams  
of our markets:

**SOFTER**  
**BETTER**  
**STRONGER**  
**MORE BEAUTIFUL**  
**HIGHER PERFORMING**

and answer to the human needs of tomorrow.





**ULTRA MEANS  
BEYOND.**

**AND WE GO THERE.**

**Pioneering Technology**  
Quality first with Takumi

**Category-defining Performance**  
Intelligence engineered

**Sensorial Experiences**  
Rewriting the language of touch

**Perfect Partners**  
A culture of attentive collaboration

**Future Focused**  
Raising the bar on responsibility

# Benefits of Polyurethane Fabric

<b>Performance Advantages</b>	<b>Polyurethane</b>	<b>Leather</b>	<b>PVC</b>
<b>Animal Friendly</b>	✓	✗	✓
<b>No Formaldehyde/Chromium</b>	✓	✗	✗
<b>Low VOCs</b>	✓	✓	✗
<b>Phthalate Plasticizer Free</b>	✓	✓	✗
<b>Optimal Yield</b>	✓	✗	✓
<b>Fade Resistant</b>	✓	✗	✓
<b>Crack Resistant</b>	✓	✗	✗
<b>Odorless</b>	✓	✗	✗
<b>Skin Friendly</b>	✓	✗	✗
<b>Soft Hand</b>	✓	✓	✗
<b>Resistant to Harsh Cleaners &amp; Bleach Solution</b>	✓	✗	✓

\* There may be fabrics available in each category that will deviate from advantages listed above.

## Not All Polyurethanes are Alike

Brisa® | Ultraleather® | Ultratech™

Not all coated fabrics perform to consistently impress. Ultrafabrics are crafted to last, as we are obsessed with quality that stands the test of time.

**Hydrolysis testing** is the most important criteria in determining whether a polyurethane will endure in seating applications found in high-traffic settings such as healthcare and hospitality. The process evaluates the integrity of a coated fabric to resist delamination - cracking and flaking of the surface - utilizing humidity and heat to simulate environmental conditions such as air conditioning, body heat and moisture from perspiration when seated.

Ultrafabrics tests for hydrolysis resistance to both **ISO 1419, Method C** (Accelerated Ageing) and **ASTM D3690-02 Section 6.11** (Hydrolytic Stability).

It is important to understand the differences between the two tests.

- The **ISO method\*** is considered a passive test, as sample material is kept in a controlled chamber with high levels of heat and humidity for a number of weeks, then visually compared against a control sample for degradation.
- The **ASTM method** is considered an active test since the sample material undergoes stringent performance testing for evaluation of possible changes in coating strength before and after being in the chamber. The physical testing includes adhesion, surface abrasion and resistance to flexing which emulates end-use performance.

\*The Association for Contract Textiles (ACT) recommends a minimum of 5 weeks to ISO 1419, Method C to be considered suitable for commercial upholstery use.

### Polyurethane Test Results (ISO 1419 Method C)

#### Ultrafabrics® Polycarbonate Polyurethane

Average product life: **14+ weeks**  
Superior hydrolysis resistance

#### Low Quality Polyurethane

Average product life: **Less than 5 weeks**  
Hydrolysis failure



**Note:** The number of weeks of hydrolysis testing has no direct correlation to years of service in the field.

Over time, break down will occur in inferior constructions. Ultrafabrics results in lasting hydrolysis resistance due to proprietary, high-grade, polycarbonate resins and backcloth compositions formulated into our Takumi™ Technology manufacturing process - proven to out-perform the competition.

# TAKUMI™ TECHNOLOGY

by Ultrafabrics.



