

PRODUCT DATA SHEET



TENCATE PERFORMANCE COMPOSITES

TenCate Cetex[®] TC920 Polycarbonate/ABS Thermoplastic Composite

PRODUCT TYPE

Polycarbonate/Acrylonitrile
Butadiene Styrene (PC/ABS)

SERVICE TEMPERATURE

Approximately 158°F (70°C)

TYPICAL APPLICATIONS

- Computer cases and enclosures
- Cell phone cases
- Hand held consumer electronics

FEATURES

- Ambient temperature storage
- Flame retardant
- Excellent impact resistance
- Low moisture properties

SHELF LIFE

Indefinite at 77°F/25°C

Revised 5/2017

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CETEX-TC920_DS_050917

PRODUCT DESCRIPTION

TenCate Cetex TC920 (formerly PMC/Baycomp CFRT[®] PC/ABS) is a high impact strength polycarbonate/ABS blend designed for consumer electronics. It features a high-quality surface finish, is easily formable to the desired shape ranging from computer cases to smart phone cases. Intricate details can be easily overmolded for clips and brackets using injection grade PC/ABS. It is an amorphous polymer that can be easily painted or bonded. It is UL94 V0 rated. It is offered on unidirectional carbon fiber, glass fiber or carbon fabrics for good fire resistance.

TENCATE CETEX TC920 PRODUCT BENEFITS/FEATURES

- Good surface quality
- Good impact resistance
- Easily formable to desired shape
- UL-94 V0 rated without secondary fire retardants (halogen free)
- Meets EPEAT-R-Phase criteria for flame retardant plastic composition



NEAT RESIN DATA

Tg 158-167°F (70-75°C)
Specific Gravity 1.2 g/cc
Melt Temperature Tm 430°F/220°C

TENCATE CETEX TC920 FIBERGLASS FIBER PC/ABS UNIDIRECTIONAL TAPE

Resin content by weight at 40%. Composite Density 1.73 g/cm³.
Tape Width 168 mm (6.6 inches). Tape Thickness 0.19 mm (0.007 Inches).

Property	Condition	Method	Results	
Tensile Strength 0°	RTD	ASTM D3039	88 ksi	610 MPa
Tensile Modulus 0°	RTD	ASTM D3039	4.9 Msi	33.8 GPa
Flexural Strength	RTD	ASTM D790	143 ksi	985 MPa
Flexural Modulus	RTD	ASTM D790	5.0 Msi	34.4 GPa
Compressive Strength 0°	RTD	ASTM D3410	31 ksi	212 MPa
Short Beam Shear ILSS	RTD	ASTM D2344	3.4 ksi	24 MPa

TENCATE CETEX TC920 CARBON FIBER PC/ABS UNIDIRECTIONAL TAPE

Resin content by weight at 45%. Composite Density 1.46 g/cm³.
Tape Width 168 mm (6.6 inches). Tape Thickness 0.13 mm (0.005 Inches).

Property	Condition	Method	Results	
Tensile Strength 0°	RTD	ASTM D3039	196 ksi	1351 MPa
Tensile Modulus 0°	RTD	ASTM D3039	14.4 Msi	99.4 GPa
Flexural Strength	RTD	ASTM D790	158 ksi	1088 MPa
Flexural Modulus	RTD	ASTM D790	12.7 Msi	87.9 GPa
Compressive Strength 0°	RTD	ASTM D3410	39 ksi	268 MPa
Short Beam Shear ILSS	RTD	ASTM D2344	3.7 ksi	25.8 MPa

Recommended Processing Temperature is 540-580°F (282-304°C)

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