

# TECHNICAL DATA



TENCATE ADVANCED COMPOSITES

## TenCate Cetex® TC940 PET Thermoplastic Composite

### PRODUCT TYPE

Engineered Polyester  
Thermoplastic Composite

### TYPICAL APPLICATIONS

- Recreational equipment

### FEATURES

- Excellent clarity and toughness
- Good overall strength

### HEAT DISTORTION TEMPERATURE

Approximately 175°F/79°C

### SHELF LIFE

Indefinite at 77°F/25°C

Revised 01/2014

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Page 1 of 1

CETEX-TC940\_DS\_012014

### PRODUCT DESCRIPTION

TenCate Cetex® TC940 PET (formerly PMC/Baycomp CFRT® PET) is a high strength polyethylene terephthalate (PET) semicrystalline polyester thermoplastic unidirectional tape. This TenCate thermoplastic composites is designed for applications in recreational equipment as a result of its high impact strength and low cost.



### TENCATE CETEX TC940 PET PRODUCT BENEFITS/FEATURES

- Good toughness
- Good chemical and solvent resistance
- Lightweight
- UL94 flammability rating HB



### TENCATE CETEX TC940 PET FIBERGLASS UNITAPE

Resin content by weight at 40%. Composite Density 1.89 g/cm³.  
Tape Width 166 mm (6.5 inches). Tape Thickness 0.26 mm (0.010 inches).

Property	Condition	Method	Results	
Tensile Strength 0°	RTD	ASTM D3039	139 ksi	960 MPa
Tensile Modulus 0°	RTD	ASTM D3039	4.6 Msi	32.0 GPa
Flexural Strength	RTD	ASTM D790	176 ksi	1215 MPa
Flexural Modulus	RTD	ASTM D790	4.7 Msi	32.2 GPa
Compressive Strength 0°	RTD	ASTM D3410	48 ksi	329 MPa
Short Beam Shear ILSS	RTD	ASTM D2344	6.0 ksi	41 MPa

Recommended Processing Temperature is 490-530°F (254-277°C)

### TENCATE CETEX TC940 PET CARBON FIBER UNITAPE

Resin content by weight at 50%. Composite Density 1.53 g/cm³.  
Tape Width 166 mm (6.5 inches). Tape Thickness 0.25 mm (0.010 inches).

Property	Condition	Method	Results	
Tensile Strength 0°	RTD	ASTM D3039	184 ksi	1272 MPa
Tensile Modulus 0°	RTD	ASTM D3039	13.7 Msi	94.2 GPa
Flexural Strength	RTD	ASTM D790	120 ksi	825 MPa
Flexural Modulus	RTD	ASTM D790	11.6 Msi	80.2 GPa
Compressive Strength 0°	RTD	ASTM D3410	39 ksi	271 MPa
Short Beam Shear ILSS	RTD	ASTM D2344	5.2 ksi	35.8 MPa

Recommended Processing Temperature is 490-530°F (254-277°C)

## TENCATE PERFORMANCE COMPOSITES

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