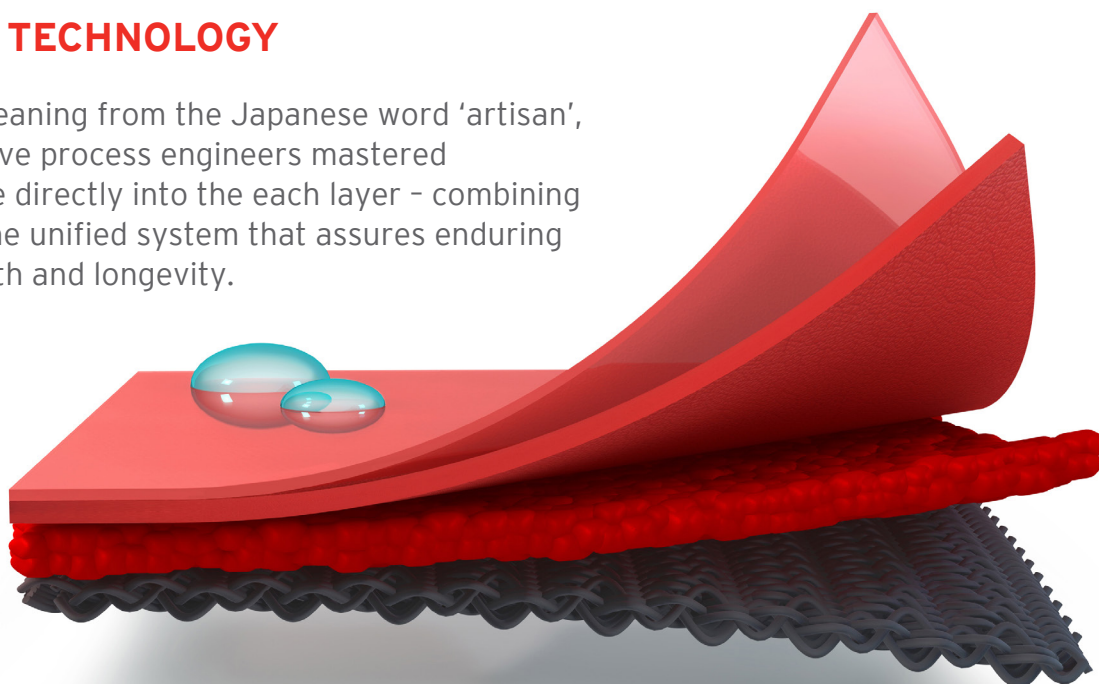
## Crafted Intelligence

Our proprietary Takumi™ Technology makes up the DNA of every roll leaving our mill. Continually perfected, Takumi is the only process able to achieve the premium quality of Ultrafabrics.

These principles define our proprietary Takumi technology, inherent in the creation of Ultrafabrics polyurethane materials. Our dedication to perfection and consistency delivers an experience that changes

## TAKUMI™ TECHNOLOGY

Taking its meaning from the Japanese word 'artisan', this innovative process engineers mastered performance directly into the each layer - combining them into one unified system that assures enduring bond strength and longevity.



### ● Surface Layer

Adds durability for ease of care and low maintenance. Protects from stains. Withstands harmful effects of harsh cleaners and disinfectants. Repels liquids.

### ● Topskin Layer

Unique polycarbonate resins engineered for maximum hydrolysis resistance and enduring strength. Azo-free pigments are infused for long lasting color vibrancy.

### ● Microfoam Layer

Polycarbonate foam structure for added cushioning. High moisture transfer provides ultimate thermal comfort when seated.

### ● Substrate

Reinforced rayon fibers or blends provide dimensional stability. Superior foundation delivers high performance, and upholstering ease.



# Preferred Cleaners and Disinfectants for Ultrafabrics® Polyurethanes

Brisa® | Ultraleather® | Ultratech™

Ultrafabrics engineers high-performance polyurethane materials utilizing proprietary Takumi™ Technology that includes premium quality polycarbonate resins in our manufacturing process. This ensures we stay ahead of the cleaning and disinfecting challenges faced by lesser quality polyurethane constructions, and withstands the various cleaners and disinfectants essential for keeping high-traffic environments clean and sterile.

Below is a list of cleaners and disinfectants that have been tested on Ultrafabrics materials with passing results when cleaning guidelines are followed as directed\*:

ALCOHOL-BASED CLEANERS & DISINFECTANTS	BLEACH-BASED DISINFECTANTS	HYDROGEN PEROXIDE BASED DISINFECTANTS	QUATERNARY-BASED DISINFECTANTS
<ul style="list-style-type: none"> <li>• Fantastik®</li> <li>• Formula 409®</li> <li>• Isopropyl/Rubbing alcohol (70%)</li> <li>• Veridien Viraguard®</li> </ul>	<ul style="list-style-type: none"> <li>• 1:5 bleach/water solution</li> <li>• Clorox® Dispatch® Hospital Center</li> <li>• Clorox® Germicidal Bleach</li> <li>• PDI® Sani Cloth® Bleach</li> </ul>	<ul style="list-style-type: none"> <li>• Ecolab® Oxycide™</li> <li>• Hydrogen Peroxide (3%)</li> <li>• Virex® TB</li> <li>• Virex® II 256</li> <li>• Virex® 5</li> <li>• Virox® Accel® TB Wipes</li> </ul>	<ul style="list-style-type: none"> <li>• 3M™ Neutral Cleaner 3L</li> <li>• 3M™ Neutral Quat 23L</li> <li>• Biotrol™ Birex®</li> <li>• Clorox® Disinfecting Wipes</li> <li>• Ecolab® Asepticare® TB + II</li> <li>• Ecolab® Discide®</li> <li>• Lysol® Disinfecting Wipes</li> <li>• Metrex™ CaviCide™</li> <li>• Metrex™ CaviWipes™</li> <li>• PDI® Sani-Cloth® Plus</li> <li>• PDI® Super Sani-Cloth®</li> <li>• Steris Coverage Plus Germicidal Wipes</li> </ul>

\*Do not saturate/soak material with cleaner/disinfectant. Rinse with clean water after exposure to eliminate residue. This recommendation will prolong the life of various furniture components (thread, seam, foam, etc.) that can potentially be impacted by cleaner/disinfectant residue.

\*\*Warning: this information is not a guarantee. Please use all cleaning and disinfecting agents safely and as instructed. The use of other cleaning agents, disinfectants, conditioners, or protectants can degrade fabric performance and may void Ultrafabrics warranty.

