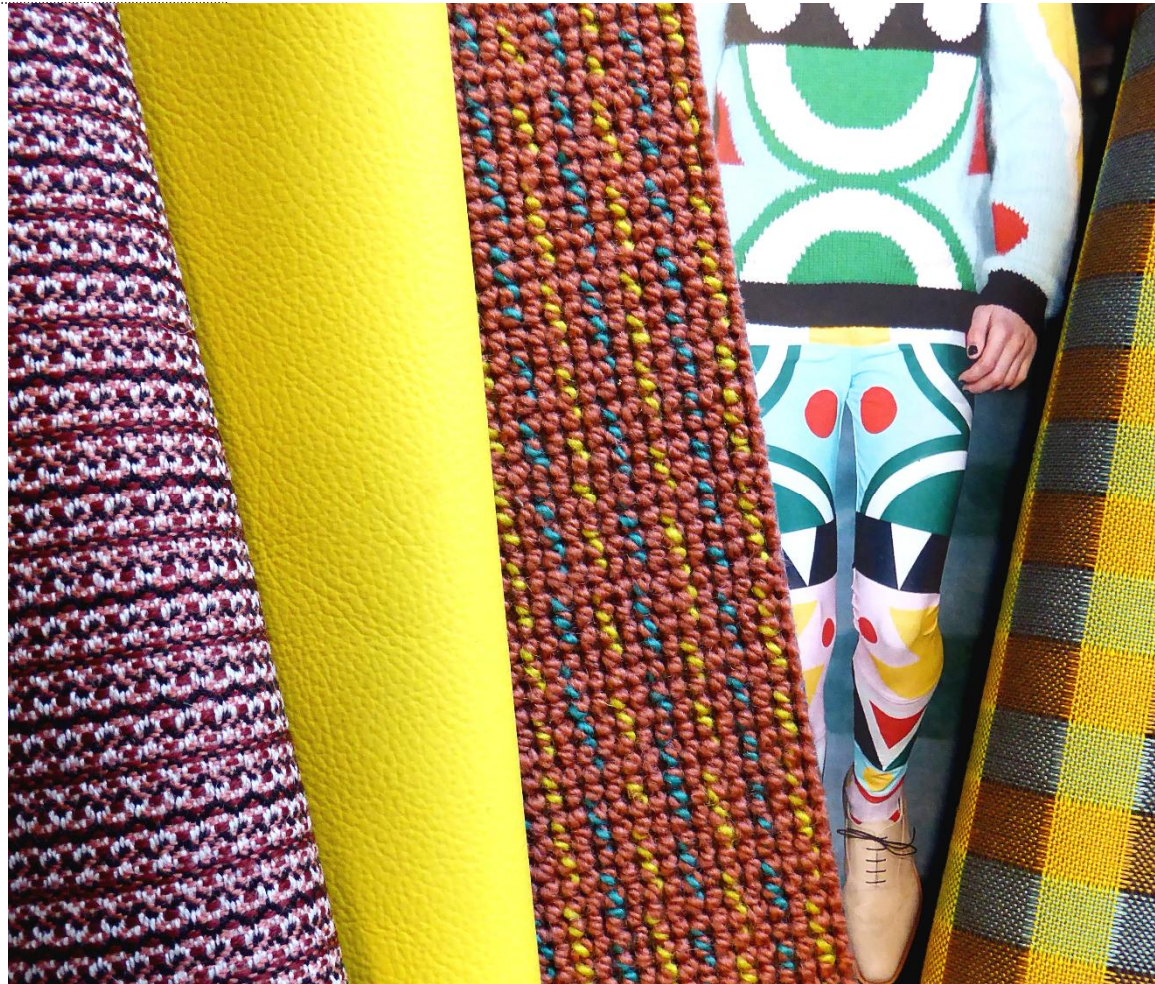


Lantal's new TEC-Leather

TEC-Leather

Table of contents

- 01 Motivation
- 02 Key features
- 03 Technical data
- 04 Composition
- 05 Cut & Sew
- 06 Cleaning
- 07 MOQ and colors



TEC-Leather

Motivation



Looking for an innovative material which has a **leather look, is lightweight, easy to clean, comfortable, has no cut loss and comes with a reasonable price**. Lantal developed TEC-Leather. In terms of properties and performance, this new innovative quality is far superior to other known leather and artificial leather products offered in the market.

