RENYCLE®

nylon after nylon

HIGH PERFORMANCE POLYMERS

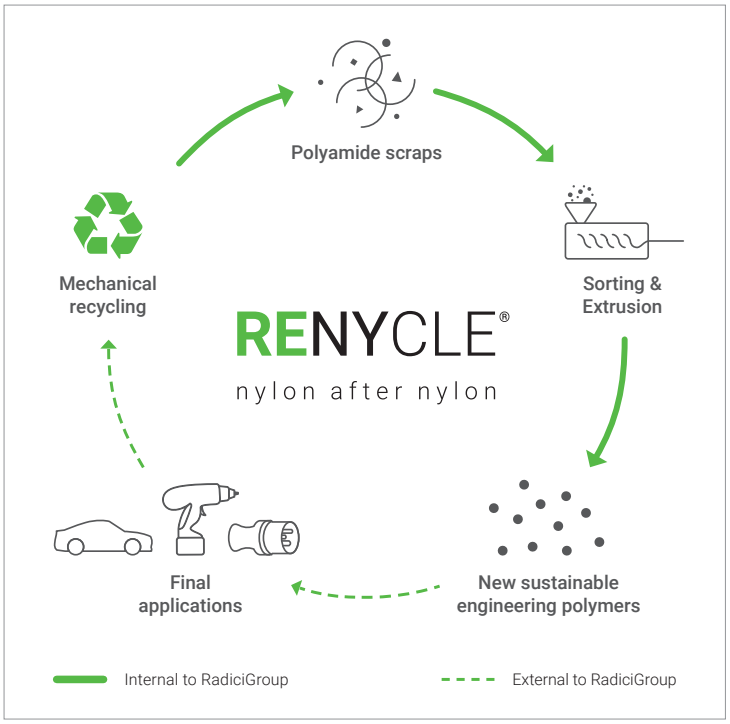
RADICI GROUP

Let's write a new sustainable story

The **Renycle®** range encompasses low environmental impact polyamides based on post-industrial and post-consumer sources. Renycle® products are characterized by lower and measurable environmental impact based on Life Cycle Assessment (LCA) data, currently available for each grade.

Renycle® key benefits:

- As these products have a **lower environmental impact** than virgin equivalents, they fuel the transition towards **climate neutrality** and **low-carbon footprint** business models.
- They allow for **waste reduction** and promote a **culture of reuse and recycling** in compliance with the legislative context.
- They meet the needs of end customers who are committed to making **environmentally conscious choices**.



Environmental footprint measurement

Life Cycle Assessment (LCA) is the compilation and evaluation of the inputs, outputs and the potential environmental impacts of a product system throughout its life cycle (ISO 14040). The LCA goal and scope, including the system boundary, should be clearly defined. The EPD is an ISO Type III Environmental Declaration, according to the ISO 14025 standard, that transparently reports third-party verified data about product environmental performance from a life cycle perspective. **LCA short studies** and **Environmental Product Declarations (EPDs)** are available for the environmental footprints of our products. Below are the characteristics of these two documents.

LCA Short Study	Common Characteristics	EPD
Confidential.	Specific data.	Public.
Faster.	Certified management system.	To be evaluated grade by grade.
For almost all RadiciGroup products.	LCA and calculation methodology.	Third-part verified.
Boundaries: Cradle-to-gate.		Boundaries: Cradle-to-distribution.

Current product offering

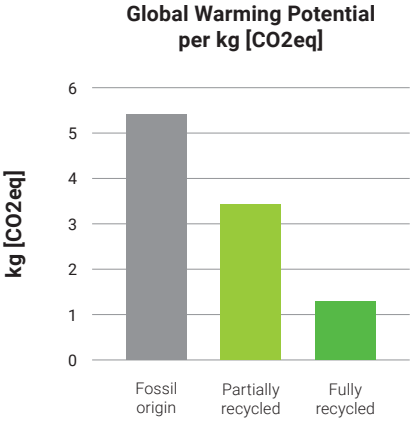
RENYCLE® ▶

General Purpose · Automotive · E-mobility · Electrical & Electronics · Furniture · Industrial · Sport

Mechanical vs environmental performance

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

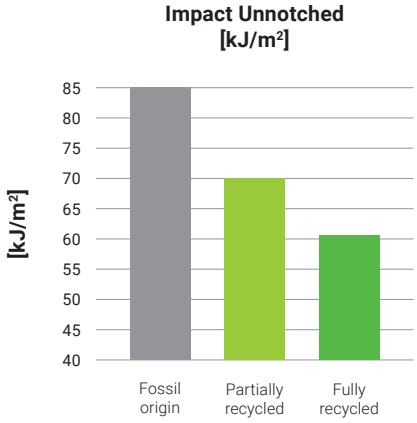
Finished Product	Stress at Break [MPa]	Strain at Break [%]	Impact Unnotched [kJ/m²]
PA6 - GF30 (Prime grade reference)	165	3.2	85
Renycle® S GF3001K 3033 BK	150	3	70
Renycle® S GF3003K 3033 BK	150	3	61



Saving CO2

> 30%

> 70%



Reduction

-18%

-28%

Renycle® selection of available grades

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 3033 BK	Partially recycled PA6 30% glass fibre-reinforced injection moulding grade. Heat stabilized.
Renycle® S T203K 3030 BK	Partially recycled PA6 injection moulding grade. Toughened. Heat stabilized.
Renycle® A GF3002HR 3039 BK	Partially recycled PA66 30% glass fibre injection moulding grade. Heat stabilized, hydrolysis resistant.
Renycle® A GF3504K 3033 BK	Recycled PA66 35% glass fibre injection moulding grade. Heat stabilized.

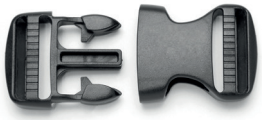
View the entire product range.

Application examples

Air intake manifold

Miniature circuit breaker

Furniture parts



Sport accessories

RADICI GROUP

radicigroup.com

RADICI NOVACIPS SpA (Headquarters) - Via Bedeschi, 20 - IT - 24040 Chignolo d'Isola (BG)

Jan/2024