Toray Cetex® TC930 HDPE



PRODUCT DATA SHEET

DESCRIPTION

Toray Cetex® TC930 is a thermoplastic composite using a high density polyethylene (HDPE) matrix. This product is commonly used in pipe overwrapping applications because of its high hoop strength, low modulus, and excellent chemical resistance. Toray Cetex® TC930 is available in a pigmented glass-reinforced tape.

FEATURES

- ► Good toughness
- ▶ High strength
- ▶ Good chemical and solvent resistance
- ► Excellent hoop reinforcement strength
- **▶** Lightweight







PRODUCT TYPE

High Density Polyethylene Composite

TYPICAL APPLICATIONS

- ► Pipe overwrap
- ► Ambient temperature storage
- ► Excellent impact resistance
- ► UV resistance

SHELF LIFE

Indefinite at 25°C (77°F)

TYPICAL NEAT RESIN PROPERTIES

Density	1.2 g/cc		
Tensile Strength	32 MPa (4.6 ksi)		
Tensile Modulus	1.25 GPa (0.2 Msi)		
Elongation at Break	150%		
Strain at Yield	15%		

HEAT DISTORTION TEMPERATURE

Approximately 121°C (250°F)



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MECHANICAL PROPERTIES

Property	Condition	Method	Typical Results	
Tensile Strength 0°	RTD	ASTM D 3039	678 MPa	98 ksi
Tensile Modulus 0°	RTD	ASTM D 3039	28.3 GPa	4.1 Msi
Flexural Strength 0°	RTD	ASTM D 790	546 MPa	79 ksi
Flexural Modulus 0°	RTD	ASTM D 790	29.2 GPa	4.2 Msi
Compressive Strength 0°	RTD	ASTM D 3410	111 MPa	16 ksi
Short Beam Shear ILSS	RTD	ASTM D 2344	13.4 MPa	1.9 ksi

Toray Cetex® TC930 Fiberglass Fiber HDPE Uni-Directional Tape

Resin content by weight at 50%. Composite density 1.55 g/cm³. Tape width 164 mm (6.5"). Tape thickness 0.27 mm (0.011"). Recommended processing temperature is 182–199°C (360–390°F)

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TORAY_TC930_PDS_v4.0_2019-07-12 Page 2/2

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