

in combination with other yarns

our group of companies is involved in production and converting of flexible films for the packaging and electrotechnical industries, production of plastics, recycled plastics, machinery, packaging machines, technical, transport, forwarding and hotel services, power production and distribution,

we are the biggest producer of polypropylene multifilament mass dyed yarn /PROLEN®/ in Europe we produce functional socks made of PROLEN®

we produce medical clothes and textiles made of antibacterially and antivirally modified PROLEN® to protect from nosocomial infections

LOCATIONS

Svit, Slovak Republic, EU Luck, Ukraine

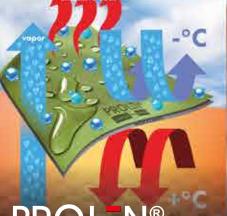
Greensboro, North Carolina

PROLEN® SILTEX is an innovative polypropylene yarn, uniquely treated with a permanent antimicrobial additive comprising of silver ions, with its active substance being silver phosphate glass. This exceptional yarn effectively impedes bacterial growth and curbs viral activity, thereby maintaining hygienic freshness and reducing unpleasant odors. The antibacterial properties of silver have been recognized for centuries. Silver ions not only inhibit bacterial growth but also balance the skin's biological environment, thus enhancing hygienic freshness. The application of the bacteriostatic agent to the yarn's core ensures its permanence, preventing migration from the fabric even after repetitive washing more, PROLEN® SILTEX boasts high antiviral PROLÉN® SILTEX has been designed for use in an workwear, socks, shoe fillings, bed linens, lining, and upholstery. It offers an exceptional level of protection in settings that necessitate high standards of hygiene.



PROLEN®

PROLEN® Bodyfresh polypropylene yarn has been zinc ions, effectively inhibiting the growth of bacteria, fungi and curtailing viral activity. The result is a significant reduction in unpleasant odours, enhanced hygiene, and Laboratory tests, in accordance with the AATCC TM 100: 2012 standard, validate the antibacterial properties of PROLEN® Bodyfresh and PROLEN® Siltex fabrics, exhibiting a reduction rate of over 99% against Escherichia Coli, Klebsiella pneumoniae and Staphylococcus aureus. The antiviral efficacy of PROLEN®Bodyfresh fabric is attested by tests following the ISO 18184: 2019 protocol, demonstrating over 99% reduction against Influenza A virus subtype H1N1 and coronavirus SARS-CoV-2. Moreover, PROLEN® Bodyfresh fabric's antifungal attributes are confirmed by the AATCC 30 standard test protocol, showing no growth against Aspergillus Niger. The Siltex and Bodyfresh treatments are applicable across all PROLEN® yarn types. In compliance with Oeko-tex® I PROLEN® Siltex meet the criteria for contact with bab



PROL-N®

PROLEN® powered by 37.5® Technology, is an innovative product born out of a collaborative effor between Chemosvit Fibrochem and Cocona Labs. This unique amalgamation amplifies the exceptional characteristics of PROLEN®, such as enhanced thermoregulation and moisture transfer, propelling them to a superior level. 37.5° Technology employs natural minerals to forge unparalleled temperature control 37.5[®] Technology excels in absorbing moisture vapor

before its transformation into liquid sweat, utilizing the body's inherent energy to maintain optimal warmth and coolness. This results in a comfortable experience, regardless of whether you are at rest or engaging in strenuous activities. The minerals integral to 37.5[©] Technology effectively trap odors, releasing them during the washing process. These minerals, permanently embedded in PROLEN®, endure through countless washes without losing efficacy. Garments fashioned from PROLEN® 37.5° Technology consistently stay fresh orting your active lifestyle without compromise.

