RENYCLE®

nylon after nylon



Let's write a new sustainable story

Renycle® is a range of special engineering polymers that have much lower environmental impact, based on LCA indicator data currently available for each grade. Consequently, this new brand answers the growing demand for more sustainable products.



Renycle® products' key benefits:

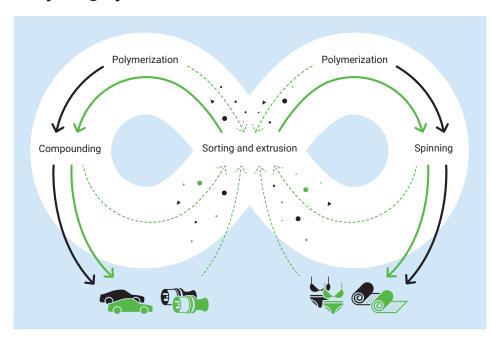
- As they are more sustainable than their virgin equivalents, they fuel the transition towards climate neutrality and low-carbon footprint business models.
- They allow for waste reduction, minimizing the amount of products sent to landfills or dispersed in the environment, and promote a culture of reuse and recycling.
- They meet the needs of end-customers who are committed to make environmentally conscious choices and support the development of a green-oriented product offering.
- They offer a solution consistent with the legislative context, which is increasingly focused on the recovery of discarded materials (so-called EOL materials).
- Being recyclable over and over again, Renycle® is a tangible circular choice.

RadiciGroup circular nylon recycling system

Thanks to its long-standing knowhow in material formulation and recycling, RadiciGroup is able to convey scraps either to the same industry they came from or to a different one.

Choosing the most sustainable solution depends on the specific characteristics of the materials and the performance expected from the final applications.





Current product offering







Post-industrial based



General purpose



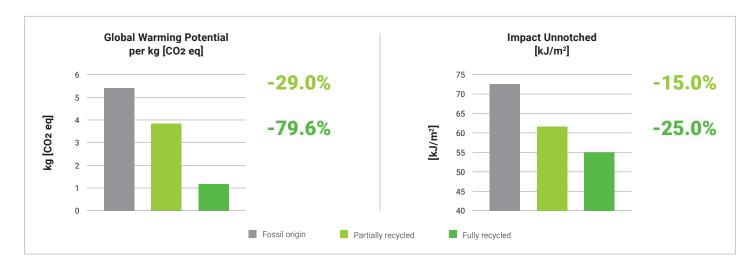




Mechanical vs environmental performance

PA6 (REC), 30% glass-fibre reinforced injection moulding grade. Heat stabilized, black colour.

Finished Product	Stress at Break [MPa]	Strain at Break [%]	Impact Unnotched [kJ/m²]
■ RAD S RV300W 333BK (Reference)	173	3.2	73
Renycle® S GF3001K 3030 BK	150	3.5	62
■ Renycle® S GF3004K 3030 BK	130	2.5	55



Renycle® grades currently available

Renycle® A GF3002HR 3039 BK	Partially recycled PA66 30% glass-fibre injection moulding grade. Heat stabilized, hydrolysis resistant.	
Renycle® A GF3502K 3033 BK	Partially recycled PA66 35% glass-fibre injection moulding grade. Heat stabilized.	
Renycle® A GF3504K 3033 BK	Recycled PA66 35% glass-fibre injection moulding grade. Heat stabilized.	
Renycle® S GF1501K 3030 BK	Partially recycled PA6 15% glass-fibre-reinforced injection moulding grade. Heat stabilized.	
Renycle® S GF2501 HF0 3033 BK	Partially recycled PA6 flame retardant injection moulding grade, halogen and red phosphorus free. 25% glass-fibre-reinforced. Laser markable.	
Renycle® S GF3001K 3030 BK	Partially recycled PA6 30% glass-fibre-reinforced injection moulding grade. Heat stabilized.	
Renycle® S GF3003 3033 BK	Partially recycled PA6 30% glass-fibre-reinforced injection moulding grade.	
Renycle® S GF3004K 3033 BK	Recycled PA6 30% glass-fibre injection moulding grade. Heat stabilized.	
Renycle® S N101 3030 BK	Partially recycled PA6 injection moulding grade. Black colour.	
Renycle® S T203K 3030 BK	Partially recycled PA6 injection moulding grade. Toughened. Heat stabilized.	

Visit us at www.radicigroup.com/en/products/plastics/sustainable-engineering-polymers-renycle



knowledge and experience become available. Data provided fall within the normal range of product properties and relate only to the specific designated material. The data may not be valid for such material if used in combination with any other material or additive, or in any process, unless otherwise expressly indicated. The data provided should not be used to establish specification limits. Such data are not intended to substitute for any testing you may need to conduct to determine the suitability of a specific material for particular purposes. Since the above-mentioned companies cannot anticipate all the variations occurring in end-use conditions, they make no warranties and assume no liability in connection with any use of the above information. Nothing in this publication is to be considered as a licence to operate under, or a recommendation to infringe, any patent rights.









