



# Unifilo<sup>®</sup> for Preforms

## U720, U740, U746, U750, U756, T700, S700

### PRODUCT DESCRIPTION

Unifilo<sup>®</sup> is an Advantex<sup>®</sup> glass continuous strand mat of random orientation in multiple layers and held together with a binder. The Advantex<sup>®</sup> glass fiber combines the electrical and mechanical properties of traditional E-glass with the acid corrosion resistance of E-CR glass. All 700 series Unifilo<sup>®</sup> mats are designed to be preformed at the same dimensions than the moulded part. These Unifilo<sup>®</sup> U700 are all compatibles with UP, UP(V), PU, and EP resins and are used for injection moulding (RTM , SRIM) and compression.

- U720: automatic preforming process
- U740, U746, U750, U756: for the manufacture of preforms and moulding with filled resins
- Unitop T700: special product with transverse oriented properties.
- Unistretch S700: specially designed with high deformability rate during preforming



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### PRODUCT REFERENCE

Example : U720 450 - 138

- U : Continuous strand mat (Unifilo<sup>®</sup>)
- 720 : Product classification code
- 450 : Nominal weight per unit area (g/m<sup>2</sup>)
- 138 : Roll width (cm)

### FEATURES AND PRODUCT BENEFITS

- |                       |   |
|-----------------------|---|
| • U720                | • Strength and durability of performs<br>• Ability to achieve both low and high levels of reinforcement                         |
| • U740 U746 U750 U756 | • Same characteristics as U720 and possibility to be used with filled resins thanks to a higher porosity given by 50 tex strand |
| • T700                | • Excellent mechanical properties in cross direction (60 - 70 % UD)   |
| • S700                | • High and constant<br>• Limited waste during preforming  |

### TECHNICAL CHARACTERISTICS (NOMINAL VALUES)

REF.	SIZING	BINDER TYPE	SOLUBILITY IN STYRENE	LINEAR WEIGHT OF BASIC STRANDS (TEX)	LOSS ON IGNITION (%)	MOISTURE CONTENT (%)
				Iso 1889	Iso 1887	Iso 3344
U720	Silane	Thermoplastic polyester	High	25	10	< 0.15
U740				25 / 50	8	< 0.15
U746				25 / 50	6	< 0.15
U750				25 / 50	8	< 0.15
U756				25 / 50	6	< 0.15
T700				25 / 50	4	< 0.15
S700				25 / 50	8	< 0.15

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### PRODUCT AVAILABILITY (STANDARD REF.)

Available widths from 50 to 306 cm

ROLL WIDTH (CM)	STANDARD WEIGHTS (G/M <sup>2</sup> )	APPROXIMATE DIMENSIONS OF FULL ROLL, 100 CM WIDE										
		BY « FULL ROLL », IS UNDERSTOOD A ROLL HAVING A GUARANTEED LENGTH OF AT LEAST 90% OF THE VALUE INDICATED ABOVE										
		Diameter (cm)	Nominal length (m)					Nominal weight (kg)				
U720	U740 U746		U750 U756	T700	S700 S750	U720	U740 U746	U750 U756	T700	S700 S750		
100	300	55	235	210	255			70	63	77		
	450		170	150	190	200	195	77	68	86	90	88
	600		110	100	120	125	125	66	60	72	75	75

### VISUAL CHARACTERISTICS OR POSSIBLE DEFECTS

Type A: coarse strands

Type B: cluster of glass fibre

Type C: water spots

Type D: binder spots, dirt and foreign matters (diameter below 30 mm)

Type E: hole

Maximum number of defects allowed: each 100 lm Unifilo® roll section may contain at most 5 of the above listed defects.

### PACKAGING

- Each roll of Unifilo® is wound up onto a cardboard tube of 0.7 kg/m with 103 mm internal diameter, then individually wrapped with a transparent protective film.
- Pallet type:
  - Rolls ≤ 205 cm width: standard pallet (vertical rolls 14 x 114cm)
  - Rolls > 205 cm width: wooden crate (horizontal rolls).
- Pallet protection:
  - Standard pallet = shrink-wrapped (cardboard base and cover)
  - Wooden crate = each roll packaged in a polyethylene bag.

### LABELING

- Each roll carries an information label with product reference.
- Each pallet carries also an information label with : product reference, gross and net weights, the number of rolls on the pallet and their net weight.

### STORAGE

Unifilo® mat must be stored in its original packaging in a place with no humidity and heat. The best conditions are temperatures between 15 and 35°C and a relative humidity level between 35 and 85%. If the product is stored at lower temperature (below 15°C), we recommend to condition it inside the workshop for at least 24 hours prior using, to prevent condensation. On site stacking of pallets is possible on (1/1) only. Please use a plywood plank between the two pallets to avoid damage the lower pallet.

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## OCV™ Reinforcements

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