



# BEST OF DIGITAL FORUM MAY 2021

Presented by Alexa Dehmel for THE LOOP by PERFORMANCE DAYS & FUNCTIONAL FABRIC FAIR



# WELCOME

to today's Expert Talks Live Webinar Series

## “BEST OF DIGITAL FORUM MAY 2021“

### SHOWING SUMMER 23

created for „THE LOOP“

by PERFORMANCE DAYS & FUNCTIONAL FABRIC FAIR

June 8, 2021

Please remember: all materials can be ordered via the digital platform:

<https://www.performancedays.com/performance-forum/fabrics.html>



**THE  
PERFORMANCE FORUM  
MAY 2021**

More than  
600 Product  
submissions

from more than  
170 exhibitors

## The PERFORMANCE TABLES

244 selected fabrics

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Presented online at

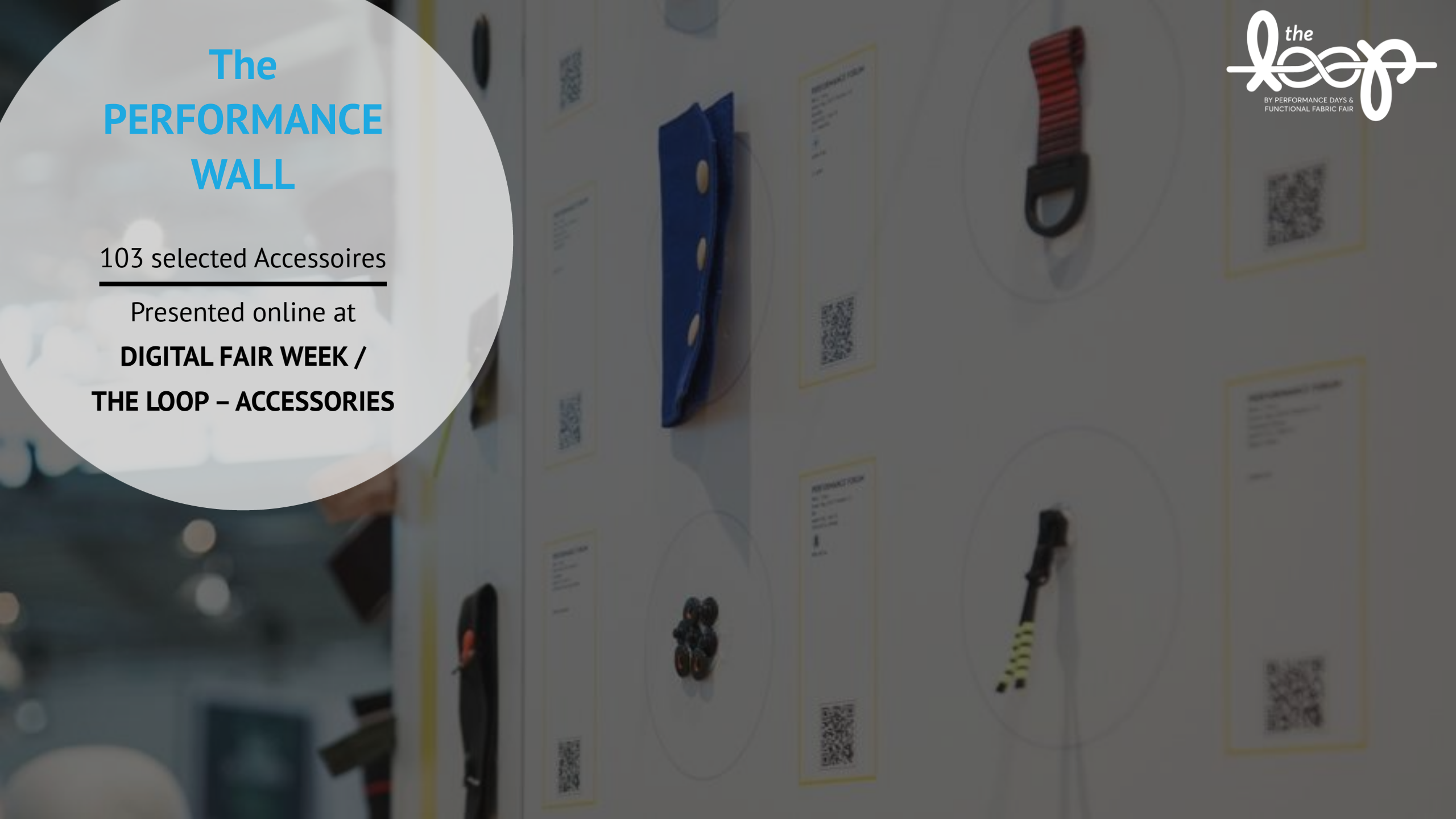
**DIGITAL FAIR WEEK**

**THE LOOP / FABRICS**

# The PERFORMANCE WALL

103 selected Accessoires

Presented online at  
**DIGITAL FAIR WEEK /  
THE LOOP – ACCESSORIES**



# FOCUS TOPIC - INTRO



Digitalization has been a big topic of last year. It has enabled us to stay in touch and to move forward, undoubtedly providing lots of useful tools. But we have also seen that – especially when facing the constraints of the pandemic - our desire for physical experiences is constantly growing.

# FOCUS TOPIC - INTRO



Taking care of our body, protecting our health, or staying fit by going outdoors and doing active sports as well as doing workouts at home, has gained new meaning - in the end, 2020 has underlined the physicality of human life, which cannot be replaced digitally.

Our clothing reflects this desire. We want to wear clothes that are functional and connect with our physicality. We want to experience them with our senses – **touch, sight and hearing**. When we perceive fabrics and clothing with these senses, it stimulates emotions. Through it, we ultimately feel alive.

**Thinking holistically about functionality also includes responsible entrepreneurship and sustainable management and production models.**

**In the sports industry we should feel particularly addressed in terms of the points mentioned, because...**



# FOCUS TOPIC - INTRO



- the intimacy of our products with the human body and the aspiration to provide the body with covering, to support it in its functions and provide protection, go hand in hand with the obligation not to employ harmful materials.

- Sport is the foundation of our business. This is deeply rooted in nature. We cannot credibly offer products for sporting activities outdoors in nature while, at the same time, contributing greatly to the devastation of nature with our production methods. Who wishes to swim or surf in a great plastic garbage patch? Who would wish to go hiking in burned down or withered forests? What would then become of our business?

# FOCUS TOPIC - INTRO



Numerous sports brands and manufacturers of materials for the sports industry already started to focus on sustainability and the cautious use of the planet's resources some time ago. Innovations in the areas of materials and in processing methods have been the driving forces of the development towards more sustainability. However, **we need to realign all processes and structures in our supply and production chains and adapt them to the needs of a resource-conserving, responsible industry.**

# FOCUS TOPIC - INTRO



A pioneering example of such alignment was the decision of **PERFORMANCE DAYS** to only present sustainable materials at the Trend Forum from the November 2019 trade fair event onwards. Additionally, the setting-up of the new digital sourcing platform “**THE LOOP**” shows how technology can be implemented aside from material and processing innovations in such a way that our procedures and structures can be adapted to difficult conditions and our industry becomes more resilient.

**Focus Topic**  
**“STILL PHYSICAL  
YOUR SUCCESS STORY  
OF 2020”**

**NATURAL CAPSULES**  
**ANTI-ODOR**  
**NATURAL WELLBEING FABRICS**  
**THERMO-REGULATING PROPERTIES**  
**BIO NYLONS, BIO POLYESTER**  
**BIO-BASED FINISHINGS**  
**SUSTAINABLE DYEING PROCESSES**  
**FABRIC INNOVATIONS**

The range extends from plant fibers such as hemp, SeaCell (oyster shell) or bamboo to natural fibers such as wool.

The addition of natural substances such as argan oil, castor oil, algae, cinnamon or sunflower seeds are ideal in keeping with the desire for natural skin care.

These natural additives support blood circulation, boost the immune system and regulate body temperature without the use of any chemical additives.

Bio-based finishes – such as, for example, by means of a finishing with MiDori Biowick – provide for good moisture transport and quick drying. Coconut, linseed or metal-free Ynviron offer anti-odor benefits. Metal or silver is no longer applied.

On top of all this, manufacturers surprise with a wide selection of bio-nylons, some recycled, some even biodegradable. We see the application of microplastics being totally dispensed with, and the same with elastane, which hinders the recycling process.

Natural dyeing processes and Dope Dye are increasingly becoming the focus of attention. Also noticeable is the desire for materials with a fashionable look & feel, but without sacrificing any function, an approach reflected by Trenchant Textiles, combining functional features with a fashionable design.





3D

Following the increasing demand for digital sourcing solutions, PERFORMANCE DAYS has launched a special project:

We have selected a handful of the best fabrics, scanned them, tested them for their material qualities and created photorealistic 3D renderings, video animations and provide to you the U3M file - ready to download and import into your 3D program. The key to a successful digital product lifecycle!

**FOCUS TOPIC**



# ANTI-ODOR TECHNOLOGY



Devan Chemicals NV

## BI-OME NTE

### Single Jersey

Composition 100% TENCEL™

Weight 165 g/m<sup>2</sup>

Functions   

- BI-OME® NTL (Natural) is a new, bio-based odour control technology
- active ingredient is linseed oil, which is derived from the seeds of the flax plant
- linseed oil, has a number of uses: as food additive, paint component and as an antimicrobial agent



Carvema Textil lda (Bloomati)

**JER.067.0163**

**Baselayer Knit**

Composition 4% Elastane/ Spandex,  
96% Polyamide recycl.

Weight 180 g/m<sup>2</sup>

Functions    

- finished with "Eternal Freshness" treatment
- Eternal Freshness is a totally innovative treatment
- made in a sustainable way from the coconut shell
- taking advantage of the antimicrobial characteristics of this fruit
- Eternal Freshness absorbs and attacks body odors by destroying them instead of disguising them protecting



Antex

**P-1638**

**Single Jersey**

Composition 100% Polyester recycl.

