

From casual footwear to professional sport shoes

>> Wet End and Finishing solutions



QUALITY SPORTS



Leather – the latest trend in Sport Shoes

Why Leather is Simply Better

There are good reasons why leather is back in the running and increasingly replacing textiles and synthetics as the most popular material for sport shoes. Leather is simply the most comfortable and durable material for such applications. It possesses a combination of both elastic and plastic properties. What's more, it can not only be made water-resistant but is also characterized by good water vapour absorption and permeability, which results in unmatched wearer comfort. Moreover, leather is ideal for almost any type of sport footwear ranging from casual or leisure footwear to professional sport shoes and from hiking boots to golf shoes.

Whatever leather is used – smooth, embossed or milled – the requirements vary greatly from application to application. Here, it is particularly helpful to fall back on the decades of expertise and experience TFL has gained in sport-shoe leather. Its premium products, renowned for their consistently high quality, ensure safe and simple processing to create leather that is ideally suited to the demands of modern sport shoes.

Why Less is More

For the retanning and finishing processes a compact and perfectly attuned portfolio for manufacturing all the common types of leather used for sport shoes, e.g. Standard, Nappa, Floater and Waterproof is available. The specific retanning and fastness properties can be efficiently achieved through the use of only a few TFL products. Moreover, they have all been put through thorough stringent practical tests to ensure they satisfy all the demands of the retanning and finishing processes.

Another decisive advantage TFL can offer is process efficiency. It is not just that you need fewer products for many articles; there is also the added benefit that short recipes reduce the complexity of the production process and simplify process management.

Last but not least, TFL enables you not only to reduce the amount of chemicals you need for retanning and finishing but also to lower your storage costs.







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Achieving the required retanning properties

TFL offers a comprehensive but compact portfolio of the retanning products required for all common types of sport-shoe leather. These auxiliaries, mineral syntans, syntans/resins, acrylics/polymers, and softening/waterproofing agents are detailed in the tables below. Crucial properties, such as tightness, softness, fullness, degree of whiteness, milling capability and light fastness, can be determined during retanning.

That is why the right choice of retanning products and product combinations is essential to achieve the desired properties. Here you can rely on our expertise, experience and application-specific advice.

The right retanning products for every sport shoe

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| Tor every spore snoc | | Standard Type | | | Nappa Type | | Floater Type | | Waterproof | | |
|------------------------|--------------------------|---------------|-------|-------------------|------------|-------|--------------|-------|---------------|---------------|-----------------|
| | Product Applications | Black | White | White Embossed | Black | White | Black | White | Black Golf | White Golf | Black Soccer |
| AUXILIARIES | BAYKANOL® PFM-C | х | х | х | - | х | - | - | - | - | - |
| | BLANCOROL® CGA-C | - | _ | - | х | - | х | х | х | - | Х |
| MINERAL | BLANCOROL® ZB 33-N | - | _ | _ | - | - | - | - | - | X | - |
| SYNTANS | BLANCOROL® RC | х | _ | - | - | - | - | - | - | White Golf | _ |
| SYNTANS / | RETINGAN® R7 | X | - | - | x | - | - | - | x | - | Х |
| RESINS | TANIGAN® 3LN/3LF | - | - | - | - | - | х | х | - | х | - |
| | TANIGAN® HO | - | х | х | - | - | - | - | - | - | - |
| | TANIGAN® PAK | х | х | х | Х | Х | Х | Х | - | Х | - |
| | TANIGAN® UW | - | Х | Х | - | Х | - | Х | - | Х | - |
| | TANIGAN® VR | х | _ | - | Х | - | - | - | Х | - | Х |
| ACRYLICS / POLYMERS | LEUKOTAN™ FW-2E/FW-2G | - | Х | x | - | x | - | x | - | - | - |
| | LEVOTAN® AT 01 | - | - | - | - | х | х | х | - | - | - |
| | LEVOTAN® C 01 | - | Х | Х | Х | Х | Х | Х | Х | _ | Х |
| | BAYTIGAN® AR | - | _ | _ | - | - | - | - | х | - | Х |
| | LEUKOTAN™ 8090 | - | х | х | х | - | - | - | - | - | _ |
| SOFTENING / | LEVOTAN® LB | Х | _ | _ | X | - | X | - | X | х | Х |
| WATER- PROOFING | LEVOTAN® WS | _ | - | - | - | х | - | х | х | х | Х |
| AGENTS | LUBRITAN™ SPE | Х | х | х | - | х | - | - | - | - | - |



