



Comfy and breathable

# The chilling power of yarn

## Embrace the perfect balance of breathability and comfort

Introducing Radilon® Chill-fit, the ultimate **PA6 yarn experience** that keeps you **comfortable** and **fresh** all day long. Say goodbye to feeling stifled or restricted by your clothing. With Radilon® Chill-fit, you'll enjoy a **newfound sense of freedom** as the fabric allows for **optimal airflow**. Additionally, Radilon® Chill-fit **maintains unchanged all the characteristics of nylon 6**, including mechanical properties, dyeability, printability, and thermal treatments.

### Unleash your full potential in any activity with Radilon® Chill-fit.

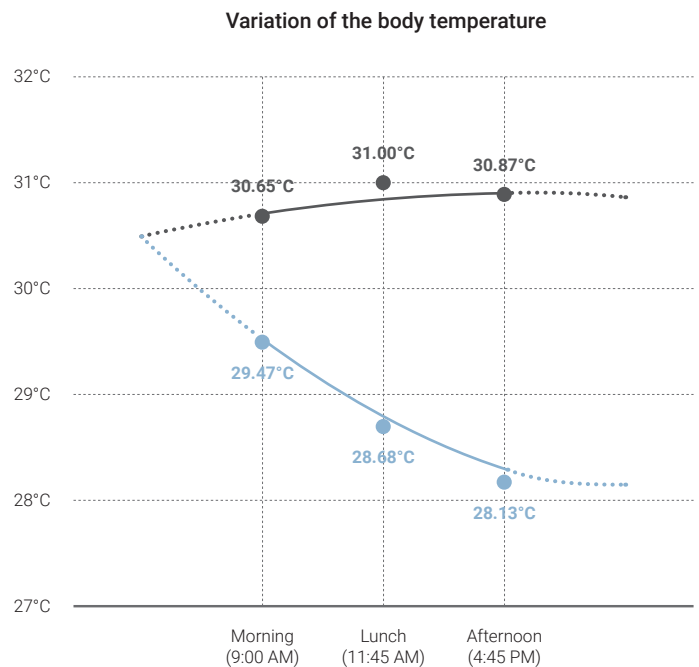
Whether you're going shopping, hitting the gym, or simply lounging at home, **garments made with Radilon® Chill-fit ensure your comfort.**

## Thermocamera test results\*

Two women wearing different pairs of pantyhoses, temperatures measured during a working day. Here are the test results based on these women sharing the same room and working conditions:

- **Standard PA**  
Higher body temperature, constantly higher during the day.
- **Radilon® Chill-fit**  
Lower body temperature during the day.

Graph disclaimer:  
throughout the day, legwear produced with Radilon® Chill-fit create a refreshing effect compared to standard PA yarn (the first temperature was detected about 1h after the tights were worn).



Moreover, according to the **skin model test\***, it is proved that water absorbed by the fabric produced with Radilon® Chill-fit is about twice the water absorbed by a fabric produced with a standard polyamide.

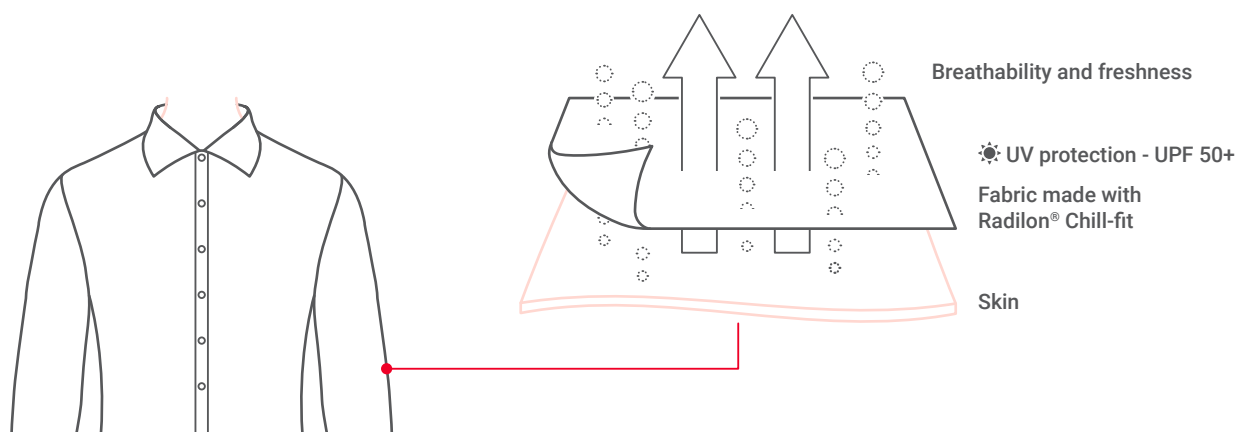
\* Internal method by Centrocot.