Weight 190.6 g/m<sup>2</sup>

Functions



- YNVIRON™ Recycled
- antibacterial METALFREE yarns for sustainable textiles
- inhibits bacterial growth



**NATURAL WELLBEING FABRICS**



Shinkong Textile

**CX-P0008-1**

**Poplin**

Composition 90% Cotton, 10% Pineapple

Weight 109 g/m<sup>2</sup>

Functions   

- 100% Biodegradable Poplin
- upcycled agricultural waste (Pineapple leaves)
- rustic and uneven look of this natural slub fabric



3D

Carvema Textil lda (Bloomati)

**JER.001.0011**

**Single Jersey**

Composition 100% organic Cotton

Weight 137 g/m<sup>2</sup>

Functions  

- "Young Skin" treatment
- treatment ensures in the meshes the ability to defend our skin against environmental aggressions
- moisturizes and improves blood circulation
- aloe Vera component
- the treatment has its maximized effect on clothing used next-to-skin





3D

Stotz & Co AG

## VENTILE DRY 110 ORG

### Highdensity Woven

Composition 100% organic Cotton

Weight 110 g/m<sup>2</sup>

Water Column 300

Breathability 8 g/m<sup>2</sup>/24h

Functions



- natural fibres fit into the sports context perfectly
- made of 100% organic cotton
- densely woven construction
- the fabric is windproof and offers good breathability
- It can also withstand a rain shower, because it is equipped with a PFC-free DWR

Shinkong Textile

**CX-P0011-1**

**Twill**

Composition 50% Cotton, 24% TENCEL™,  
26% Abacell®

Weight 120 g/m<sup>2</sup>

Functions 

- 100% biodegradable Twill
- fabric is made from a plant-based Abacell® (Abacá) fiber traditionally used for paper making in Japan
- Paper-like feel and great tensile strength
- kind-to-skin benefits
  - antimicrobial
  - hypoallergenic
  - odor-resistant

3D



Devan Chemicals NV

## **SceNTL – Citrus Blend**

### **Single Jersey**

Composition 100% TENCEL™

Weight 165 g/m<sup>2</sup>

Functions 

- SceNTL® are bio-based, encapsulated fragrances that can be integrated onto the fabric
- they are gradually released over time
- Upon release, the fragrances appeal to the senses
- This sample has been treated with a Citrus Blend, which contains Limonene, a component found in the peel of citrus fruits that is clinically proven to have an uplifting effect.



3D

Carvema Textil lda (Bloomati)

**RIB.076.0176**

**Fine Ribknit**

Composition 50% Modal, 50% organic Cotton

Weight 188 g/m<sup>2</sup>

Functions  

- "Slim Care" treatment
- Slim Care is an innovative treatment that uses a microcapsule technology with a biological and biodegradable basis, built with sugars and proteins that improves the aspect of the skin and has slimming effects.
- Enzymes in the skin bio-degrade the capsule walls, releasing the active ingredients slowly.

Carvema Textil lda (Bloomati)

**JER.080.0181**

**Single Jersey**

Composition 95% Bamboo, 5% Elastane/Spandex

Weight 226 g/m<sup>2</sup>

Functions  

- "Luxury Care" treatment
- it is a concentrated softener based on argan oil
- great softness, an elegant touch and a silk effect
- treatment increases well-being and promoting cell renewal
- Luxury Care is ideal for next-to-skin clothing

3D



**NATURAL WELLBEING FABRICS**



3D

Erictex Fashion

**KS949B**

**Single Jersey**

Composition 71% Cotton, 5% Elastane/Spandex,  
24% SeaCell™

Weight 180 g/m<sup>2</sup>

Functions  

- natural handfeel
- Benefits of SeaCell™
- SeaCell™ contains trace elements including minerals and vitamins



3D

Utenos Trikotazas

**16429REN**

**Single Jersey Baselayer**

Composition 76% organic Cotton,  
5% Polyurethane, 19% SeaCell™

Weight 160 g/m<sup>2</sup>

Breathability 4,8 Ret

Functions



- SeaCell™ the fiber is produced exclusively from sustainable raw materials – wood and seaweed – using methods that save both energy and resources.
- Fabric with organic cotton/ SeaCell™ blend which also has the property of properly regulating humidity, i.e. absorbs excess moisture and instantly evaporates to the environment.





Devan Chemicals NV

## R-VITAL - MULTIVITAMIN

### Single Jersey

Composition 100% TENCEL™

Weight 165 g/m<sup>2</sup>

Functions 

- R-Vital® enables textile manufacturers to boost their textiles with a range of microencapsulated active ingredients
- R-Vital® Multivitamin is a combination of
  - vitamine C
  - vitamin E
  - ginger

**FOCUS TOPIC**



**NATURAL INNOVATION  
&  
ECO AWARD**



Lenzing AG

**PYRATEX® tropic I**

**Double Knit**

Composition 90% Modal, 10% Kapok

Weight 170 g/m<sup>2</sup>

Functions



- PYRATEX® tropic I is a double fabric
- can be recycled into reusable wood pulp
- Kapok, a tree which grows naturally in tropical forests without any chemicals or pesticides
- The modal fiber in the fabric comes from sustainable managed woods, certified by FSC and PEFC.
- Classified as a moisture management fabric, with the same values as conventional polyester/cellulosic blends.



3D

Utenos Trikotazas

**2174R**

**Midlayer Fleece, brushed backside**

Composition 11% Hemp, 63% organic Cotton,  
26% TENCEL™

Weight 310 g/m<sup>2</sup>

Breathability 5,1 Ret

Functions



- Hemp has natural antibacterial and UV protection
- most exclusive eco properties such as requiring four times less water in the growing stage
- In combination with an organic cotton (GOTS) and TENCEL™ this fabric ensures perfect thermal regulation
- A fully biodegradable choice

# BIO-BASED / BIODEGRADABLE NYLON & POLYESTER FABRICS



Jiangsu Sunfeng Special Material Technology Ltd.

## **SUNFENG 990TM BIODEGRADABLE FABRIC**

### **Highdensity Woven Fabric**

Composition 100% Polyester

Weight 78 g/m<sup>2</sup>

Functions 

- 990TM contains organic additives
- integrated into polyester filaments to enhance the biodegradability
- lab test under ASTM D5511, 990TM polyester biodegradability is 40 times quicker than common polyester decomposition



Tiara Textile

**SP530**

**Woven with light crinkle**

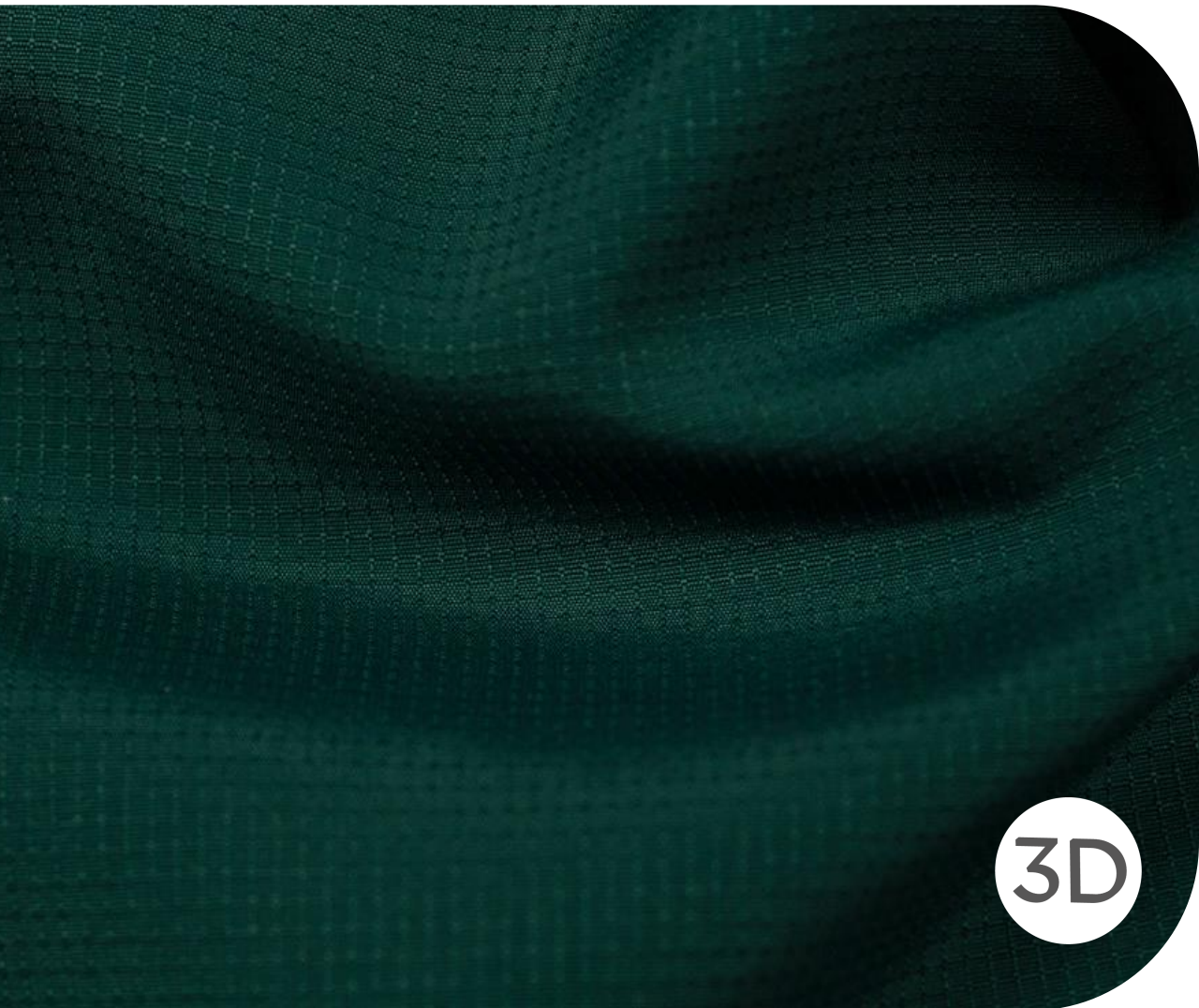
Composition      100% biodegradable Nylon

Weight              120 g/m<sup>2</sup>

Functions



- SP530 can degrade in the environment by a combination of Oxidation and Biodegradation after land filled.
- Through catalyze breakdown to smaller micro piece under UV & O<sub>2</sub> presence and then after digested by bacteria & fungi, returned to the environment finally.
- As demonstrated by laboratory biodegradation tests in accordance with ASTM D5338.



WidePlus International

**BWNR0001-PWC**

**Mini Ripstop woven**

Composition 100% bio-based Nylon

Weight 92 g/m<sup>2</sup>

Functions     

- Bio-Based Wicking Treatment miDori bioWick
- hydrophilic processing agent made from 100% renewable resources
- natural vegetable oil source extracted from its raw materials will not crowd out the cultivation of food crops
- provide a soft hand to the fabric
- good hydrophilic effects





WidePlus International

**BWND0005-PR7F35**

**2Layer woven**

Composition 100% bio-based Nylon

Weight 148 g/m<sup>2</sup>

Water Column 10000

Breathability 10000 g/m<sup>2</sup>/24h

Functions     

- PFC-Free DWR alternative that is bio-based and hydrocarbon polymer-based chemistry

**FOCUS TOPIC**



**COOLING TECHNOLOGY**



brrr<sup>o</sup>

**K0034-1R**

**Baselayer Knit**

Composition 9% Elastane/Spandex, 50% Polyamide,  
41% Polyamide recycl.

