



UV STABILIZED YARN

- Starlight® UV Stabilized is a polyester yarn designed to resist to **solar radiation**. It is produced by NoyFil SA, a company belonging to the Fibres area of RadiciGroup. It guarantees 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.
- It is able to keep the **intrinsic properties** of the polymers unaltered, without post - treatments.



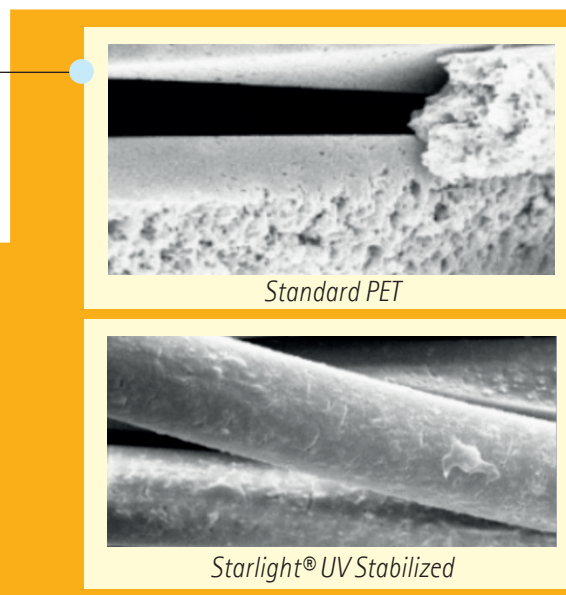
Stabilized Polymer: Intrinsic anti UV properties

Starlight® UV Stabilized is based on a PET polymer able to reduce the polymer chain deterioration caused by UV rays. UV radiations damage the 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		%
Ultraviolet (UV)	295	400 nm	6.8
Visible (VIS)	400	800 nm	55.4
Infrared (IR)	800	2,450 nm	37.8



Dimensional Stability of Fabrics

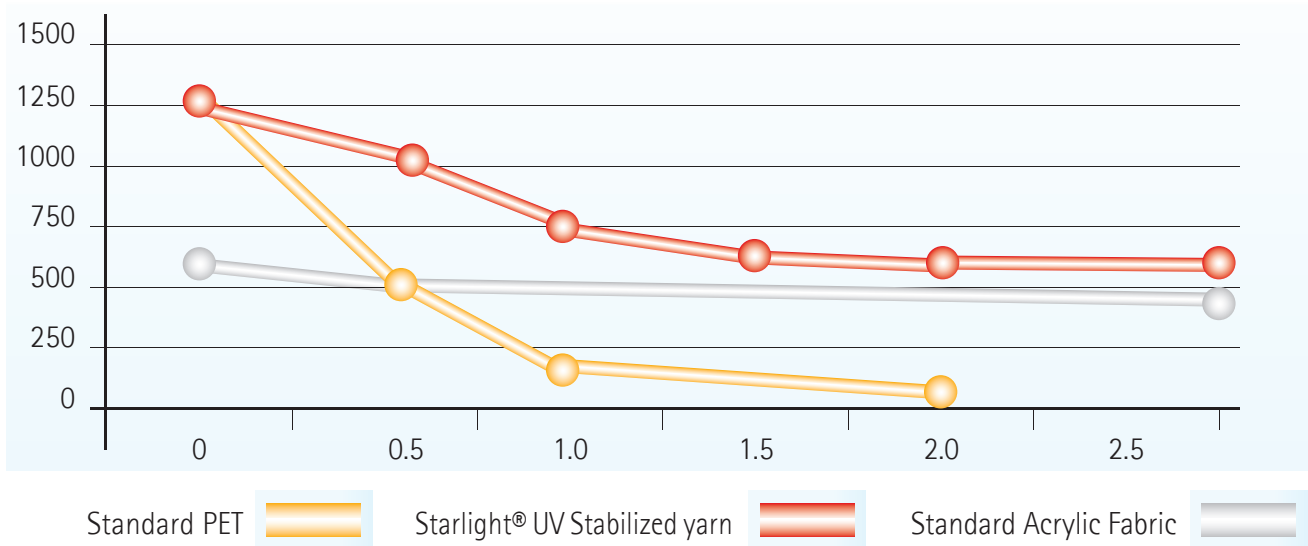
Fabrics made with Starlight® UV Stabilized yarn are safe from folds and deformations sometimes occurring on the surface and along seaming lines.



Comparison of Mechanical Properties After Exposure

Tensile Strength in cN measured on air textured 600 dtex yarns.

Solar radiation at ISO 105-B04. Test corresponding to 2.5 years of exposure (Florida – USA).



Safety and Respect of the Environment

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



Multifunctionality

Fungicidal Activity and Anti-mold

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

Applications, Sectors

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