## RadiciGroup was inspired by nature behavior

The idea for this special product came from the observation of:

- eccrine sweat glands that regulate the thermal balance of the human body through the physical effect of evaporative cooling;
- tropical plants whose leaves have a transpiration process (called guttation) that expels excess water.

## Radilon® Chill-fit, discover a new sensation



Thanks to the excellent work of RadiciGroup research and development team, an **innovative and special solution** has been developed that combines the **ability of the yarn to intrinsically keep freshness** and **to absorb sweat and make it evaporate quickly**.

This brings a special "flow" to garments made with Radilon® Chill-fit.

This new engineered process grants that **thermal regulation** is intrinsic and permanent in the yarn without the need of additional treatment for the fabric.

The fabric made with Radilon® Chill-fit is fast absorbing and quick drying; in fact, it absorbs about twice as much water and ensures rapid evaporation compared to standard nylon. This is why garments made with Radilon® Chill-fit offer thermoregulation properties and ensure comfort on the skin.



## Radilon® Chill-fit specialties:

### **thermoregulating**

The textile made with Radilon® Chill-fit has the power to restore freshness, vitality, energy, and to prevent odor emanation from sweat.

### **soft touch**

Radilon® Chill-fit gives the textile a nice touch and premium comfort. It is the ideal solution for skin contact textiles.

### **durability**

Radilon® Chill-fit guarantees long lasting quality.

### **breathability**

These yarns have a great ability to allow the passage of air and moisture.

### **UV protection**

Thanks to this distinctive polymer, these yarns are endowed with UV protection properties. The fabric made with these yarns actually shields the skin with an UPF 50+.

### **long lasting performances**

Being at the fiber level, the air flowing properties will never wash out.

### **coverage**

Radilon® Chill-fit has a greater coverage ensuring lightness.

### **100% recyclable**

Being recyclable, these yarns perfectly fit into RadiciGroup circular strategy.



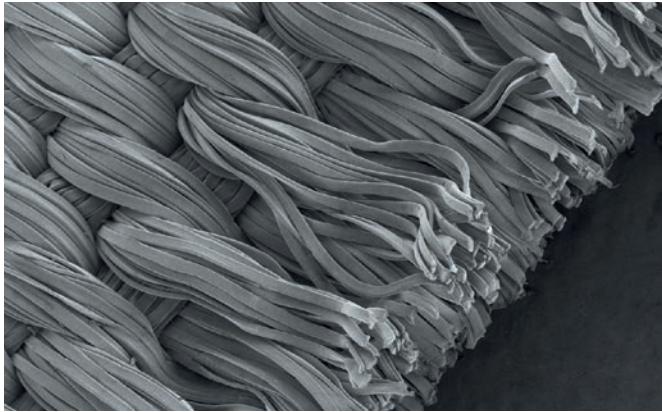
## Unveiling the Radilon<sup>®</sup> Chill-fit section

# Discover the innovation behind Radilon<sup>®</sup> Chill-fit

Explore the innovative world of Radilon<sup>®</sup> Chill-fit fibers as we unveil their unique structure. Through microscopic imagery, you'll discover the details that contribute to the exceptional performance of this yarn, showcasing its remarkable shape that provides the fibers with properties of fast absorption and quick drying.

### SEM picture of a 100% Radilon<sup>®</sup> Chill-fit woven fabric

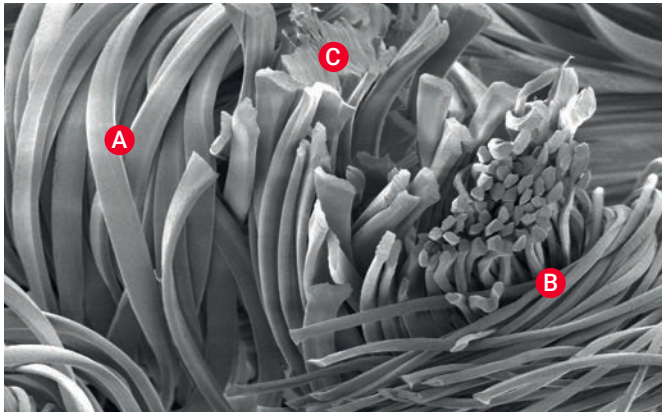
This image clearly shows the fibre's cross-section and how it is arranged in a fabric sample. Both warp and weft are Radilon<sup>®</sup> Chill-fit yarns.