TEC-Leather is an ingenious alternative to artificial leather, composition leather and even real leather and offers great benefits for the passenger's **health and well-being**.



TEC-Leather

Key features

Cleanability

- Unmatched ease of cleaning
- Stain repellent



TEC-Leather has an unique level of cleanability – but it is also stain repellent and therefore has a high resistance to stains.

Well-being

- Soft touch
- No skin irritation
- Great thermal properties
- Vegan



TEC-Leather offers the best comfort for passengers.
It is one of the best bio compatible products on the market.

Cost savings

- Lightweight
- No fireblocker needed
- Certification by similarity



Thanks to it's low weight, easy make-up and the fact that no fireblocker is needed. TEC-Leather is a great possibility to save money.

Appearance

- Seat-cover stays in shape for a long time – no sagging
- Easy make-up for various seat-shapes



Due to the high stretchability of TEC-Leather, it has no sagging and looks like new for a long time.

TEC-Leather

Key features - Cleanability

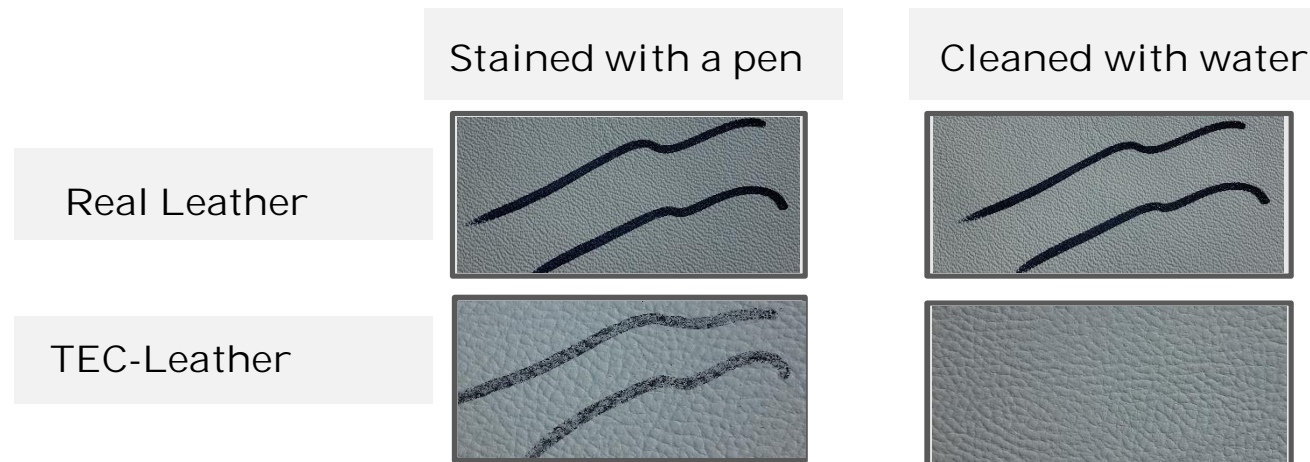


Unique level of cleanability:



TEC-Leather offers an unmatched ease of cleaning. Most stains can be cleaned just with a dry cloth. In addition, it also has a high resistance to stains and dirt, therefore reducing the overall need for cleaning.

Furthermore, it is also insensitive to oils (massage oils, sun cream, etc.), to body fluids and alcohols.



TEC-Leather

Key features – Well-being



Comfort for passenger:



TEC-Leather sets a new standard for passenger comfort. With it's **soft touch** and **peach skin effect** it offers up a new sensorial experience.

TEC-Leather is also **non-cytotoxic** and causes **no skin irritation**. Furthermore, it is **resistant to fungal growth**.