The properties sport shoes need

| | Product Characteristics | Tightness | Softness | Fullness | Whitness | Milling | Light Fastness |
|---------------------|--------------------------|-----------|----------|----------|--|----------|-------------------|
| AUXILIARIES | BAYKANOL® PFM-C | +++ | ++ | +++ | ++ | ++ - +++ | ++ |
| | BLANCOROL® CGA-C | ++ | ++ | + | ++ | ++ | ++ |
| MINERAL | BLANCOROL® 7B 33-N | ++ | + | +++ | 111 | | +++ |
| SYNTANS | BLANCOROL® RC | ++ - +++ | ++ | ++ - +++ | | | +++ |
| | DEMINEOROE NE | | | | · | • • | |
| SYNTANS / | RETINGAN® R7 | ++ - +++ | ++ | ++ | + | ++ | + - ++ |
| RESINS | TANIGAN® 3LN/3LF | +++ | + | + | +++ | ++* | +++ |
| | TANIGAN® HO | ++ | ++ | ++ | ++ ++ -++ ++ ++ ++ ++ ++ ++ ++ ++ +++ ++ +++ ++ +++ ++ +++ ++ +++ ++ +++ ++ +++ ++ +++ | ++ | +++ |
| | TANIGAN® PAK | ++ - +++ | ++ | ++ | ++ | ++ - +++ | ++ - +++ |
| | TANIGAN® UW | ++ | ++ | ++ | +++ | +++ | +++ |
| | TANIGAN® VR | +++ | ++ | ++ | ++ | +++ | ++ |
| | | | | | | | |
| ACRYLICS / POLYMERS | LEUKOTAN™ FW-2E/FW-2G | ++ | + | ++ | +++ | ++ | +++ |
| | LEVOTAN® AT 01 | ++ - +++ | ++ - +++ | +++ | ++ | ++ - +++ | +++ |
| | LEVOTAN® C 01 | ++ - +++ | + | + | ++ | +++ | +++ |
| | BAYTIGAN® AR | ++ - +++ | ++ | ++ | ++ | ++ - +++ | +++ |
| | LEUKOTAN™ 8090 | +++ | +++ | ++ - +++ | ++ | +++ | +++ |
| SOFTENING / | LEVOTAN® LB | ++ - +++ | +++ | ++ | ++ | ++ - +++ | ++ - +++ |
| WATER- PROOFING | LEVOTAN® WS | ++ - +++ | +++ | ++ | | ++ - +++ | +++ |
| AGENTS | LUBRITAN™ SPE | ++ - +++ | ++ - +++ | ++ - +++ | ++ | ++ - +++ | +++ |

 $[\]ensuremath{^\star}$ Improves milling pattern if used in combination with other syntans

x = product applied

+ = average ++ = good +++ = very good

Achieving the required finishing properties

When it comes to finishing all types of sport shoes, TFL offers an easy-to-handle portfolio of base coat binders, auxiliaries, top coat binders and crosslinking agents. Here again, your main benefit is that all common leather articles can be efficiently finished with only a few products.

By using our products and suitable product combinations you can manufacture leather with the widest possible range of fastness properties – flexibility, heat resistance, waterproofness, light fastness and abrasion resistance.