### Radilon<sup>®</sup> Chill-fit and standard cross section yarn comparison

Circular knitted fabric - Detail of Radilon<sup>®</sup> Chill-fit and standard PET with round cross section.

- A** Radilon<sup>®</sup> Chill-fit yarn.
- B** PET yarn with round cross section.
- C** Elastomer.



### SEM picture of a 100% Radilon<sup>®</sup> Chill-fit warp knitted fabric

Radilon<sup>®</sup> Chill-fit is arranged to guarantee better coverage and premium soft touch.



# Radilon® Chill-Fit on the Catwalk



Radilon® Chill-fit walked the runway at the Imperial Forums in Rome during the Phygital Sustainability Expo 2024. This yarn offers excellent fabric performance, **providing thermal regulation, freshness, and comfort all day**, making it perfect for an active lifestyle.

The fabric made with Radilon® Chill-fit offers a **softness** that gently embraces the body, **transitioning effortlessly** from university to a bold evening out.

In response to today's **environmental challenges**, RadiciGroup have created a Radilon® Chill-fit based fashion manifesto: **durable, recyclable** essentials that mix and match seamlessly, combining personal style with a commitment to **sustainability**.

**With RadiciGroup, fashion's future is sustainable, elegant, and full of opportunities.**

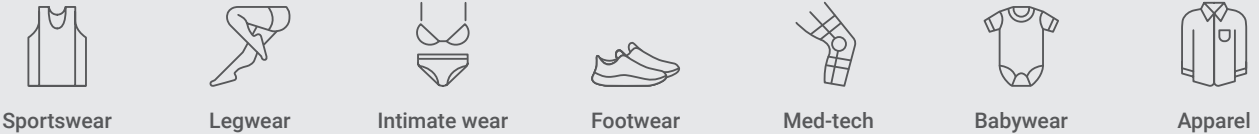
## Manufacturing technologies

Radilon® Chill-fit yarn is available **textured, drawn** on bobbins with different sizes or **warped on beams**. Radilon® Chill-fit product range includes **many combinations of counts, number of filaments** and **plies** that made ideal for many technologies to enhance its characteristics:

- **Seamless**
- **Circular and flat knitting**
- **Covering**
- **Warp knitting**
- **Hosiery and socks**
- **Weaving**

# Radilon® Chill-fit endless possibilities

Radilon® Chill-fit is the ideal solution for all those applications where moisture management is required.



## Advantages of co-branding with RadiciGroup

RadiciGroup is available for cooperation in order to associate the Radilon® Chill-fit brand to textile collections. The co-branding:

- unlashes creativity;
- grants transparency in the supply chain and traceability of products;
- is an example of sustainability for the market;
- ensures a deeply-rooted know-how in synthetic fibres.



# RadiciGroup. Inside your world.

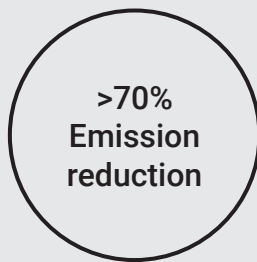
RadiciGroup is one of the world's leading producers of a wide range of chemical intermediates, polyamide polymers, high performance engineering polymers and advanced textile solutions, including nylon yarn, polyester yarn, yarn made from recovered and bio-source materials, nonwovens and personal protective equipment for the industrial and healthcare fields. These products are the result of the Group's outstanding chemical expertise and vertically integrated polyamide production chain and have been developed for use in a variety of industrial sectors, such as: automotive, electrical and electronics, household appliances, consumer and industrial goods, apparel, furnishing, construction, sports. The basis of the Group's strategy is a strong focus on innovation, quality, customer satisfaction and social and environmental sustainability.

## Sustainability

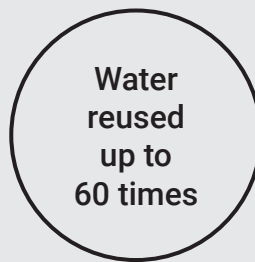
Every day at RadiciGroup, we work to make circularity our business model. We optimize the use of materials while fine-tuning our processes, eliminating waste and promoting recyclability from the earliest product design phases. We are always looking for low-impact solutions in terms of natural resources and energy. We rely on certified management systems for Quality, Health and Safety, Environment and Energy to keep our companies in line with the highest sustainability standards.



**GRI**, third-party certified  
**Sustainability Report**  
covering all RadiciGroup  
companies worldwide.



**Since 2011**,  
in RadiciGroup plants.



**Water reused**  
in RadiciGroup  
production plants.

Data Source: RadiciGroup Sustainability Reports



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