TEC-Leather is also **vegan** – it contains no products from animals

Even in case of long **direct** contact with human body:
No dead skin cells were observed.
Conclusion: TEC-Leather is **non-cytotoxic**.



TEC-Leather

Key features – Cost savings



Thanks to the very good fire retardant properties, TEC-Leather needs **no additional fireblocker* and scrim to pass the seat burn test.**



Thanks to this, a seat cover construction with genuine leather is up to 65% heavier – a construction with composition leather is up to 31% heavier than a seat cover with TEC-Leather.

		Genuine Leather	Composition Leather	TEC-Leather
Seat construction	Weigh (g/m2)	800	500	650
	Foam 5mm (kg/m3)	45	45	45
	Scrim (g/m2)	220	220	0
	Fireblocker (g/m2)	200	200	0
	Use per seat cover (m2)	1.8	1.8	1.8
Weight per cover	Weight Leather (g)	1440	900	1170
	Foam 5mm (g)	405	405	405
	Scrim (g)	396	396	0
	Fireblocker (g)	360	360	0
Total	Total weight per cover (g)	2601	2061	1575
	+/- Weight (g)	1026	486	0
	Deviation in %	65%	31%	0
	per plane (A320 à 180 pax)			
	Weight per plane (kg)	468	371	284
	+/- Weight per plane (kg)	185	87	0

*based on foam Metzeler FRM-C45

TEC-Leather

Key features – Cost savings



TEC-Leather is a new, innovative material. For that reason, it is necessary to certify one color of TEC-Leather if you choose it for your project.



Once a color of TEC-Leather is certified, it will be possible to certify other colors of TEC-Leather by similarity.

This allows for various colors inside a plane without additional certification costs or even on one seat as a design option.



TEC-Leather

Key features – Appearance

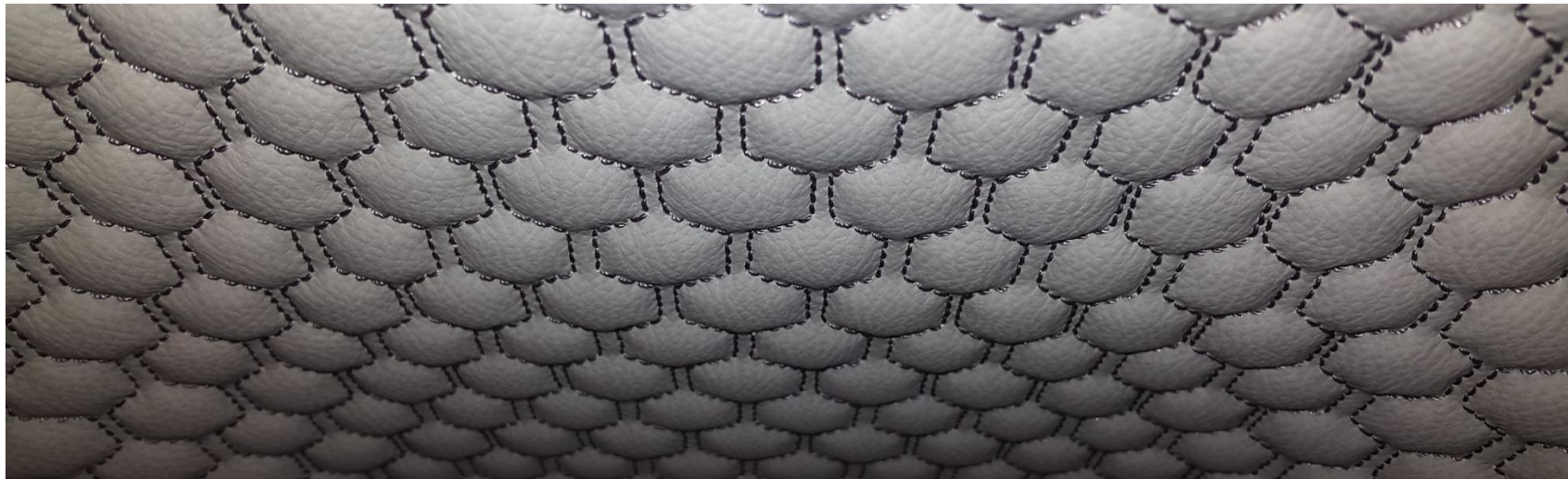


Easy make-up:



TEC-Leather is uniquely suited for complex seat-shapes.

