



# TWINTEX® T PP

## PP Glass Fabrics

### PRODUCT DESCRIPTION

TWINTEX® T PP is a fabric made of TWINTEX® R PP 60 black or natural 1870 (HPR) roving (high performance reinforcement glass and polypropylene comingled filaments).

Consolidation is done by heating above melting temperature of PP matrix (180°C-230°C / 360°F-450°F) and applying a pressure (1-30 bars), before cooling step under pressure.

Depending on parts to be produced, vacuum molding, diaphragm, or calendering process can be used.



### PRODUCT REFERENCE

- Example: TWINTEX® T PP 60 745 1/1 NATUR 1520-200 (HPR)
- T: fabric
- PP: polypropylene matrix
- 60: glass content by weight (%)
- 745: nominal weight (g/m<sup>2</sup>)
- 1/1: balanced product
- NATUR: natural color, heat and UV stabilizations
- BLACK: black color, heat and UV stabilizations
- 1520: width (mm)
- 200: length (m)
- (HPR) High Performance Reinforcement glass

### NEW NOMENCLATURE

- WR t – 0750 – PP 60 W – --- / 02 – 152
- Weaving pattern: WR (Woven Roving) / LT (Non Crimp Fabric)
  - Orientation: t (balanced) / x (unbalanced)
  - Rounded nominal weight (g/m<sup>2</sup>)
  - Thermoplastic resin: PP
  - Glass fiber ratio (%wt)
  - Color: B (black) / W (natural)
  - Internal code
  - 02: High Performance Reinforcement glass
  - Width (cm)

### PRODUCT APPLICATION

TWINTEX® T PP is mainly used for the following applications:  
Automotive - Marine - Transportation - Sports & leisure – Renewable Energy - Building & Construction.

### FEATURES AND PRODUCT BENEFITS

- Ready to Use Product – The Thermoplastic Resin is inside
- Ease of Storage conditions
- Fast Processing Cycle Time
- High Mechanical Properties with Impact Resistance and Weight Saving
- No solvent Emission
- Recyclability

### COMPOSITE MECHANICAL CHARACTERISTICS (AFTER MOLDING)

VALUES GIVEN IN WARP / WEFT DIRECTIONS OR AVERAGE OF BOTH DIRECTIONS FOR BALANCED PRODUCTS				Woven 1-1	Woven 4-1
Tensile	Strength	ISO527	MPa (psi x 10 <sup>3</sup> )	360 (52.2)	520 (75.4)
	Modulus		GPa (psi x 10 <sup>6</sup> )	15.3 (2.2)	160 (23.2) 22.2 (3.2) 7.4 (1.1)
Flexural	Strength	ISO14125	MPa (psi x 10 <sup>3</sup> )	240 (34.8)	360 (52.2)
	Modulus		GPa (psi x 10 <sup>6</sup> )	14.0 (2.0)	120 (18.1) 20.4 (3.0) 6.6 (1.0)
Impact Un-notched Charpy		ISO179	kJ/m <sup>2</sup>	180	220 110
Glass content		ISO1172		60%wt / 35%vol	

- Mechanical property data was developed in accordance with standard ISO specifications
- Mechanical testing performed on 3mm thick molded samples
- Relative values shown are accurate to the best of our knowledge, but should not be used for design purposes since absolute values can be influenced by processing condition.
- More specific data are available

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### PRODUCT AVAILABILITY\*

Code NEW NOMENCLATURE	Color	Structure	Pattern	Standard width (cm)
Twintex® T PP 60 745 WRt-0750-PP60 B or W	natural or black	balanced	twill 2/2	154 natural 150 black
Twintex® T PP 60 1485 WRt-1490-PP60 B or W	natural or black	balanced	twill 2/2	103 and 150
Twintex® T PP 60 935 WRx-0940-PP60 B	black	4-1	plain	103 and 150
Twintex® T PP 60 980 WRt-980-PP60 W	natural	balanced	twill 2/2	255
Twintex® NCF LT PP 60 1050 LTx-1050-PP60 B	black	5-1	0/90 NCF Non Crimp Fabric	123

\* Other Twintex® fabrics patterns and widths are available upon request

### PACKAGING

Each roll of TWINTEX® T PP glass fabric is wrapped in a polyethylene bag and palletized

### STORAGE

TWINTEX® T PP must be stored in its original packaging, away from humidity and at moderate temperature.

The best conditions are:

- Temperatures between 15°C and 35°C. (60°F and 95°F)
- Humidity between 35% and 65%.

If the product is stored at low temperature (below 15°C/60°F), it is advisable to condition it in the workshop, for at least 24 hours before use, to prevent condensation.

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