The right finishing products for every sport shoe

| for every sport snoe | | Standard Type | | | Nappa Type | | Floater Type | | Waterproof | | |
|-------------------------|-------------------------------|---------------|-------|-------------------|------------|-------|--------------|-------|---------------------------------------|---------------|-----------------|
| | Product Applications | Black | White | White Embossed | Black | White | Black | White | Black Golf | White Golf | Black Soccer |
| AUXILIARIES | ACRYSOL™ RM-819W | х | х | х | х | Х | Х | х | Х | х | Х |
| | AQUADERM® FLUID H | Х | Х | х | Х | Х | Х | х | Х | х | х |
| | AQUADERM® X-PIGMENTS B / C | х | х | Х | х | х | х | Х | х | Х | х |
| | EUDERM® MATT SN 2 | Х | Х | Х | Х | х | Х | Х | Х | Х | Х |
| | EUDERM® FILLER M | Х | х | х | х | х | х | х | х | х | х |
| | AQUADERM® ADDITIVE XF | Х | Х | Х | х | х | х | Х | х | х | Х |
| BASE COAT BINDERS | BAYDERM® BOTTOM ELW | Х | Х | Х | - | - | - | - | Х | Х | Х |
| | BAYDERM® PREBOTTOM APV | Х | - | - | х | _ | Х | - | Х | - | X |
| | BAYDERM® BOTTOM PG | Х | - | - | Х | _ | Х | _ | Х | _ | Х |
| | PRIMAL™ SB-160 EMULSION | Х | Х | х | Х | х | Х | Х | х | Х | х |
| | PRIMAL™ SB-300 | Х | Х | х | Х | х | Х | Х | х | Х | х |
| | PRIMAL™ SCL-371 | х | х | - | х | Х | х | х | х | х | Х |
| TOP COAT BINDERS | AQUADERM® FINISH HW2 | Х | Х | Х | - | _ | - | - | Х | Х | Х |
| | AQUADERM® MATT 102 | Х | Х | Х | Х | х | Х | Х | х | Х | Х |
| | BAYDERM® X-TRA FINISH TV | Х | Х | Х | Х | х | Х | Х | х | Х | х |
| | OPTI-MATT™ A-2000LV | х | Х | х | х | х | х | Х | х | х | Х |
| CROSS- LINKING | AQUADERM® XL 50 / XL 5010 | х | X | х | Х | х | Х | х | Х | х | Х |
| AGENTS | AQUADERM® XL 71 | Х | Х | Х | Х | Х | Х | Х | x x x x x x x x x x x x x x x x x x x | Х | |

x = product applied



The properties sport shoes need

| | Product Characteristics | Flexometer Dry | Flexometer Wet | Flexometer Cold | Heat Resistance | Light Fastness | Abrasion Resistance | Waterproof Properties | | | |
|-------------------|-------------------------------|---|-------------------|--------------------|--------------------|-------------------|------------------------|--------------------------|--|--|--|
| AUXILIARIES | ACRYSOL™ RM-819W | Rheology modifiers with no or little influence on the phys. properties | | | | | | | | | |
| | AQUADERM® FLUID H | QUADERM® FLUID H Rheology modifiers with no or little influence on the phys. properties | | | | | | | | | |
| | AQUADERM® X-PIGMENTS B / C | n.a. | n.a. | n.a. | +++ | +++ | n.a. | n.a. | | | |
| | EUDERM® MATT SN 2 | n.a. | n.a. | n.a. | +++ | +++ | n.a. | n.a. | | | |
| | EUDERM® FILLER M | n.a. | n.a. | n.a. | ++ | ++ | n.a. | + | | | |
| | AQUADERM® ADDITIVE XF | n.a. | n.a. | n.a. | +++ | +++ | +++ | ++ | | | |
| BASE | BAYDERM® BOTTOM ELW | +++ | +++ | +++ | +++ | +++ | +++ | +++ | | | |
| COAT BINDERS | BAYDERM® PREBOTTOM APV | ++ | + | - | - | - | n.a. | ++ | | | |
| | BAYDERM® BOTTOM PG | +++ | +++ | +++ | - | - | n.a. | +++ | | | |
| | PRIMAL™ SB-160 EMULSION | +++ | ++ | + | ++ | ++ | n.a. | + | | | |
| | PRIMAL™ SB-300 | +++ | +++ | +++ | +++ | +++ | n.a. | ++ | | | |
| | PRIMAL™ SCL-371 | ++ | + | - | + | + | n.a. | + | | | |
| TOP COAT | AQUADERM® FINISH HW2 | +++ | +++ | +++ | +++ | +++ | +++ | +++ | | | |
| BINDERS | AQUADERM® MATT 102 | ++ | ++ | ++ | +++ | +++ | ++ | ++ | | | |
| | BAYDERM® X-TRA FINISH TV | +++ | ++ | ++ | +++ | +++ | ++ | ++ | | | |
| | OPTI-MATT™ A-2000LV | ++ | ++ | + | +++ | +++ | ++ | ++ | | | |
| CROSS- LINKING | AQUADERM® XL 50 / XL 5010 | +++ | +++ | +++ | +++ | +++ | +++ | +++ | | | |
| AGENTS | AQUADERM® XL 71 | +++ | +++ | +++ | +++ | +++ | +++ | +++ | | | |

n.a. = not applicable - = poor + = average ++ = good +++ = very good

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