Thanks to its elasticity – convex and concave seat shapes are no problem.



TEC-Leather

Key features – Appearance

Good appearance over a long time:



The high elasticity of TEC-Leather has a further advantage. Thanks to this, the seat cover stays in the exact same shape - it has **no sagging** - and therefore looks like **new for a long time**.



TEC-Leather keeps the original shape



Genuine leather shows sagging over time

TEC-Leather

Key features – Appearance



Artificial ageing:

The artificial ageing test simulates the weathering effects that occur when materials are exposed to sunlight (either direct or through window glass) and moisture as rain or dew in actual usage.



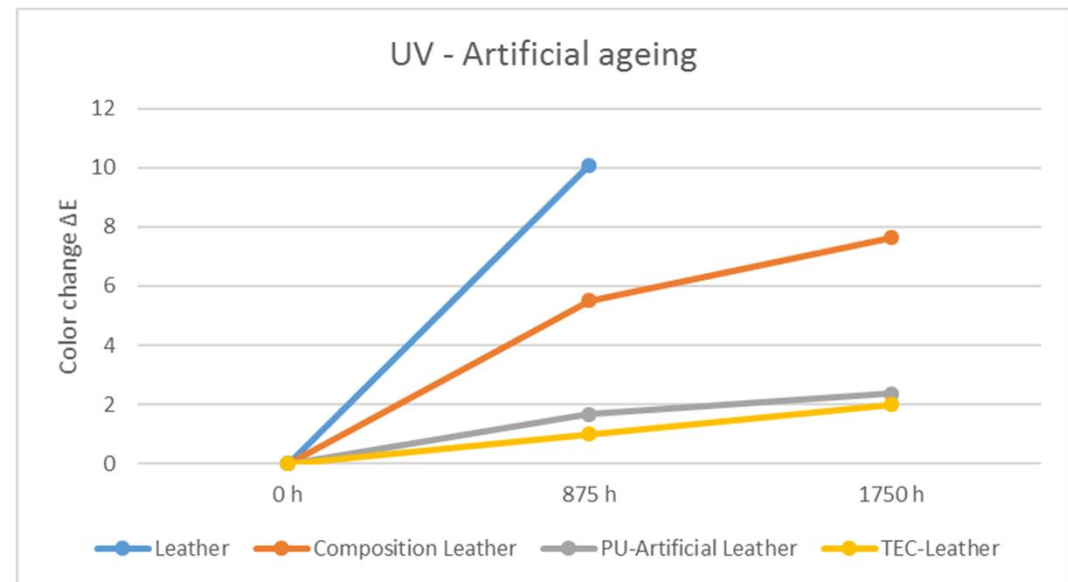
The color change gives an indication how the appearance of the test samples changes over time.

A smaller rate of color change means less alteration of the appearance over time.

Reference test: ASTM G154

Cycle with:

