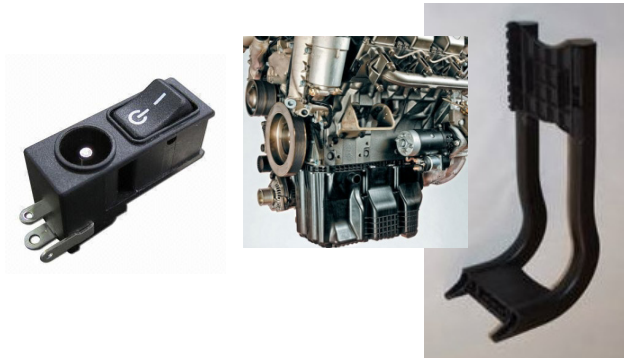


DESCRIPTION

TenCate Cetex® TC910 is a thermoplastic composite using a polyamide 6 (PA6) matrix resin. This product provides excellent mechanical performance at a good price to weight ratio. It features high strength and wear resistance and performs well at elevated temperatures. TC910 is also resistant to solvents. As a result of these attributes, TenCate Cetex TC910 is commonly used in a variety of automotive and transportation applications. Secondary details in the final part may be injection overmolded using injection grade polyamides. TenCate Cetex TC910 is available in glass or carbon reinforced UD tapes.

FEATURES

- › **Good resistance to solvents**
- › **Excellent balance of strength and impact resistance**
- › **Moldable and formable**
- › **Excellent temperature resistance and strength makes it ideal for housings and under the hood applications**
- › **Excellent impact & solvent resistance**
- › **Good elevated temperature resistance**



PRODUCT TYPE

Nylon 6-based Thermoplastic Composite

TYPICAL APPLICATIONS

- › Automotive Structure
- › Under hood applications
- › Replacement for highly loaded injection molded parts

NEAT RESIN PROPERTIES

Heat Deflection Temperature 200°C (392°F)

SHELF LIFE

Indefinite at 25°C (77°F)

MECHANICAL PROPERTIES

Properties	Condition	Method	Typical Results	
Tensile Strength 0°	RTD	ASTM D 3039	900 MPa	131 ksi
Tensile Modulus 0°	RTD	ASTM D 3039	30 GPa	4.4 Msi
Flexural Strength 0°	RTD	ASTM D 790	1050 MPa	152 ksi
Flexural Modulus 0°	RTD	ASTM D 790	29 GPa	4.2 Msi
Compressive Strength 0°	RTD	ASTM D 3410	345 MPa	50 ksi
Short Beam Shear ILSS	RTD	ASTM D 2344	42 MPa	6.1 ksi

TenCate Cetex® TC910 Nylon 6 Fiberglass Uni-directional Tape

Resin content by weight at 40%. Composite density 1.73 g/cm³.
 Tape width 166 mm (6.5 inches). Tape thickness 0.25 mm (0.010 inches).
 Recommended processing temperature is 249–271°C (480–520°F)

Continued on page 2



More information:
info@tcac-usa.com (North America/Asia/Pacific)
tcacsales@tencate.com (Europe/Middle East/Africa)

MECHANICAL PROPERTIES

Continued from page 1

Properties	Condition	Method	Typical Results	
Tensile Strength 0°	RTD	ASTM D 3039	1900 MPa	276 ksi
Tensile Modulus 0°	RTD	ASTM D 3039	100 GPa	14.5 Msi
Flexural Strength 0°	RTD	ASTM D 790	950 MPa	138 ksi
Flexural Modulus 0°	RTD	ASTM D 790	97 GPa	14.1 Msi
Compressive Strength 0°	RTD	ASTM D 3410	375 MPa	54 ksi
Short Beam Shear ILSS	RTD	ASTM D 2344	43 MPa	6.2 ksi

TenCate Cetex® TC910 Nylon 6 Carbon Fiber Uni-directional Tape

Resin content by weight at 40%. Composite density 1.45 g/cm³.

Tape width 166 mm (6.5 inches). Tape thickness 0.16 mm (0.007 inches).

Recommended processing temperature is 249–271°C (480–520°F)