Weight 126 g/m<sup>2</sup>

Functions



- Recycled brrr<sup>o</sup> Nylon
- brrr<sup>o</sup> yarns and fabrics have Triple Chill Effect
- technology includes natural cooling minerals
- active wicking
- rapid drying to keep you cool and comfortable

37.5 Technology / Cocona Labs.

**3514419 (DANMAO)**

**Woven stretch Twill**

Composition      2% LYCRA®, 68% Wool Merino,  
30% 37.5® PET + EB additive

Weight              174 g/m<sup>2</sup>

Functions



- Woven twill with 37.5® PET + EB additive to enhance biodegradation
- 37.5 Technology works with your body to determine if you need warming or cooling based on the amount of humidity next to your skin
- removing heat & moisture when you're hot
- retaining warmth when you're cold

3D



Devan Chemicals NV

## Tones of Cool Bio

### Fine knit with embedded PCMs

Composition 100% TENCEL™

Weight 165 g/m<sup>2</sup>

Functions  

- Tones of Cool® Bio is a patented cooling technology
- it stimulates the textile to dissipate redundant heat from the body and to instantly reduce the body temperature
- PCMs used in Tones of Cool® Bio are derived from sustainable, natural sources
- The PCMs have the form of a crystalline wax or oily liquid (depending on temperature) and are 100% plantbased.

**FOCUS TOPIC**



# SPECIAL DYING

SHEICO Group

**Hakka Tie Dye ( ZAL )**

**Printed Knit**

Composition 10% Elastane/Spandex, 90% Polyester  
recycl.

Weight 194 g/m<sup>2</sup>

Functions



- "Hakka Blue" In the early era of Asia, the frugal Hakka people would dye their clothes blue with plants.
- Even if the color fades, clothes can be re-dyed again.
- Inheriting ancestors' sustainable "Loop" wisdom, utilizing new tie-dye technology, the dyeing of blue wavy ripple pattern creates a natural print and zen sensation, to give plain fabrics a second brand new life.

3D



Jiangsu Sunfeng Special Material Technology Ltd.

## SUNFENG ECIO

### 2 Tone Double Weave

Composition 100% Polyester recycl.

Weight 135 g/m<sup>2</sup>

Functions    

- ECIO is an innovative dope dye
- wider color range than traditional dope dyes
- fabrics with distinct color possibilities and long-term awesomeness
- clever combination of pigment + dyestuff, and the unique technology of tapping the dyestuff
- better color development and excellent colorfastness
- consumes less dyes and water pollution



**FOCUS TOPIC**



# COTTON & WOOL TOUCH



Wujiang Flying Textile

**FY20223-R8**

**3Layer Woven**

Composition 52% Polyester, 48% Rayon

Weight 243 g/m<sup>2</sup>

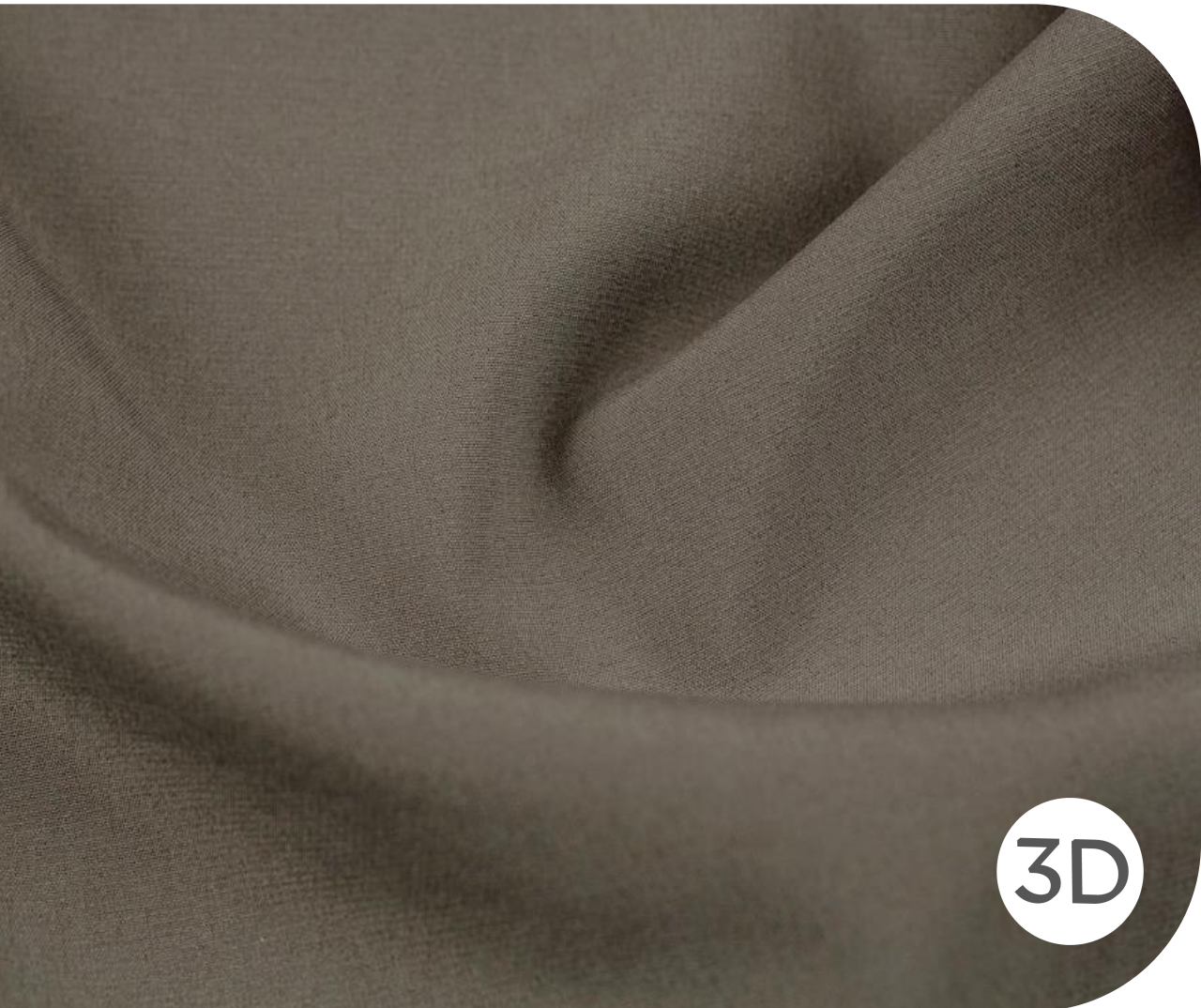
Water Column 1000

Breathability 5000 g/m<sup>2</sup>/24h

Functions



- 3Layer fabric with microporous membrane
- T8 polyester yarn and rayon yarn, which makes the fabric stretchy
- cottony touch



Tiara Textile

**SP493**

**Fine Shirt Woven with 3D backside**

Composition      10.5% Elastane/Spandex recycl.,  
75% Polyester recycl.,  
14.5% Seawool® (recycled polyester)

Weight              96 g/m<sup>2</sup>

Functions           

- Seawool® is made by oyster shell & recycled PET bottle
- Oyster shell makes regular polyester valuable & functional
- Oyster shell has the natural contained with mineral that can bring multi-functions for yarn: Anti-odor, Anti-static, moisture management.

# FOCUS TOPIC



# PERFORMANCE AWARD





3D

Trenchant Textiles

**SlickrB (100% Polypropylene Membrane / 100% Nylon backer)**

**3Layer Lightweight**

Composition 88% Polyamide, 22% Polypropylene

Weight 36 g/m<sup>2</sup>

Water Column 20000

Breathability 9500 g/m<sup>2</sup>/24h

Functions



- ultralight fabric, with the membrane on the outside
- 18 micron thick Intrepid PP membrane is PFC-free, solvent-free, and air permeable
- SlickerB leverages the natural hydrophobicity of PP to achieve durable water repellency with CO DWR

**FOCUS TOPIC**



**SPECIAL STRUCTURES**





Hung's Fortune

**HKG-REPS-702-2L**

**3D structured Softshell**

Composition      6% LYCRA®, 94% Polyester recycl.

Weight              510 g/m<sup>2</sup>

Functions              

- Provides an easy transition from outdoor to urban environments
- bringing a modern edge to outerwear



Trans-Textil GmbH

**E21510010**

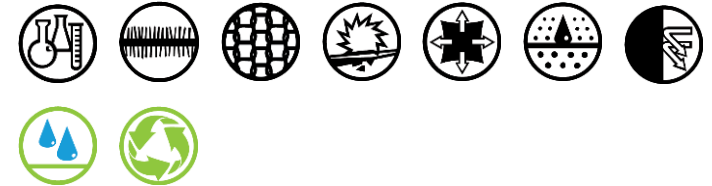
## Softshell with 3D Jacquard Warp-Knit

Composition 13% Elastane/Spandex,  
27% Polyamide, 7% Polyurethane,  
53% Polyester recycl.

