



TFL HYDRO PU **HY**

Innovative uppers for classy sneakers and high- performance sport shoes

» Sustainable coating solutions from TFL



TFL – Great chemicals. Excellent advice.



Environmentally friendly processes for sustainable materials

TFL Hydro PU stands for innovative LeatherLike materials providing the elegance of genuine leather in the most authentic way.

LeatherLike materials which are produced with TFL Hydro PU technology do not require the wet-coagulation-process of traditional PU-Leather

- No use of harmful solvents like DMF or toluene
- Reduced consumption of water and energy
- TFL Hydro PU chemistry guarantees the processing under safest conditions to workers and environment
- One-step-coating process allows highest transparency in the Supply Chain

Moreover, TFL chemicals guarantee compliance with the ZDHC-MRSL list as well as with REACH and all EU directives and major national and international regulations.



TFL is a member of:

- Leather Working Group
- ZDHC (Zero Discharge of Hazardous Chemicals)
- CADS (Cooperation at DSI)

This is part of TFL's ambitious product stewardship strategy, which is to offer safe chemical products to customers and to give excellent advice on their safe use to protect employees, public health and the environment.

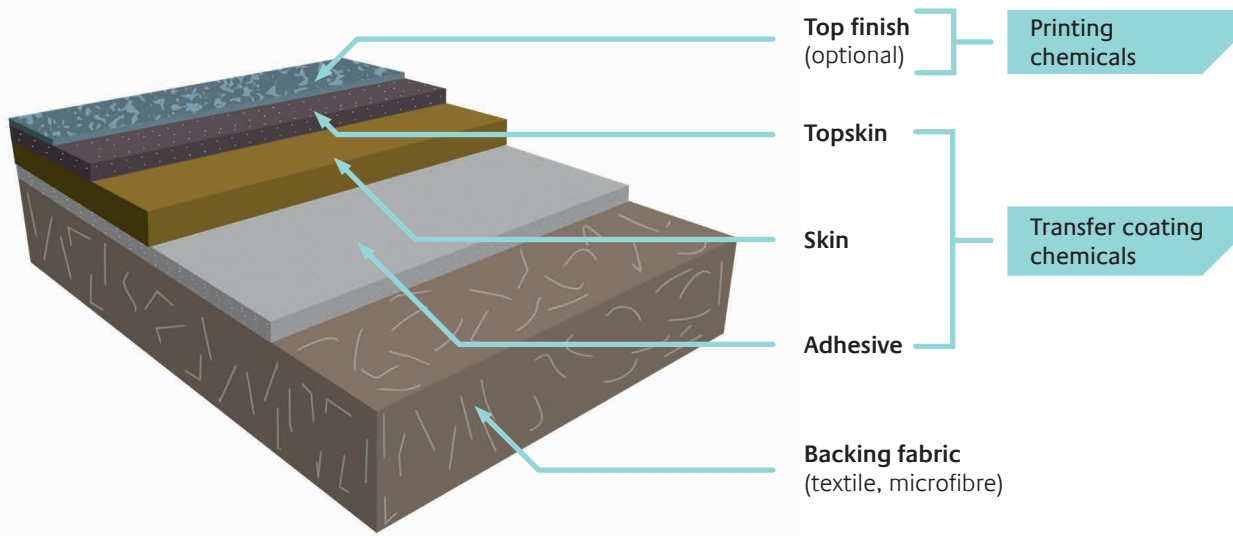
Endless design options with the feel and touch of real leather

With a long history in leather making and as one of the market leaders in leather chemicals, TFL knows how the look and feel of leather should be. TFL Hydro PU technology allows any design option and enables our customers to combine the appearance of LeatherLike materials and finest high-class leather.



Best performance for high-class end articles

TFL Hydro PU technology meets highest performance standards regarding breathability, surface resistance and robustness. Water-based PU technology guarantees trouble-free processing and consumer-safe end products.



Censored by ISC Germany under industrial production conditions

TFL Hydro PU has been tested regarding its aptitude for the industrial footwear-manufacturing process. The test-production was carried out at ISC Pirmasens/Germany under industrial conditions with positive results.

Category	Test method /unit	Microfibre base	Action-leather
→ Dry flexing	Bally - no of cycles	200.000 +	100.000 +
→ Wet flexing	Bally - no of cycles	NA	100.000 +
→ Adhesion, dry	kgs/cm	3,5	2.5 +
→ Adhesion, wet	kgs/cm	3	2 +
→ Cold flexing	Bally - no of cycles @ - 20o C	80.000 +	NA
→ Hydrolysis	1 week at 70°C, 95 % humidity	NA	No change in flexing and adhesion
→ Hydrolysis	10 % NaOH - 24 hrs	no cracks on film peel strength kgs 3+ / cm	NA
→ Abrasion	Tabor, H 22 / 1 kgs load - no of cycles	300	200
→ UV yellowing – white sample	grey scale	5	5
→ UV yellowing – color sample	grey scale	5	5
→ rub fastness dry	200 cycles	5	5
→ rub fastness wet	200 cycles	5	5





www.tfl.com