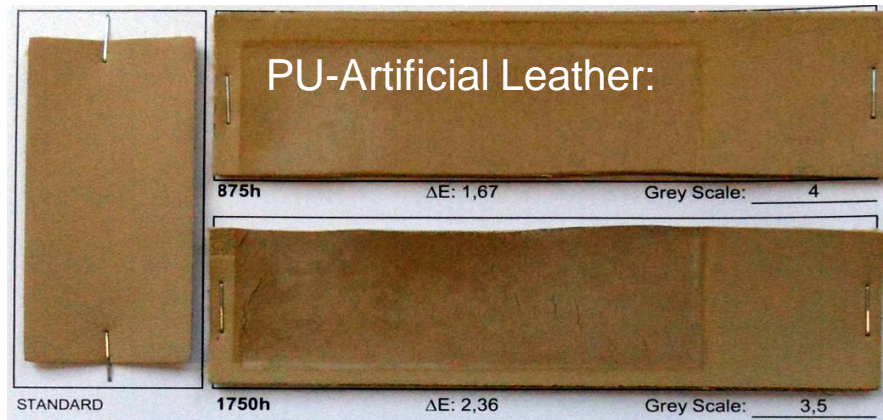
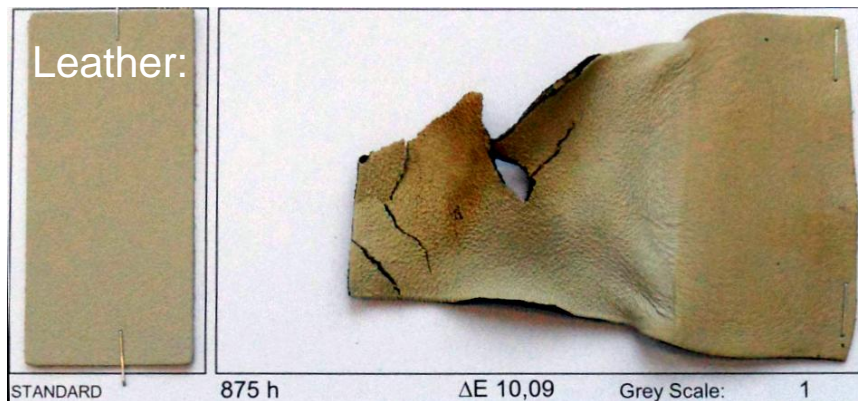
- 8h UV at 60°C with 1.55W/m²/mn
- 4h moisture at 50°C



TEC-Leather shows considerably less color change in comparison to leather/composition leather.