Weight 260 g/m<sup>2</sup>

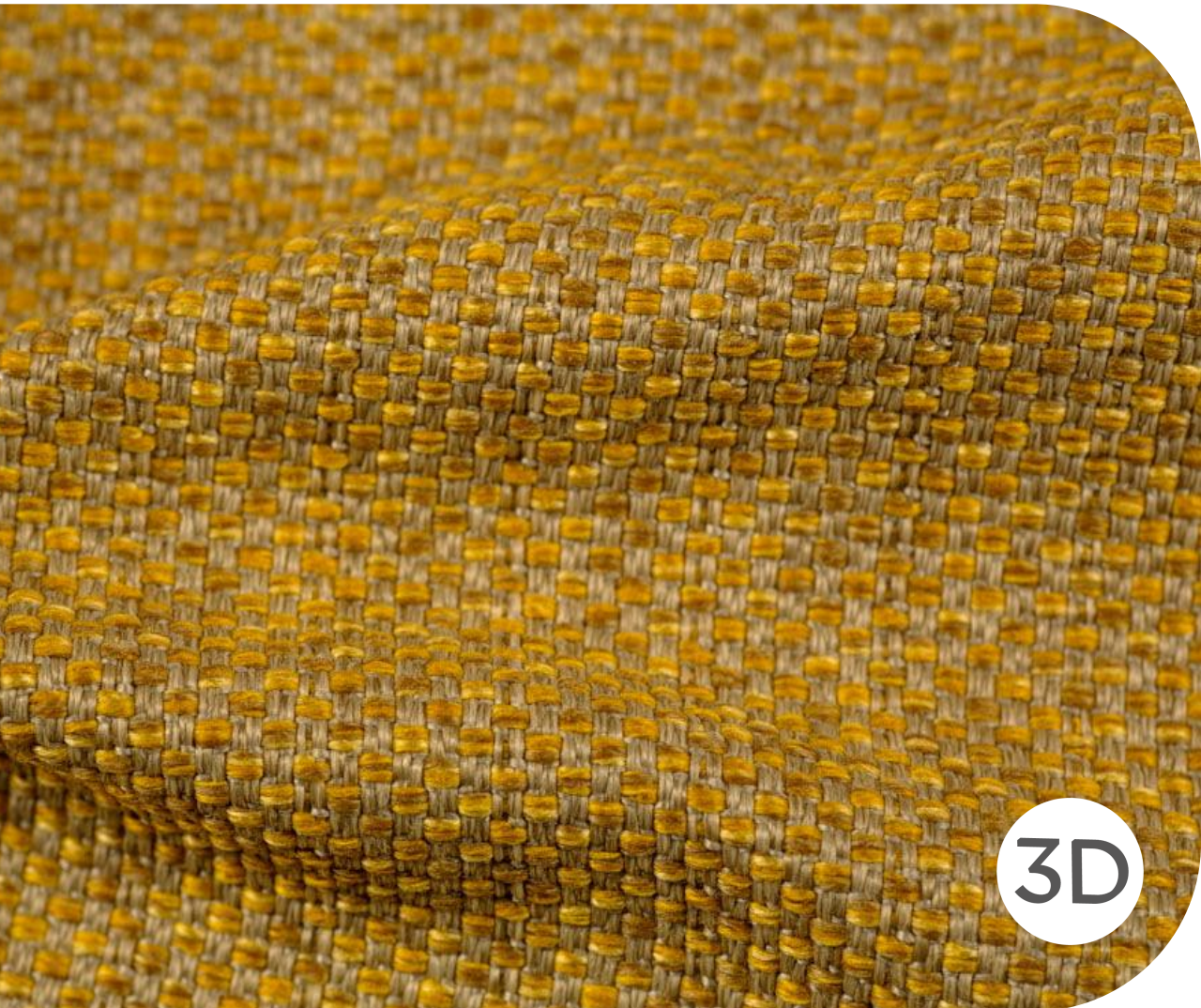
Breathability 17000 g/m<sup>2</sup>/24h

Functions



- body mapping possibilities allow reducing seams in manufacturing – 4-way stretch/ highly elastic
- abrasion resistant 3D zones and highly breathable areas through selective open structures
- PFC-free DWR





## Taiwan Axroma Technical **Outdoor Tech Zero Waste** **Coarse woven Fabric**

Composition 100% Polypropylene

Weight 380 g/m<sup>2</sup>

Functions        

- 100% transform old stock materials
- meticulously twist for robust hand and sight
- Heavy denier mixture as protective textile in various outdoor & sporty environment
- Mono component
- Olefin
- longevity colorfastness beyond your experience.

# BASELAYER



Soft, ultra-light and in fantastic shades – the latest materials for baselayers impress with their versatile function, and all on a natural basis.

Manufacturers are taking more and more care in facilitating the return of the material back into the cycle, a valid reason for abandoning the use of elastane for circularity. In keeping with the Focus Topic, the feel-good character is enhanced with the aid of natural additives such as algae, cinnamon or linseed. These substances keep the body temperature constant during sporting activity and provide for a pleasant cooling effect.

# BASELAYER



## WOOL, MAINLY MERINO WOOL

- Elasticity, soft to touch and comfortable to wear
- Blended with
  - Polyamide, also in recycled and biobased form
  - Recycled Polyester
  - Lycra
  - Elastane
- Some are RWS certified

# BASELAYER



## MAIN COMPONENT TENCEL™

- TENCEL™ REFIBRA™
- Blended with
  - recycled Polyester
  - Linen,
  - Organic cotton
  - Elastane



## HEMP AS THE MAIN COMPONENT

Blended with:

- Cotton, organic Cotton
- recycled Polyester
- TENCEL™
- Linen

Hemp is nature's most technical fiber: breathable, antibacterial, durable and quick dry.

# BASELAYER



Organic nylons – either recycled or as a drirelease<sup>®</sup>/Naia<sup>™</sup> blend (made from cellulose derived from eucalyptus and pine forest), offer high breathability.

Evertex Fabrinology Ltd.

## **BulkyStretch™ - KN7051S**

- Unique very dense knit construction
- Fabric is mechanical-mosquito repellent without any use of chemical finishing
- 100% recycled Polyester

# BASELAYER



COTTON, MAINLY AS ORGANIC  
COTTON AS MAIN  
COMPONENT:

Blended with:

- recycled Polyester
- Elastane
- Viscose

GOTS certified Cotton



# MIDLAYER



The midlayer, as the inbetween layer of baselayer and outer layer in clothing, should at the same time insulate and thermoregulate in spring/summer/ fall.

The entire layering system is based on the so-called “onion principle”, i.e. many layers result in a dry and warm body feeling depending on the warmth/cold sensation and the material mix.

Manufacturers have their sights set on fashionable tech fleeces, but also old-school surfer styles and midlayers in pullover style get a look in.

Natural fibers take the lead:

- Bamboo
- Hemp
- Organic Cotton
- Recycled Cotton
- TENCEL™
- Great wool combinations:
  - KBT wool
  - Recycled wool with Lyocell
  - Wool with TENCEL™
  - Wool with eco-viscose

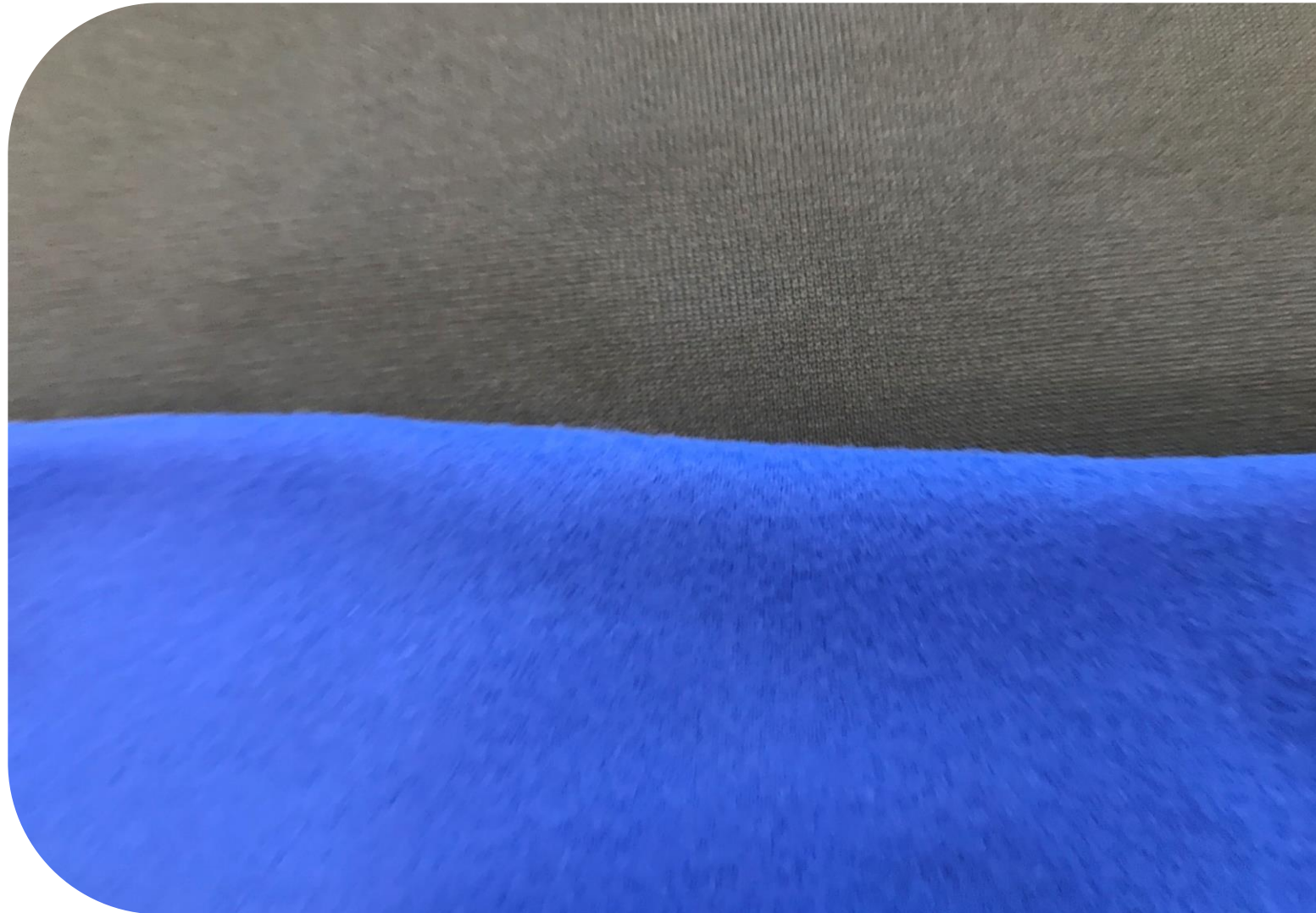


- Enormously attempts of the manufacturers to reduce the release of micro-plastics during the washing process or avoid their use altogether
- New brushing processes on the back of the fabric
- Air pockets
- Internal grid structure



# MIDLAYER

Nylon has already proven to degrade after 300 days at 40 percent in aerobic conditions, according to the D6691 standard, with 50% less micro-plastic up to zero percent micro-plastic in the fiber.



# SOFTSHELL & OUTER MIDLAYER



The softshell and outer midlayer category ranges from highly technical and various casual variants to extremely fashionable models.

