

New nylon stories







An inexhaustible source of stories

This is a story you have never heard. A story that begins anew again and again, but each time with a different ending. It is a story of how production scrap is converted into secondary raw material until it becomes Renycle®, a sustainable nylon featuring optimal performance for a variety of applications.

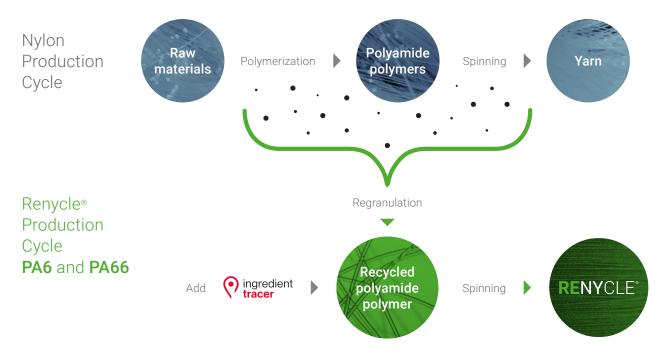
Renycle® is ideal for expressing your identity in innovative ways. Are you ready to write your own story with Renycle®?

Nylon after nylon

Renycle® is one of the most valuable RadiciGroup products,

obtained from recycled nylon, including both **polyamide 6 and 66**. This highly valued material is renowned for its excellent resistance, dyeability, softness, and versatility. Through recycling and recovery, production scrap is transformed into polymers and then into yarns with technical performance characteristics ideal for textile flooring, apparel, and automotive applications.

From scrap to new nylon



Renycle®: the traced version

Renycle® is also available in a **traceable version**, combining **physical and digital traceability**. A **unique tracer blend** allows the yarn to be scanned with a dedicated device, ensuring production traceability without altering its properties. Additionally, **a tailored blockchain system digitally records every step of the process**, offering **full transparency** and enabling users to uncover the complete story behind the final garments.



Discover more

Why choose Renycle®



Renycle® gives you the opportunity to be greener in several ways:

- A global leader: Renycle® is a product from RadiciGroup, one of the world's leading manufacturers of polyamides, synthetic fibres and engineering polymers.
- Performance: Renycle®'s technological value and performance are retained unchanged over time and there is no loss into the environment.
- No waste: conversion of scrap eliminates the need for new raw material.
- Green energy: the energy consumed in Renycle® polymer production is entirely green, as it comes from renewable sources.

Our Renycle® results have a lot to say

Resource saving compared to standard PA6 polymer production.

(Data obtained from internal evaluations, under EPD certification process.

Energy data based on Italian energy mix).

Renycle® Polymer



Energy

Energy saving of 87.4% compared to energy used for standard PA6 polymer production.

(Global Energy Requirement MJ/kg)



Emissions

89.3% lower CO₂ emissions compared to standard PA6 polymer production.

(Global Warming Potential GWP100 kg CO₂ eg)



Water

Water saving of 90.4% compared to consumption for standard PA6 polymer production.

(Potential Water Deprivation m³)

The Renycle® story does not end here. Its applications go on and on.

Renycle® is the ideal solution for all those sectors where creativity and high performance are required. It has countless applications in:







Underwear



Hosiery



Technical apparel



Outerwear



Beachwear





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.

1st Sustainability Report in 2004

GRI, third-party certified Sustainability Report covering all RadiciGroup companies worldwide >70% Emission reduction

Since 2011, in RadiciGroup plants Water reused up to 60 times

Water reused in RadiciGroup production plants

Data Source: RadiciGroup Sustainability Reports



RADICI YARN SpA
Via Provinciale, 1125 - IT - 24020 Villa d'Ogna (BG)
Tel. +39 0346 89111
www.radicigroup.com
apparel.technical@radicigroup.com

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