

Outdoor Polypropylene Yarns



Sunole is an olefin based synthetic yarn which is durable to outdoor conditions.

Due to additives and special pigments used in the production, Sunole provides high protection to sun and weather conditions, high color fastness and very limited tenacity loss in the material.

The research and tests are continuing to ever improve the performance of Sunole.

Olefin as well as acrylic and polyester materials are being used for outdoor textile products and the usage of olefin is increasing and becoming more and more popular.

Olefin has got the following advantages compared to other materials:

- Specific density of olefin is 30-40% less
- Tenacity of olefin is 30-100% more
- Polymer properties of olefin is more flexible;
 - flame retardancy, antibacterial property, dyeability during spinning
- Olefin can be recycled easily and is more environment friendly
- It is foreseen that Olefin will improve and expand in the markets in the years to come

Sunole is offered with about 100 uni colors and thousands of multicolors. The service is as fast as one week, thanks to the raw material stocks.





Outdoor Upholstery

Garden furniture and decoration

Hotel, Café outdoor products

Boats, Yachts, Marine sector Sun Umbrella and Sun Shade Beach and pool products

<image>

Outdoor rugs

Outdoor ropes

Tents, Hammack, baby stroller, hats, shoes

YARN TYPE	YARN NAME	UNI COLOR	MULTI COLOR	DENIER	DELIVERY TIME	MOQ	PACKAGE OPTIONS	
CF	SUNOLE-CF	+	-	155-310	stock	1 box/1 pallet	C4;C5 - B4;B5;B6	
AIR TEXTURED	SUNOLE-SB	+	-	150-600	Develo	Development and test phase, for Sunbed use		
	SUNOLE 300	+	+	335	1-2 weeks	30kgs/720kgs	C1 - B1;B3	
	SUNOLE 300T	+	-	340	2-3 weeks	30kgs/360kgs	C2;C3 - B1;B2;B3	
	SUNOLE 450T	+	-	490	2-3 weeks	30kgs/720kgs	C2;C3 - B1;B2;B3	
	SUNOLE 500	+	+	500	1-2 weeks	30kgs/720kgs	C1 - B1;B3	
	SUNOLE 700	+	+	665	1-2 weeks	60 kgs	C1 - B1;B3	
	SUNOLE 1000	+	+	990	1-2 weeks	60 kgs	C1 - B1;B3	
	SUNOLE 1300	+	+	1315	1-2 weeks	60 kgs	C1 - B1;B3	
	SUNOLE 2000	+	+	2010	1-2 weeks	80 kgs	C1 - B1;B3	
	SUNOLE 2700	+	+	2660	1-2 weeks	120 kgs	C1 - B1;B3	
	SUNOLE 2000-2700 Degrade	-	+	2130-2700	1-2 weeks	160 kgs	C1 - B1;B3	
TEXTURED	SUNOLE 150 DTY	+	-	157	1-2 weeks	30kgs/320kgs	C2;C3 - B1;B2;B3	
	SUNOLE 300 DTY	+	+	315	1-2 weeks	30kgs/320kgs	C2;C3 - B1;B2;B3	
	SUNOLE 450 DTY	+	+	470	1-2 weeks	30kgs/320kgs	C2;C3 - B1;B2;B3	
	SUNOLE 600 DTY	+	+	630	1-2 weeks	30kgs/320kgs	C2;C3 - B1;B2;B3	
FANCY	SUNOLE FNC Series	+	+	900-4000	2-3 weeks	60kgs/320kgs	C2;C3 - B1;B2;B3	
	SUNOLE Chenille	+	-	NM6-NM3	3-4 weeks	30kgs/320kgs	C2;C3 - B2	
Light Fastness	ISO EN 105 B04 Artificial Weathering Test: Grade 7-8 (Except for few colors which are yellow group on colorcard)							
Tenacity / Elongation	Over 3 g / denier / 30%(+/-5%)							
UV Stability	ASTM G154 (0,87W/m2) Guaarented 50% tenacity - 1500 Hours							
APPLICATIONS	Outdoor upholstery, Garden furniture and decoration, Hotel&Cafe outdoor products, Boats, Yachts, Marine sector, Sun Umbrella, Sun Shade, Outdoor rugs, Outdoor ropes, Tents, Hammack, Babby stroller, Hats, Shoes.							
DENIER	Counts can be adjusted on demand.							
PACKAGE OPTIONS								
CONES (WxL - kg)	TEXTURED		C1-> 24x29 d	cm - 3,5 kg		TEXTURED	B1-> 500x600x300 mm	
	TWISTED/FANCY-A		C2-> 18x29 cm - 2,5 kg		BOXES	TWISTED/FANCY	B2-> 500x600x230 mm	
	TWISTED/FANCY-B		C3-> 14x23 cm - 2,2 kg			JUMBO	B3-> 1000x1200x900 mm	
	CF		C4-> 28x23	cm - 7,1 kg	(WxLxH)	CF BOX	B4-> 300x500x300 mm	
	CF		C5-> 37x13 c	:m - 7,8 kg]	CF PALLET	B5-> 1150x1150x1400 mm	
Package options are showing the max kg available, cone and box kg may vary depending on the yarn process. CF PALLET B6-> 1150x1150x							B6-> 1150x1150x1320 mm	