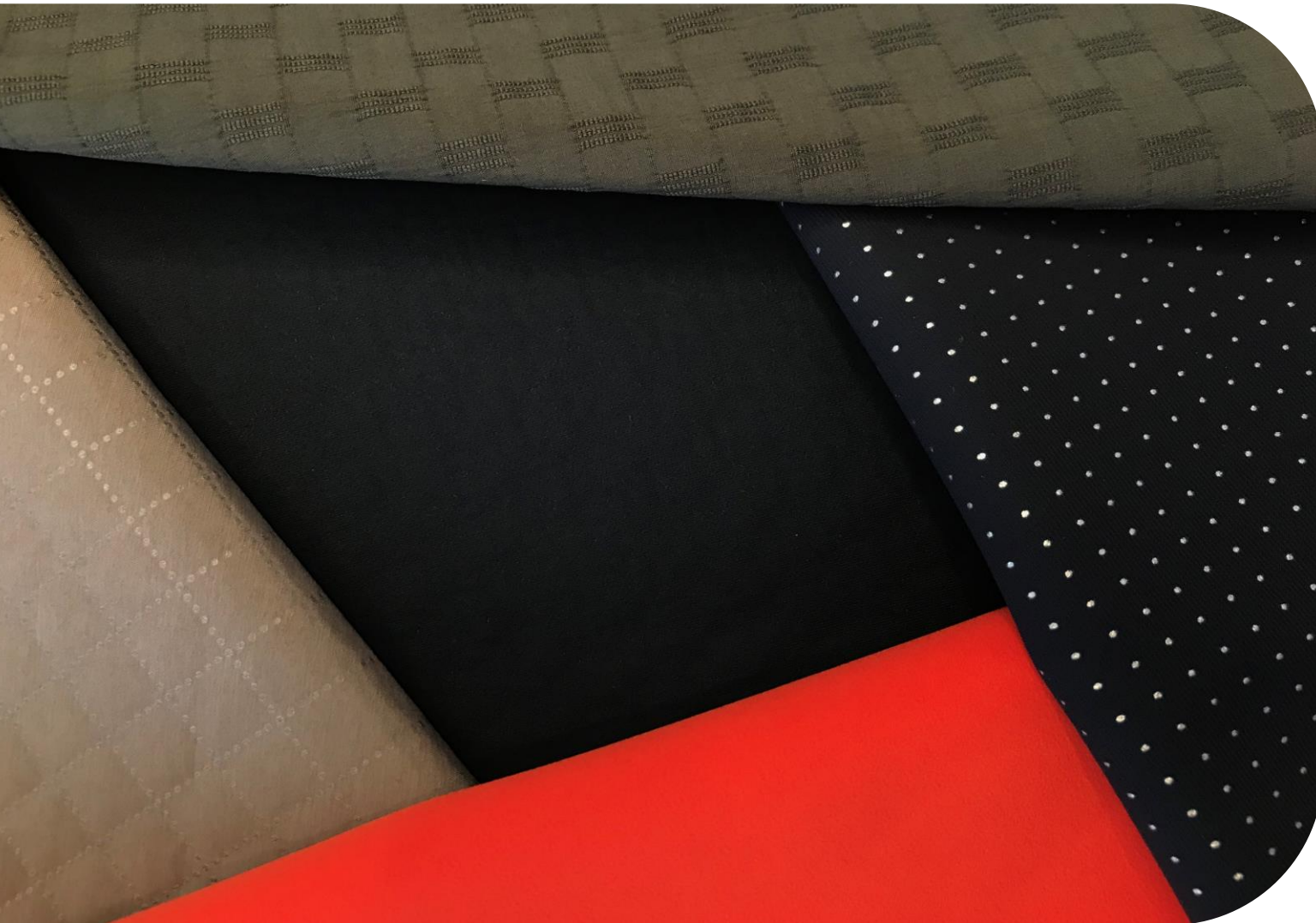
The materials boast great performance while still being extremely lightweight, ideal requirements for running and biking or any high aerobic activity.

# SOFTSHELL & OUTER MIDLAYER



- chemical fibers are often recycled, even biodegradable or are available as an organic variant
- 100% recycled Polyester
- 100% biodegradable Polyester
  
- An extremely thin knitwear (10 DENIER), bonded

# SOFTSHELL & OUTER MIDLAYER



Mechanical Stretch, Elastane,  
Lycra<sup>®</sup> or stretch PU ensure for  
more freedom of movement

# SOFTSHELL & OUTER MIDLAYER



Various blends natural fibers:

- Organic cotton
- Cotton
- Wool
- TENCEL™



## 2.5 & 3LAYER

In view of the upcoming ban on fluorocarbons in 2025, many brands and fiber manufacturers are already looking for viable membrane options.

The focus is on a sufficiently high water column that does not need to lose any functional quality despite frequent washing, nor on a pleasant feel.

## 2.5 & 3LAYER

Great constructions yet again show how to add function to fabric without any chemical treatment. Trans-Textil, for example, uses a fiber-based 3D structure made of their own specially developed high-tech polyurethane for its Topaz Companion membrane. The microporous structure in the nano range unites technical performance and comfort with an ecological claim. BenQ also impresses with a microporous membrane, which still leaves a question mark regarding sufficient performance in terms of water column and its loss of performance after the washing process.

## 2.5 & 3LAYER

Furthermore, there is the far less harmful use of polypropylene:

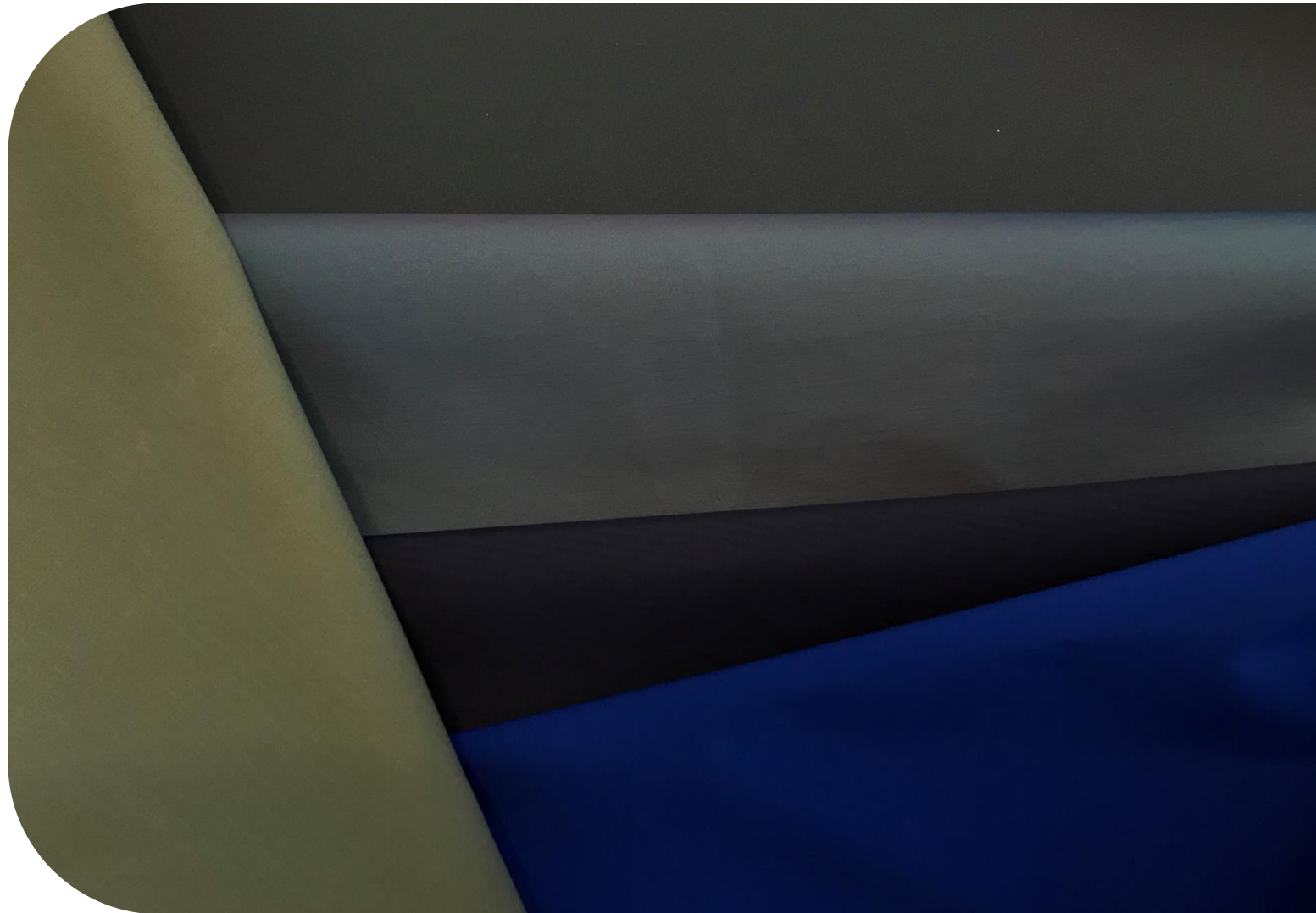
Polypropylene has the advantage over other synthetics that in its basic form it does not omit any substances harmful to health or the environment during its use and decomposition and no or very little problematic residues remain when it is burnt. The widely used synthetic material also contains no questionable softening agents in most applications.

Another great variant is the nanoporous membrane made of polyolefin, which contains only carbon and hydrogen. It is free of PTFE and PFC and does not require any solvents in its production. These are complimented with recycled polyester, polyester natural fiber blends and recycled nylon.

