

PRODUCT DATA SHEET

DESCRIPTION

Toray Cetex® TC960 is a polypropylene-based thermoplastic uni-directional tape. It is part of the Toray CFRT® (continuous fiber reinforced thermoplastic) line of industrial thermoplastic composites. This thermoplastic composite is designed for applications that require high impact resistance, but where cost is a factor. The impact toughness of glass fiber/polypropylene composites make them ideal for use in truck bodies, vehicles, and vehicle enclosures.

FEATURES

- ▶ Good toughness
- ▶ Good chemical and solvent resistance
- ▶ Lightweight
- ▶ Easily formable
- ▶ Impact resistant



PRODUCT TYPE

Polypropylene Thermoplastic Composite

TYPICAL APPLICATIONS

- ▶ Truck bodies
- ▶ Under the hood fairings

SHELF LIFE

Indefinite at 25°C (77°F)

TYPICAL NEAT RESIN PROPERTIES

Density	0.9 g/cc
Melt Temperature	160°C (320°F)
Tensile Strength	32 MPa (4.7 ksi)
Tensile Modulus	0.9 GPa (0.13 Msi)
Elongation, Ultimate	100%
Izod Impact Strength Notched	48 J/m (0.9 ft-lb/in)
Hardness Shore D	69
Heat Deflection Temperature	116°C (241°F)
UL94 rating	HB



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MECHANICAL PROPERTIES

Property	Condition	Method	Typical Results	
Tensile Strength 0°	RTD	ASTM D 3039	750 MPa	109 ksi
Tensile Modulus 0°	RTD	ASTM D 3039	27.8 GPa	4.0 Msi
Flexural Strength 0°	RTD	ASTM D 790	643 MPa	93 ksi
Flexural Modulus 0°	RTD	ASTM D 790	28.2 GPa	4.1 Msi
Compressive Strength 0°	RTD	ASTM D 3410	136 MPa	20 ksi
Short Beam Shear ILSS	RTD	ASTM D 2344	9.8 MPa	2.9 ksi

Toray Cetex® TC960 Fiberglass Fiber PP Unitape

Resin content by weight at 40%. Composite density 1.49 g/cm³. Tape width 164 mm (6.5"). Tape thickness 0.27 mm (0.011"). Recommended processing temperature is 199–216°C (390–420°F)

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