PROL-N®

PROLEN® Soft imbues apparel with the tender touch of natural fibers, enhancing the wearer's comfort due to its innovative typically found in hygiene products. This unique composition not only ensures the fabric's softness but also promotes a healthier interaction between the garmer and skin. Additionally, PROLEN® Soft significantly bolsters the thermoinsulation capabilities of the clothing, amplifying color vibrancy, and supporting accelerated drying rates. It further enhances the processability and slipperiness of the material, making it an ideal choice for quality textile

PROL-N®

Prolen® XSTING is a yarn product enhanced with flame retardant modifications, specifically designed to meet the stringent safety needs usage spans across the automotive sector and upholstery in establishments with substantial public interaction such as bars, restaurants, hospitals, cinemas and hotels. The product's durability and long-term efficiency are achieved by incorporating flame retardant inhibitors directly into the yarn's core. The efficacy of the flame retardant modification is consistently validated to meet specific customer requirements.

PROLEN®

To enhance driving safety and comfort for both drivers and passengers, automotive manufacturers utilize PROLEN® Carwear in various car components such as dashboards, upholstery, seats, and fillings. This enhances the interior aesthetics, providing a soft and delicate touch.
PROLEN® Carwear, available in a wide range of colors and of superior quality, allows car interior designers to fully express their creativity. The fabric is spotproof UV resistant, and can be FR modified to providing thermo-insulating benefits to passengers. Adhering to EU Directive 200/53 EC, PROLEN® is recyclable, promoting the reuse and recovery of at least

CHEMOSVIT

PROL-N® **PRODUCT LIST**



PROLEN®

LIGHT: low density, lighter products, higher covering

DRY: the auickest moisture transfer, no moisture absorption THERMOREGULATING: maintains ideal temperature

DURABLE: abrasion resistant, permanent colours, chemically and biologically inert

HEALTHY: annalergic, no dyes migration, negative charge ■ ECOLOGICAL: 100% recyclable, dope-dyed ■ ECONOMIC: saved energy during PROLEN® and from PROLEN® production

EASY TO CARE: lower maintenance demands

automotive industries

standard: more than 2000 colour functionalities: melanges, micro, hollow, recycled, additives, etc Colour upon demand subject



of the number of ticks in Europe

Due to the escalating impact of global warming, Europe is witnessing a significant surge in tick population. These ticks can transmit serious, challenging to treat diseases such as encephalitis Lyme disease, ehrlichiosis, anaplasmosis, and babesiosis. To counteract this issue and enable continued enjoyment of outdoor activities, we have innovatively crafted a unique yarn, PROLEN® IXO. This product greatly minimizes the adherence of Ixodes ricinus (the most common European tick) to textile surfaces. PROLEN® IXO is a result of collaborative efforts among the Institute of Parasitology of the Slovak Academy of Sciences, the University of Veterinary Medicine and Pharmacy in Kosice, and the Institute of Biological and Ecological Sciences of the Pavol Jozef Safarik University in Kosice.

PROLEN®

PROLEN® Self-Cleaning, an innovative textile material, boasts a unique composition enriched with advanced photoactive pigments. It's meticulously designed to safeguard individuals in settings with an increased likelihood of hazardous microorganism transmission. These next--generation pigments are intended antimicrobial additives, thereby reducing

Introducing a unique insulating yarn, a standout in its class, designed to provide warmth at a faster rate than any other fiber. Its premix is enriched with a variety of components that work both on the surface and beneath, providing comprehensive insulating properties. This yarn has the impressive ability to raise the temperature by several degrees within just 10 minutes, relying solely on human IR energy spectrum, making it independent of solar power.

PROLEN®

This yarn has been enhanced with a specialized agent that minimizes heat generation on dark fabrics exposed to direct sunlight. This innovation offers UV radiation protection, thereby safeguarding the skin from premature aging and serious illnesses.