## 2.5 & 3LAYER

All fabrics are 100% recycled  
Polyamide, some of them are:

- GRS (Global Recycle Standard) certified
- Mechanical stretch
- Ripstop
- Xpore™ membrane

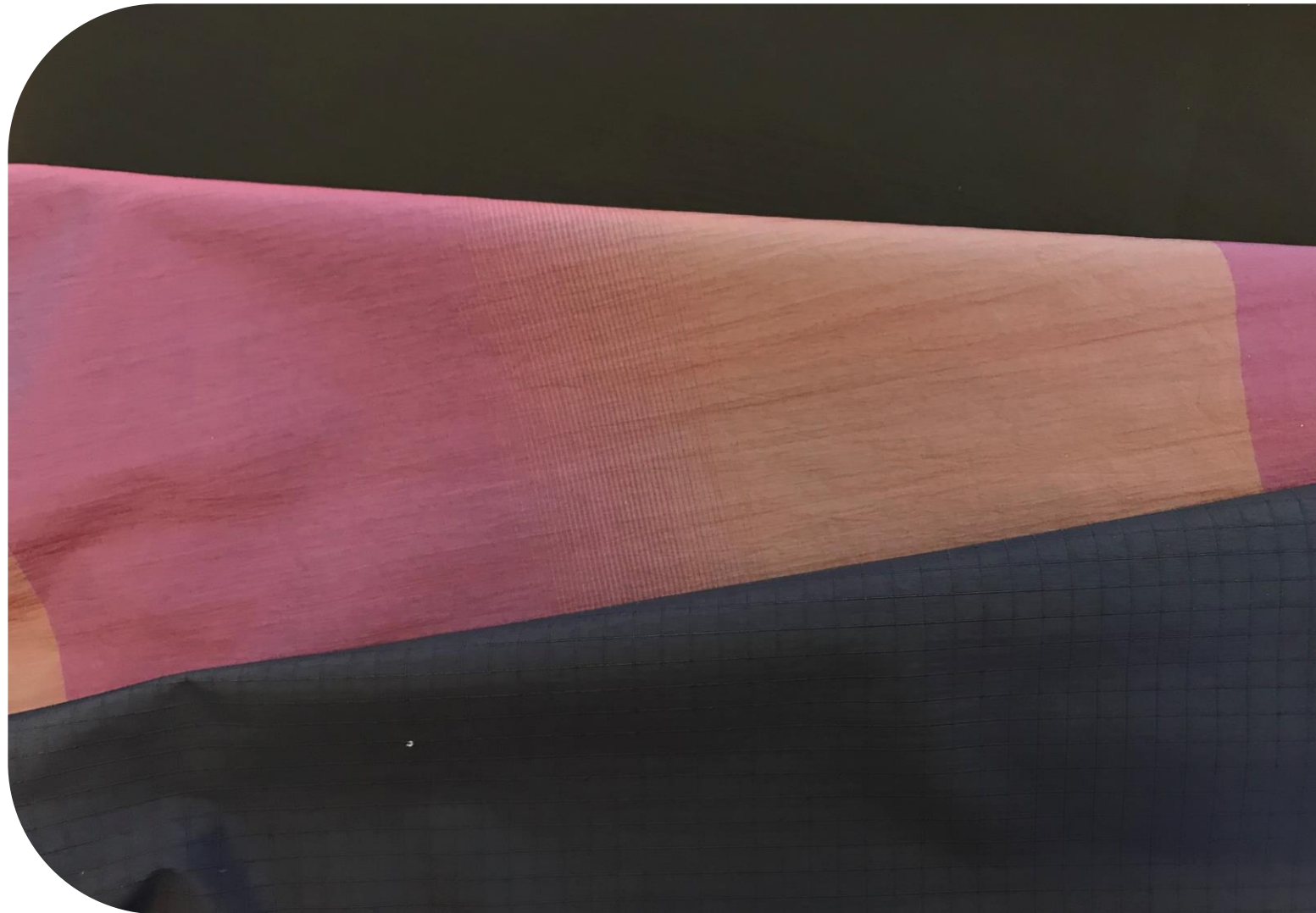


## 2.5 & 3LAYER

All fabrics are 100% recycled

Polyester, some of them are:

- Solution dyed, a water saving dying process
- cotton touch
- 3D print
- Ripstop design
- Xpore™ membrane



## 2.5 & 3LAYER

### E-spinning membranes:

- VENT-LITE membrane, 100% recycled Polyester without any PFCs
- aerobrane™ membrane, offers optimum protection against wind and weather and is exceptionally breathable



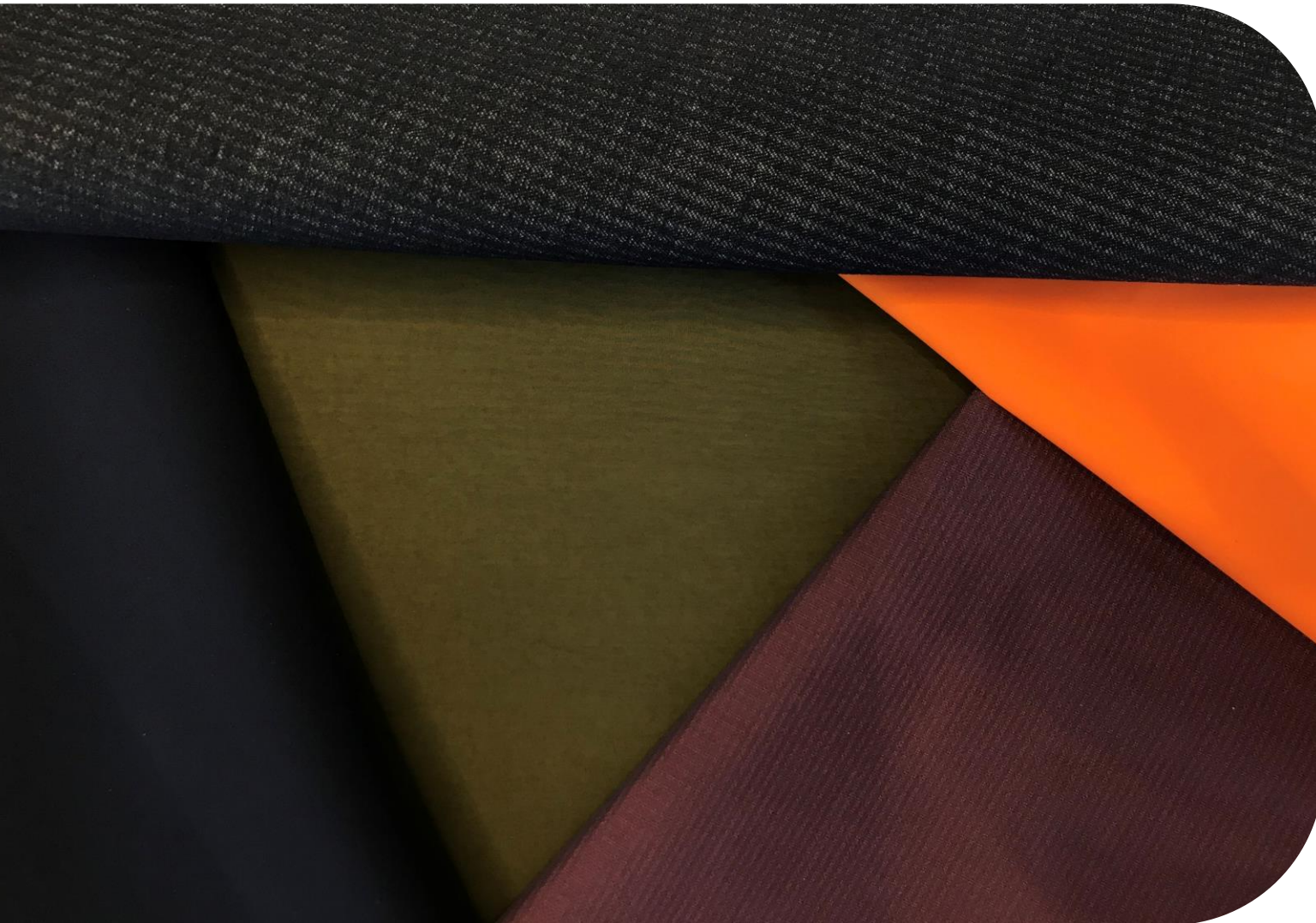
# 2LAYER



In 2-layer constructions, the membrane is bonded to the outer material. For protective purposes, a loosely attached inner lining is fitted on the inside. This group also presents a surprising number of organic-based material variations, some as mono-components to facilitate circularity, some recycled.

In addition to 10k/10k and 20k/20k, a 30k/30k membrane development appears for the first time. The question is here: Might this be the initial response to the upcoming PFC ban?

# 2LAYER

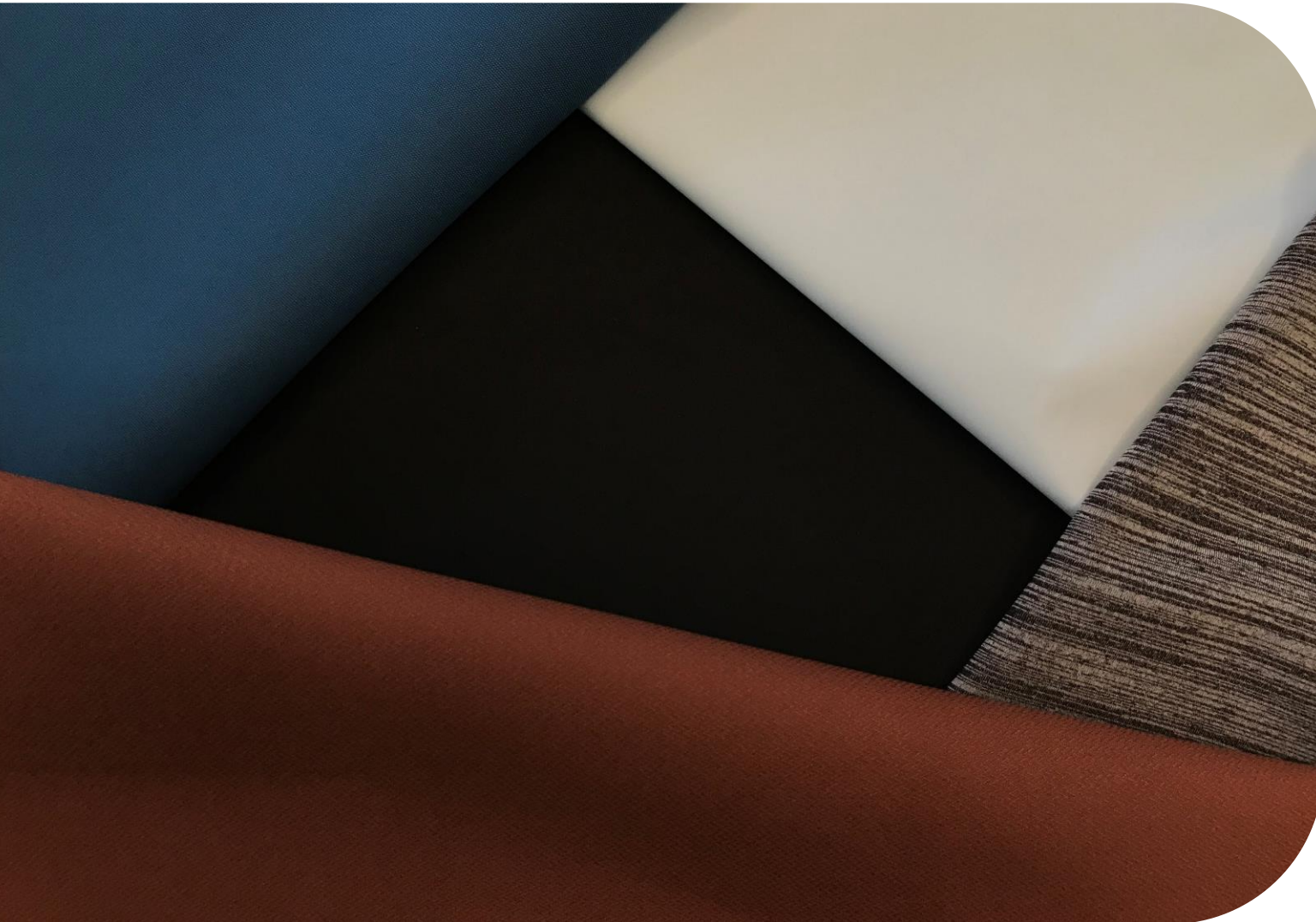


large number of organic-based nylon articles

- Biobased Polyamide hydrophilic membrane
- water based coating
- 100% biobased Nylon with a water column/ breathability of 30K/30K
- biobased membrane



# 2LAYER



robust polyester variants  
with good abrasion values

- 100% recycled Polyester
- Biobased Polyester
- TPE membranes  
(Thermoplastic Elastomer,  
which is biodegradable)

# LIGHTWEIGHT & DOWNPROOF



The trend in summer is moving away from the shiny towards a more slick look, with matt and even mélange color variations.