TEC-Leather

Key features – Appearance



TEC-Leather

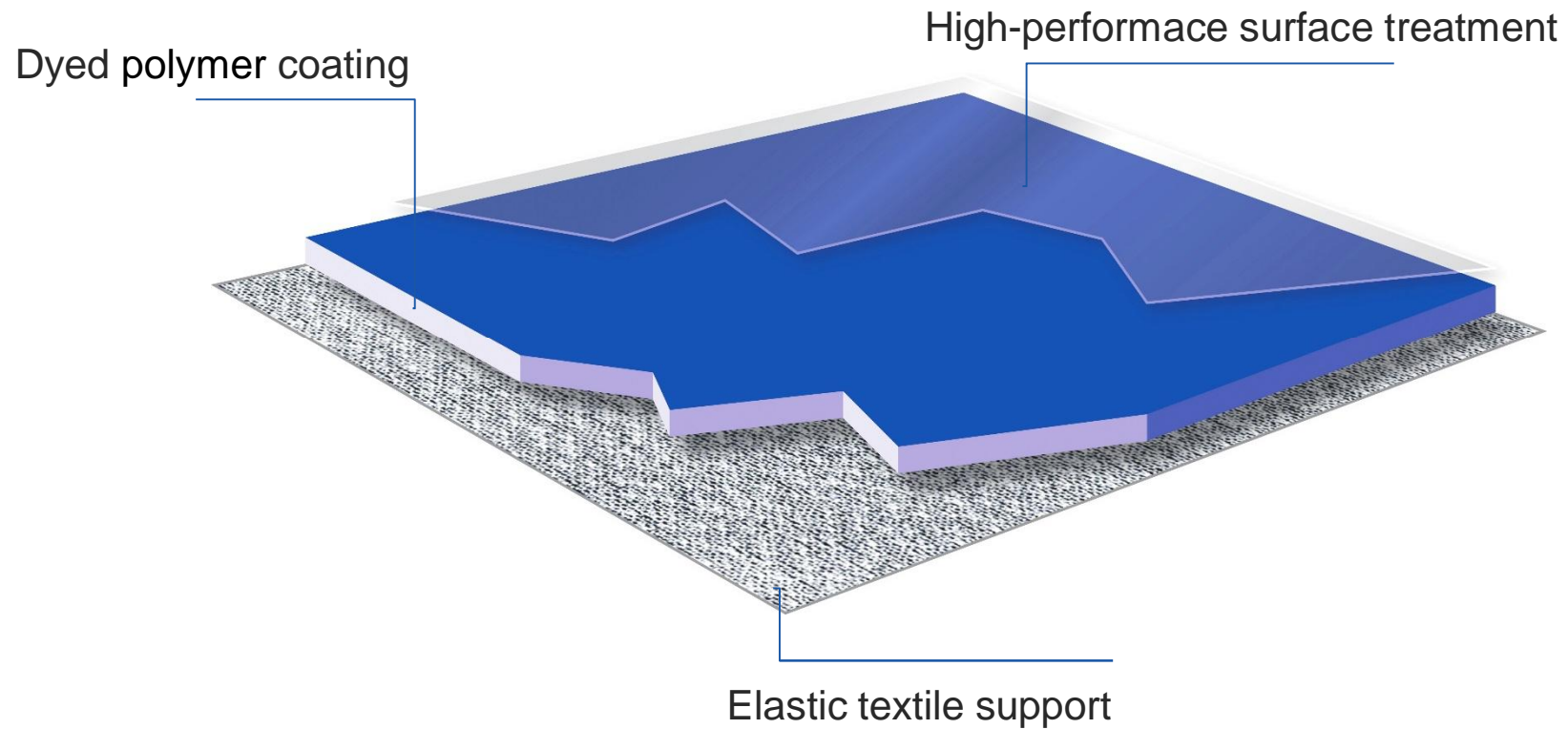
Technical Data

TEC-Leather	
Composition	Polymer
Weight	650 g/m ² (± 5%)
Width	146 cm
Standards	FAR 25.853, BMS 8-87, ABD 0031 Seat burn test < 7.5% (based on foam Metzeler FRM-C45)
Colors	Customized colors
Service lifetime*	Approx. 3-5 years



*The specific service lifetime depends largely on routing (long-haul, short-haul), geographical routes, load factors and cleaning attitudes.

TEC-Leather Composition



TEC-Leather

Cut & Sew



Sizing

Due to the product's elasticity, the sewing patterns of genuine leather cannot be used for TEC-Leather.

Sewing

- Machine: Triple feed sewing machine
- Needle: 110 – 120
"R" shape (round tip) with a thin yarn (Nm 30 or 40) is recommended.
- Corners need to be sewn to prevent tearing.



Installation

We recommend to implement TEC- leather on soft materials (foam, cotton ...).

For more information please consult Lantal's Cut & Sew Guidelines



Cut & Sew
Guidelines

TEC-Leather

Cleaning recommendation



Spot removal

Use a dry soft wipe or cloth to remove the stain. If this is not sufficient, use a sponge or a wipe impregnated with water. For the stronger stains we recommend to use an alcoholic solution.

Main cleaning

Use a wipe and impregnate the wipe with an alcoholic solution.

Remove the dirt in a circular motion. Rinse the surface with a wipe and water.

à Never use an abrasive sponge or a strong brush, you could damage the surface.

à We do not recommend the usage of solvent detergents other than alcohol to clean TEC-Leather.

These solvents can damage the surface

For more information please consult Lantal's cleaning recommendation.



TEC-Leather

MOQ and colors

Normal production quantity for customized colors is 1400m² (1000 lm). Lower production quantities are possible on request, up from 430m² (300 lm) per color.

- Two surface texture available
 - smooth for a technical look (FK09730144FL*)
 - structured for a leather look (FK09727144FL*)
- Customer specific color samples (A5) on request
- Leadtime: Color samples: 2 - 3 Weeks
Production: 7 - 8 Weeks
- Roll width: 146 cm
- Roll length: 25 lm or according to arrangement



Lantal – The ultimate in well-being for passengers



***Do something for the uniqueness and
the identity of your service brand and
its income potential.***

Talk to Lantal!