PROL-N®

Polypropylene yarn, noted for its high luminescence, provides exceptional visibility against all backgrounds. It is judiciously employed in the production of protective clothing to mitigate accidents in low-light scenarios. This material proves invaluable for a diverse group of users, including railway, road, and airport personnel, emergency responders, hunters, cyclists, motorcyclists, and drivers, who all rely

on its high visibility for safety purposes

PROL-N®

Is a unique polypropylene yarn engineered with a distinctive remission curve in the infrared (IR) spectrum. This advanced technology decreases the thermal/IR signature, providing protection against When adorned, PROLEN® Invisible allows the wearer to seamlessly blend with their by specific instruments. It finds its application among soldiers, law enforcement personnel, snipers, hunters, and nature photographers, all of whom can benefit from its unique



PR LEN®

PROLEN® Recycle is an innovative product derived from both pre-consumer and post-consumer polypropylene waste. This waste is ingeniously processed into PROLEN® Recycle chips, which serve as the raw material for generating PROLEN® Recycle yarn. The yarn retains all the functional properties of the original PROLEN® brand. Consequently, PROLEN® Recycle can be utilized effectively in the manufacture of functional clothing and a wide range of textile products. By adhering to the principles of Reuse, Reduce, and Recycle, we are able to decrease waste and promote

more sustainable production methods, thereby

contributing positively to the wellbeing of our

environment and planet.

Experience the magic of PROLEN® and cellulose coming together to create a superior yarn. With unrivaled thermal nsulation, moisture control, breathability and lightness from PROLEN®, coupled with the soft, natural touch of cellulose, this yarn is not just an innovation, it's a revolution in textile technology. Don't just settle for ordinary; embrace the extraordinary fusion of technology and nature for a more comfortable,

breathable, and lightweight experience.



CHEMOSVIT FIBROCHEM, s. r. o. Sturova 101 | 059 21 Svit | Slovak Republic, EU info@prolen.sk | prolen.sk | fibrochem.sk VAT ID: SK7020000273 49°03′19.3′′N 20°10′52.7′′E



Introducing our distinctive polypropylene multifilament yarn, ingeniously blended with photoluminescent pigment for advanced properties. The exceptional PROLEN® maintains its inherent features of moisture control and thermo--insulation while integrating a revolutionary safety component—PROLEN® GLOW. Visualize garments that, upon sun exposure, heighten your visibility in low-light conditions, effectively balancing safety and fashion. Welcome to the next generation of fashion safety with PROLEN® GLOW.

PROLEN®

Imagine the allure of a unique intricately blended with special pigments for a stunning metallic effect. This material is not just a game-changer, but a revolution luggage design. It's time to redefine your style with this versatile fabric that seamlessly blends durability and aesthetics.Available colours: aluminium, silvermirror.



The Sun is an essential entity for life on Earth, yet its UV radiation poses a significant threat by inflicting damage to skin tissue. Interestingly, even simple fabrics can offer an effective shield against such UV radiation. The UV permeability of a fabric layer is contingent on the fiber throughput. As such, we incorporate additives into PROLEN® that are capable of converting theabsorbed light energy into a different form of energy that is non-detrimental for the species. The consequence of UV radiation is an immediate decrease in molecular weight and a rise in the concentration of free radicals,

which trigger a new oxidation process. Therefore, to enhance light stability, PROLEN® necessitates stabilization. We achieve this through PROLEN® Sunprotect, which is stabilized using substances that guard against the impact of light radiation (UV absorbers and oxidation. With PROLEN® Sunprotect, you're not just wearing clothing, you're wearing a shield against harmful UV radiation.



PROLEN®

Is a special polypropylene yarn with an ultraviolet protection factor Comparable to wearable sunscreen it eliminates the need for reapplication. Its distinctive ultraviolet protection feature acts as a shield, preventing skin damage. A truly innovative yarn that safeguards your skin while fulfilling its essential role.



PROL-N®

This particular type of polypropylene yarn, distinguished by its lower melting point, is primarily utilized in the fabrication of composite materials.