They also come in an impressive wide range of colors and designs.

Windbreakers and Batwing styles with a retro 80s look are particularly trendy in summer 2023.

All nylons and polyester in this category come recycled, biobased or even biodegradable.

# LIGHTWEIGHT & DOWNPROOF

A LOT OF 100% RECYCLED  
NYLONS

- super-light weight, starting with 21g
- Ripstop structure
- natural crinkle effect
- downproof by construction
- GRS certified
- PFC-free DWR



# LIGHTWEIGHT & DOWNPROOF

## NYLONS

- Biodegradable Nylons
- Biobased Nylons
- ECONYL®
  
- downproof
- liquid rubber coating for waterproofing barrier



# LIGHTWEIGHT & DOWNPROOF



## 100% RECYLCED POLYESTER FABRICS

- Downproof by construction
- CYCLEPET, post-consumer  
PET



# SHIRTS



The trend towards fabrics of natural origin is clearly evident here.

Check patterns are less in demand for the coming summer in the outdoor market segment.

They are being replaced by small ripstops in 90s look and new, modern structures.

More and more importance is also being placed on the technical look in the fashion division.

# SHIRTS



The range extends from new linen looks to zonal shirt fabrics or recycled nylon with hemp quality to dry structures with elastane content, ideally suited for light summery shirts.

Sturdy jerseys surprise in new qualities and with extreme stiffness in a casual look.

# SHIRTS



Naturals like:

- recycled Wool, Cotton, Hemp and TENCEL™

Blended with:

- recycled Polyester, recycled Nylon and Elastane





- Mechanical stretch
- 4-way mechanical stretch
- Recycled Elastane
  
- ROICA™ EF is the only premium stretch, recycled yarn in the world today

# SHIRTS



- Recycled Polyester
- Biodegradable Polyester
- Recycled Polyamide
  
- UV 50+ protection
- Cooling effects
- Quick Dry properties

# PANTS & TIGHTS



In the pants segment, many fabrics impress with a special look & feel and are pleasant to the touch. Natural fibers, are the group leaders here, not to mention the use of Ecovero. The environmentally conscientious viscose is made from certified renewable wood sources. Lightly grained, it provides a stylish look.

# PANTS & TIGHTS



Also noticeable is the large proportion of recyclable materials up to and including mono fibers. The meta-trend towards workwear and cargo are becoming more and more prevalent in the world of sportswear. Two trends are generally recognizable here – the parachute style on the one hand and the rougher look on the other.

# PANTS & TIGHTS



- ECOVERO™ by Lenzing
- TENCEL™
- TENCEL™ REFIBRA™

ECOVERO™ by Lenzing with 50% lower emissions and water impact, compared to generic Viscose, biodegradable

# PANTS & TIGHTS



- Recycled Polyamide
- ECONYL® regenerated Nylon
- Recycled Polyester
  
- graphene added, superior thermal regulation
- Mechanical stretch
- high abrasion
- PFC-free ecorepel® finish



## TIGHTS FABRICS, WITH MINIMUM 14% EA – 25% EA

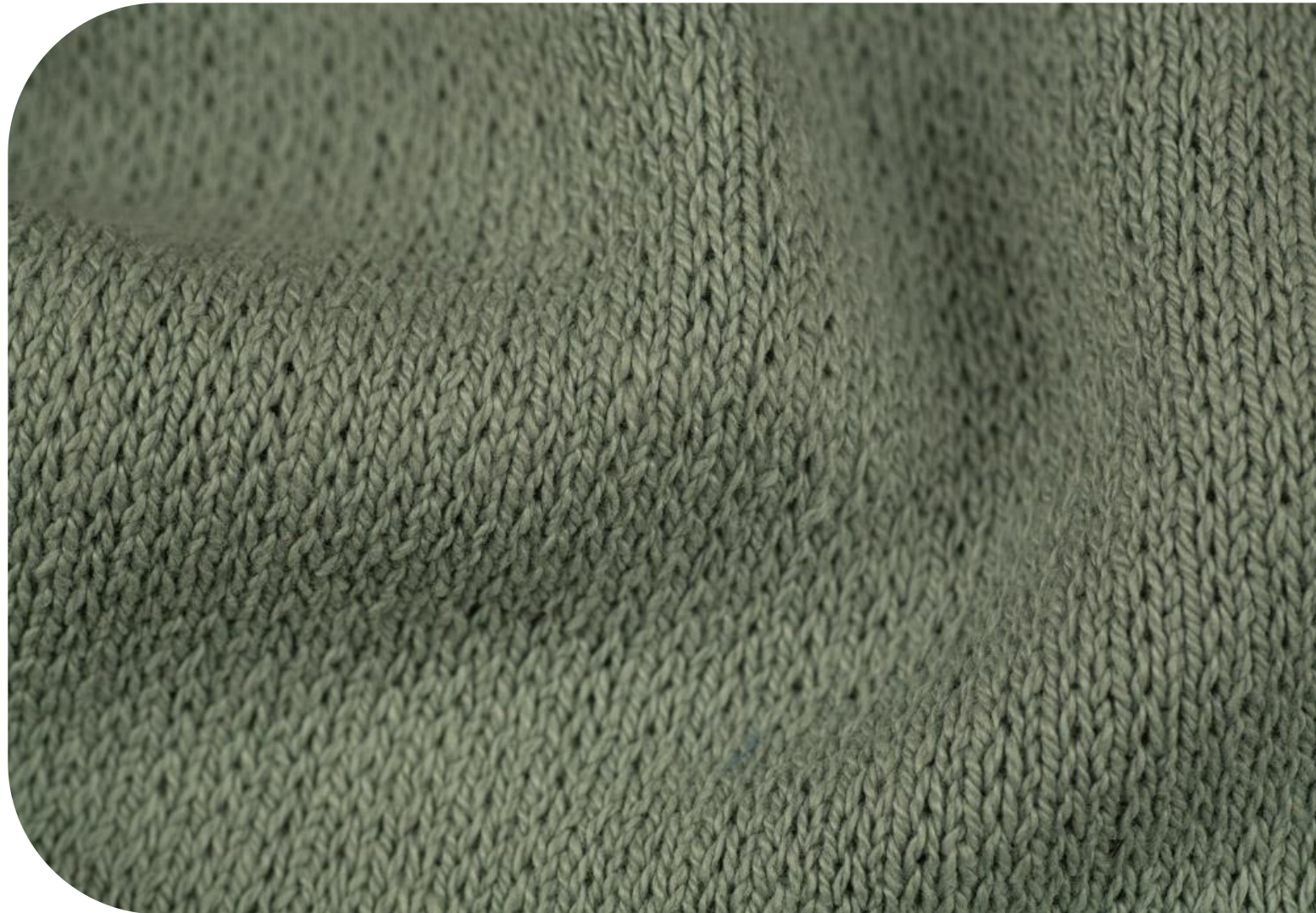
- ECONYL®
- Recycled Polyamide
- Recycled Polyester
  
- high performance sport
- maximum body-shaping
- excellent elasticity
- UV 50+ protection, suitable for cycling, triathlon or running

The lifestyle category for the summer 2023 season inspires with all fabrics and captivates with an extraordinary color palette.

The colors range from dark, deep blue shades to muted, light pastel variants enhanced with grey.



A standout is an organic cotton/hemp blend that delights as a summer knit in a trendy sage-mint shade. The highlight: In the processing to a new knit, all fabric waste was recycled.



Natural fibers for light summer jersey and summery mid-season models

- Cotton
- recycled Wool
- Modal
- TENCEL™
- recycled Polyester



Recycled polyester is combined with organic cotton, creating a versatile and fashionable look.



## Two corduroy fabrics

- One biodegradable, made of Merino Wool and Viscose
- The other one, made of recycled Polyester and Wool
- they are heavy to the touch yet boast an extremely lightweight look
- both with anti-odor properties



# SAFETY, HEALTH & DURABILITY



Durability, abrasion protection, tear-resistance, elasticity, breathability, wearing comfort – workwear fabrics must boast high technical performance values.

Workwear rethought:

A lot of the materials in summer 2023 convince with their lightness and soft, smooth feel.

Furthermore, they impress with a fashionable look.

# SAFETY, HEALTH & DURABILITY



## NEW COMBINATIONS:

- Black Dyneema<sup>®</sup>, the world's most tear-resistant yarn blended with ECONYL<sup>®</sup>
- 100% Polypropylene with Macintosh patent in Ripstop and monochrome tech optic

# SAFETY, HEALTH & DURABILITY



- Organic cotton without synthetic materials prevents static charging
- Bio-based PU coatings are ideal for bottom bases for backpacks because of their stability



## HI-VIS FABRICS

- many are 100% recycled Polyester
- Biodegradable Polyester
- YNVIRON™ Polyester, which has antibacterial features
- Dope Dyed



ANCE DAYS  
ONAL FABRIC FAIR



## The PERFORMANCE WALL

103 selected Accessoires

Presented online at

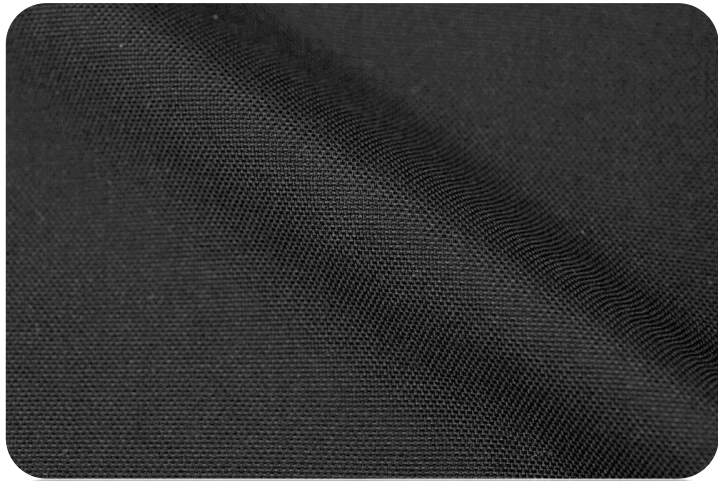
**DIGITAL FAIR WEEK /  
THE LOOP – ACCESSORIES**



**CIRCULARITY WITH POLYPROPYLENE** - this novelty may deserve a circularity award!

Trenchant Textiles has worked together with a global leader in polypropylene recycling to develop an end-of-life process flow for garments made with our PP<sup>3</sup> collection of 100%-polypropylene zippers, seam tapes, and fabrics made with our PFC-free, solvent-free, nano-porous Intrepid PP membrane.