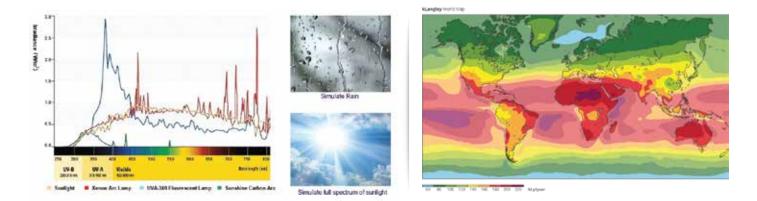


As the tests confirm Sunole is developed to be superior than its competitors and still being improved. Furthermore, the service of Sunole is much faster than competitors due to raw material stocks kept. These stock levels are calculated with statistical models. And the lead time is 1-2 weeks.

Service for Acrylic based products are limited and the delivery times are much longer. In addition to these, it is a fact that acrylic is not environment friendly therefore its consumption is decreasing year by year.

It is experienced that Sunole can resist over 5 seasons in regions such as Southern France (around 140 kLangley per year)

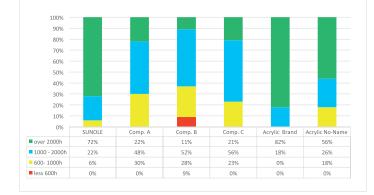
The real criteria for the performance of outdoor products are their results according to; ASTM G-154 (for material degradation) and ISO 105-BO4 (for color fastness) tests.

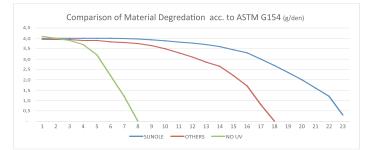


In our laboratory we are simulating destructive effect of the solar radiation. As seen in above solar radiation map, the radiation levels differ from region to region, thus a general warranty period for an outdoor product cannot be given which could cover all the regions of the world. Material degradation and color fading occurs because of the solar radiation under wave lengths of 400 nm. ASTM G-154 test with UV-A lamp (340 nm) simulate this destructive effect of the UV wave lengths and also ISO 105-BO4 test for Color fastness to artificial weathering in Xenon Arc fading lamp device. These two instruments are the best devices known to date for simulating actual weather conditions.



Performance of SUNOLE vs Competitors acc. to ISO 105-B04





We aim in Sunole to have highest durability and best color fastness in the market. To achieve this we are constantly working on the colors which need to be improved, namely colors with less than 1000 hours durability according to ISO 105-B04.

We always check the performance of Sunole in real life and compare the results with the theoretical aging and laboratory simulations.





PEX

*FRP NAT Wool NAT

FROLE RENAT

SUNNAT





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