PROLEN®

PROLEN® Composite is a multifilament polypropylene yarn, applicable in composite production as a matrix. It features minimal shrinkage, capping at 1.5%, and exhibits adhesion with materials like carbon and glass. Additionally, it offers high impact resistance, elasticity, and a lightweight attribute, being 30-50% lighter than comparable plastic materials.



PROLEN®

PROLEN® Delta represents a polypropylene yarn characterized by its trilobal cross-sectioned filaments featuring smoothly rounded edges. The unique structure augments optical attributes, thereby amplifying the yarn's luster. Additionally, it enriches the tactile quality of fabrics composed of PROLEN® Delta.

PROLEN®

PROLEN® Dryfast enhances the performance of fabrics by offering increased drying speed and a refined feel, setting new standards in textile technology.



PROLEN® Hollow's structure, mimicking bird feathers and the hollow hair of cold--adapted animals, is exceptionally lightweight among synthetic fibres. Its hollow filaments contribute to its lightness, providing economic, ecological perks for manufacturers and comfort for users. Thislightweight fibre boosts performance and promotes free movement. Similar to polar bears, reindeers, and alpacas, which have hollow, air-filled hair for therma insulation against harsh temperatures, PROLEN® Hollow filaments encapsulate air, enhancing their thermal insulation. As a result, PROLEN® Hollow's thermal resistance exceeds all other synthetic and natural fibres, even wool.

CHEMOSVIT

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PRODUCT LIST PROLEN® CIRCULAR Quantities MOQ + Multiples of # /kg Yarn Typology Yarn Type Type of Textu Ply Luster Colours Melange Standard Dope Dyed Standard Standard Textured
Standard Textured Dope Dyed Standard

Dope Dyed Standard х х х Standard x x x x x x x x x х х х х Dope Dyed Standard
Dope Dyed Standard х х Standard х х x x x х х Dope Dyed Standard
 Prolen® DTY&Twist
 VEL FTS

 Prolen® DTY&Twist
 VEL FTS

 Prolen® DTY&Twist
 VEL FTS

 Prolen® DTY&Twist
 VEL FTS
 Dope Dyed Standard
Dope Dyed Standard
Dope Dyed Functionalitie PP Prolen Min 60 S & Z 2200 1 350 350 2,5 Min 60 SZ 2200 1 350 350 2,5 PP Prolen
PP Prolen • x x Prolen® ATV Prolen® FDY
Prolen® FDY x x x x x x x x x x x x x x x x x x x х PP Prolen Standard Flat
PP Prolen Standard Flat x x x Dope Dyed Standard
Dope Dyed Standard x x • x All CERTFICATES TEST REPORTS All 003, 511 8135, 8136 904 All All 904 1101 004,900 004, 900 PACKAGING 5241,5243 004,6102 23 AATCC TM Individual bobbins are packed into PE bags and put into boxes. The packaging unit is one europallet. Every bobbin, box and pallet are marked by respective data. Pallet is packed into stretch PE film.

PROLEN®

ISO 9001
ISO 14001
Oeko-Tex Standard 100, Appendix 6, Class 1
REACH Conformity
AATICC TM 100
GRS - in process STANDARD SSS SSS

100	
method B1	

23 AATCC TM 100

3 AATCC 30

3 EN 14119 - metl

23 ISO 18184

23 B4 (404 OECD)
EN ISO 11092

4 EN 1149-3

5 EN ISO 20471

6 EN 13758-1-A1

7 BS 5852

7 EN 1021-1

Other counts and colours, combination of functionalities are possible to develop under extra development surcharge conditions, price, intended purchase volumes and minimum order quantity for the first trial from 150 to 350 kg depending on the assortment and functionality. Fo more information about physical & mechanical properties, functionalities and other variations technical data sheet will be provided upon request.

FUNCTIONALITIES

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⁷ EN 1021-1 ⁷ EN 1021-2 ⁷ EN 103 3795 EN ISO 105-E01, E04, C06, X12, X18 EN 14683+AC EN 13795-1