They have validated both mechanical and chemical recycling processes, with the latter processing the polypropylene into pyrolysis oil. TT's PP<sup>3</sup> suite of fabrics and trims can help brands close the loop and achieve circularity by providing a fully-recyclable, mono-material solution for technical outerwear.



Trenchant Textiles

## MONO-MATERIAL PP RECYCLING PROCESS FLOW

2.5 & 3Layer

Composition 100% Polypropylene

Water Column 7000

Breathability 7000 g/m<sup>2</sup>/24

Functions



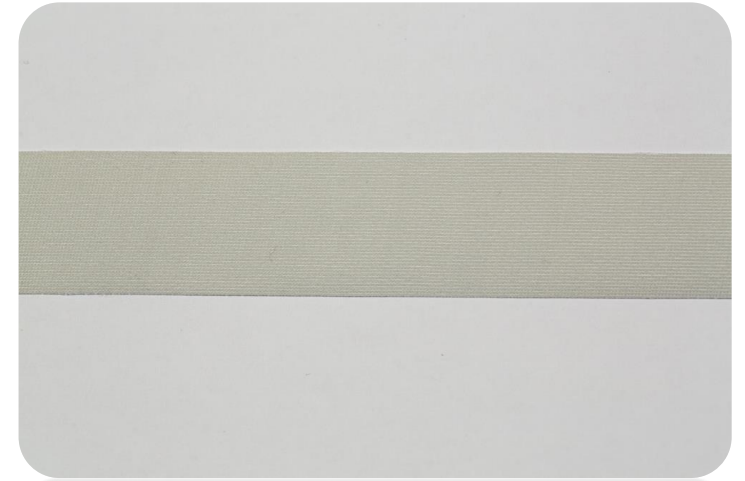
Trenchant Textiles

## MONO-MATERIAL PP ZIPPERS

Zippers

Comp. 100% Polypropylene

Functions



Trenchant Textiles

## MONO-MATERIAL PP RECYCLING PROCESS FLOW

Tapes

Comp. 100% Polypropylene

Functions



# LABELS & PATCHES

ACG ACCENT AB

**WILDBERRY – REAL  
FISH LEATHER BADGE**

100% Fish leather



Bitzer + Single GmbH

**\*BE NATURAL\*  
BAMBOO HOOK**

100% BA



Rudholm & Haak AB

**SUSTAINABLE ECO  
RFID TAGS**

100% Paper



Wasa Sweden AB

**WASA APPLE  
LEATHER**

25% CO, 25% PES,  
50% Apple skin

# TRANSFERS

dekoGraphics GmbH

**3D SILICONE I  
RECYCLED  
MULTILEVEL**

20% PES, 80% recycl.  
Silicone



Rudholm & Haak AB

**ISPO2111-12-AS**

100% biobased PES

# TAPES

*Yu Shin Development*

## BIODEGRADABLE GROSGRAIN TAPE WITH DEBOSSED LOGO MY7530

100% biodegradable  
recycl. PES



*Rudholm & Haak AB*

## ISPO2111A-02-AS

100% rec. PES



*Bitzer + Single GmbH*

## \*BE NATURAL\* WOOD FIBER TAPE

100% wood fibers



*Pioneer Elastic (Hong  
Kong) Ltd.*

## COLOUR-SHIFTING WEBBING TAPES

50% rec. PES, 50% PA

# TRIMS

Protect Accessory Co., Ltd.

**202103003**

100% Straw Fiber +  
ABS (Acrylonitrile  
Butadiene Styrene)



Wasa Sweden AB

**WASA RECYCLED  
NYLON SNAP**

100% rec. PA



Shimada Shoji Hk Ltd.

**P352SL-TN300**

100% rec. PA



Duraflex Hong Kong Ltd.

**G.SOFT-PLATIC 4-  
HOLE BUTTON**

100% Plant-based  
TPU



# ZIPPERS

Ideal Fastener Corporation

**IDEAL EARTHE ZIPPER  
+ HEAT SEALED  
RECYCLED REFLECTIVE**

100% rec. PES



Ideal Fastener Corporation

**IDEAL EARTH 2.0**

100% rec. PES



Max Zipper Co., Ltd.

**SUSTAINABLE ZIPPER**

100% rec. PES



Keen Ching Industrial Co.,  
Ltd.

**CURVED ZIPPER**

70% PES, 30% ZINC



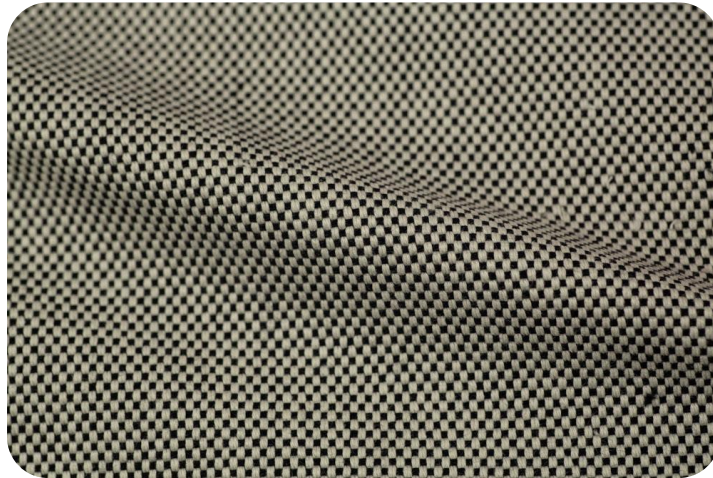


# APPLICATIONS & INLAYS

STOTZ & Co AG

**Ventile ECO 420 RCO**  
**COLOUR Black YD**

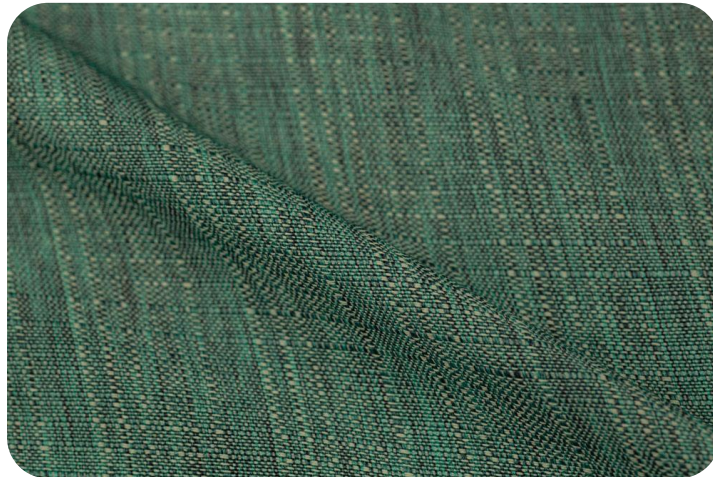
100% rec. CO



U-Long High-Tech Textile  
Co., Ltd.

**Q21A087**

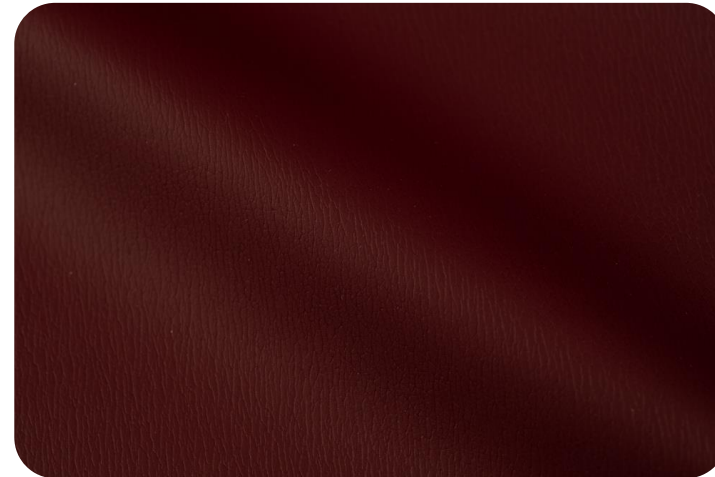
52% PES, 48%  
ABACELL



IBO FABRICS

**PENGUIN**

62% rec. PA, 38% bio-  
based Dyneema®



Super Textile Corporation

**P0335-03**

47% PES, 42% rec.  
PES, 11% PINEAPPLE

# INSULATION & FIBERS

Freudenberg Performance  
Materials Apparel SE &  
Co. KG

**COMFORTEMP®**

**HO 806**

100% PA



Thermore (Far East) Ltd.

**ECODOWN FIBERS  
SOFT**

100% rec. PES

Imbotex Srl

**HEMP & NETTLE**

40% HA, 40% Nettle,  
20% PLA



HDWool Limited

**HD125ACT**

75% rec. PES, 25%  
PLA

Thank you very much for attending today's webinar:

**“BEST OF DIGITAL FORUM MAY 2021“**

**SHOWING SUMMER 23**

If you wish to order some of the shown fabrics today, you can enter the article number in search and directly order the swatch at

<https://www.performancedays.com/marketplace.html> after registering for free.

You should receive the recording of the webinar later on and be able to optionally download the corresponding .pdf file.

Thanks again and I look forward to connecting with you all again, very soon!

Alexa Dehmel – active sports design & consulting

[www.active-sports-design.com](http://www.active-sports-design.com)

**BEST OF DIGITAL FORUM MAY 2021**

Presented by Alexa Dehmel for THE LOOP by PERFORMANCE DAYS & FUNCTIONAL FABRIC FAIR

