

-Radyarn[®]-

UV STABILIZED YARN

Noyfil SpA, a company belonging to the Fibres area of RadiciGroup, is able to offer its customers a wide range of products taking advantage of its UV stabilized polyester yarn (UV Guard) produced as POY by its sister company Noyfi Sa in Switzerland.

MAIN FEATURES

- This polyester is stabilized to resist to **Solar radiation**. It boasts complete versatility in all the versions of solution dyed PET.
- Its Stability and Colour fastness are guaranteed and it can provide great versatility.
- Its residual resistance, after exposure, is **COmparable** to traditional acrylic products, no degradation is recorded after maintenance processes.
- It is able to keep the **intrinsic properties** of the polymers unaltered, without post treatments.
- This product is certified **OEKOTEX** Std 100 Class 1 and it contains no harmful substances.



Stabilized Polymer: Intrinsic anti UV properties

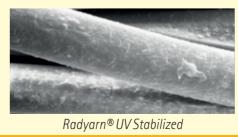
Radyarn® UV Stabilized is a PET polymer able to reduce the polymer chain deterioration caused by UV rays. UV radiations damage polymer bonds of standard PET weakening its filaments. This yarn absorbs and dissipates UV rays thus limiting polymer deterioration.

Effects of Solar Radiation

About 10% of the solar energy is in the form of Ultra Violet radiation. The atmosphere absorbs most of it, only 6% of the UV radiation reaches the Earth's surface.

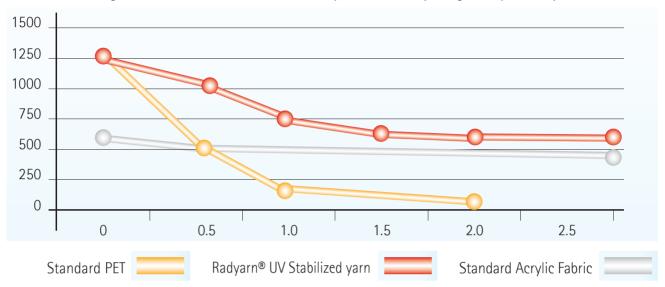
NAME	WAVELENGTH		0/0
Ultraviolet (UV)	295	400 nm	6.8
Visible (VIS)	400	800 nm	55.4
Infrared (IR)	800	2.450 nm	37.8





Comparison of Mechanical Properties After Exposure

Tensile Strength in cN measured on air textured 600 dtex yarns Test corresponding to 2.5 years of exposure (Florida – US)



Dimensional Stability of Fabrics

Fabrics made with Radyarn® UV Stabilized yarn are safe from folds and deformations sometimes occurring on the surface and along seaming lines.

Safety and Respect of the Environment

Radyarn® UV Stabilized yarn contains no harmful substances. OEKOTEX Std 100 certification Class 1 is available upon requests. Furthermore, it is solution dyed by Noyfil Sa, thus reducing energy and water consumption.



Applications, Sectors

FURNITURE	AUTOMOTIVE/TRANSPORT	TECHNICAL
Outdoor	Boating	Outdoor
Curtains	Seats	Coverings
Coverings	Coverings	-

<u>Multifunctionality</u>

Fungicidal Activity and Anti-mold (UVGuard + Feel)

There is the possibility of adding to Radyarn® UV Stabilized yarn also flame retardant properties (FR) and / or combining them with the fungicidal and anti-mold functionality (Feel) in order to avoid the formation of mold patches on the surface of fabrics exposed to external agents.

Radicigroup Goal: Continual Improvement of Sustainability

RadiciGroup's attention to Sustainability is a long term commitment demonstrated by the voluntary publication of a Sustainability Report every year. All the new products of our Group satisfy therefore the strictest Security criteria and have limited environmental impact.



AVAILABILITY

Radyarn® UV Stabilized is available as flat or textured on knitting or sized beams, textured, twisted and taslan on spools and beams.





NOYFIL SpA

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