



Bio from renewable sources





Our respectful yarns

Choosing bio-sourcing represents an important commitment to the environment and to reduce the dependance on fossil fuels.

All our bio-sourced options derive from agricultural feedstock not competing with food chains and grant the following **sustainable characteristics**:

- From renewable sources
- Solution dyed range
- Biodegradable material options
- Durable
- Fully recyclable through standard recycling methods

Why choose Biofeel®

RadiciGroup provides strong development capabilities and a longstanding experience in the world of yarns:

- Our focus on **innovation**, **quality**, **customer satisfaction**, both social and environmental **sustainability** is the basis of our service, allowing continuous and always up-to-date solutions.
- Our dedicated masterbatch department provides a prompt assistance and a longtime experience as for dyeing.
- A short and integrated supply chain enables RadiciGroup to manage **production processes efficiently**, providing **personalized services**. In fact, RadiciGroup can guarantee small batches and flexibility in order handling.

Advantages of co-branding with RadiciGroup

- Visibility
- Transparent supply chain and traceability of products
- A sound sustainability basis
- · A deeply-rooted know-how in synthetic fibres

Our applications

Biofeel® could be used in many different sectors, depending on the material type, polyamide, polyester or PLA.



Fashion apparel



Intimate wear



Sportswear



Industrial applications



Furniture



Outdoor



Automotive

Biofeel® | PET



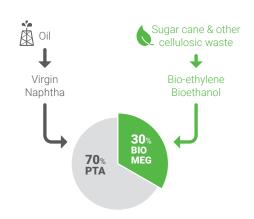
Biofeel® PET yarn is obtained through polymerization of 70% PTA (purified terephthalic acid) and 30% Bio-MEG (mono-ethylene glycol). Bio-MEG synthesis starts from **renewable sources**, such as sugar cane and cellulosic waste.

Bio-MEG used in Biofeel® PET is 100% bio-based.

Biofeel® PET is chemically identical to standard PET and stands out for:

- Durability
- Excellent light, washing and abrasive fastness
- · Excellent dyeability
- Very good tenacity

Biofeel® PET is available in several counts and filament combinations, texturized, solution dyed, yarn dyed.



Biofeel® | PA

Biofeel® nylon includes PA 6.10 yarn and staple fibre, obtained from the polycondensation of 1,6-hexamethylenediamine (HMDA) and sebacic acid derived from castor oil plant seeds.

Biofeel® nylon is 64% bio-sourced.



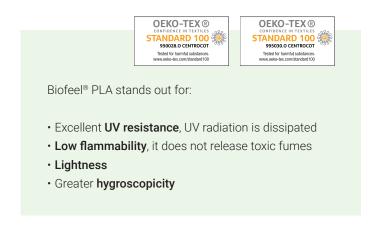
Biofeel® nylon guarantees:

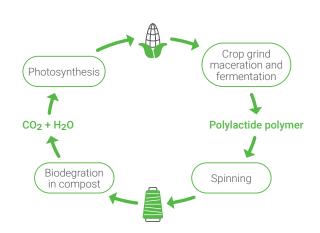


- Excellent drying ability for a feeling of comfort
- Excellent **chemical resistance** characteristics
- Better dyeing uniformity compared to other bio-based solutions
- Excellent dimensional stability characteristics

Biofeel® | PLA

Biofeel® PLA is a continuous filament yarn made with polylactic resin (polylactic acid), synthetized from non-GMO vegetable raw materials, 100% biodegradable and compostable.





RadiciGroup. Inside your world.

RadiciGroup is one of the most active Italian chemicals manufacturers at an international level. RadiciGroup's diversified businesses operate worldwide and are focused on Specialty Chemicals, High Performance Polymers, Advanced Textile Solutions. Synergistic vertical integration, of polyamide production in particular, is one of RadiciGroup's strengths. Indeed, the Group has total control over its production chain, from chemical intermediates, such as adipic acid, to polyamide polymers, engineering polymers and synthetic fibres. RadiciGroup products are exported all over the world for use in the following sectors: apparel, sports, furnishings, automotive, electrical/electronics and household appliances.

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, 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 Safety, Environment and Energy to keep our companies in line with the highest sustainability standards.

Last 10 years' milestones:



use of Energy per ton processed



CO₂ Emissions per ton processed



use of Water per ton processed

Data Source: RadiciGroup Sustainability Reports



Radici Yarn SpA Via Provinciale, 1125 - 24020 Villa D'Ogna (BG) - IT Tel. +39 0346 89111 Fax +39 0346 23396 Noyfil SpA Via Verdi, 1 - 24040 Chignolo d'Isola (BG) - IT Tel. +39 035 905252 Fax +39 035 905112

Via Gaggiolo, 31 - 6855 Stabio - CH Tel. +41 91 6416141 Fax +41 91 6472806

Noyfil Sa

www.radicigroup.com - apparel.technical@radicigroup.com

The information provided in this document corresponds to our knowledge on the subject as of the date of publication. The information may be subject to revision as new 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 Radici Yarn cannot anticipate all the variations occurring in end-use conditions, Radici Yarn makes no warranties and assumes 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.