



Celstran® CFR-TP PP GF70-13

Celanese Corporation - Polypropylene

Tuesday, November 5, 2019

General Information

Product Description

Celstran® CFR-TP PP GF70-13 is a 70% E-glass fiber by weight PP (polypropylene) continuous fiber (uni-directional) reinforced thermoplastic composite tape. This material exhibits a high strength-to-weight ratio, excellent toughness and chemical resistance. It is well suited for industrial, automotive and sporting goods applications where cost and process ability are critical. The material is available in natural and black colors. Alternate tape widths and thicknesses may be available.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
Filler / Reinforcement	• Asia Pacific • Glass Fiber, 70% Filler by Weight, 45% Filler by Volume		
Features	• Chemical Resistant	• Good Toughness	• High Strength
Uses	• Automotive Applications	• Industrial Applications	• Sporting Goods
Appearance	• Black	• Natural Color	
Forms	• Unidirectional Prepreg		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.66	g/cm ³	ISO 1183
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	4.92E+6	psi	ASTM D3039M
Tensile Strength ²	135000	psi	ASTM D3039M
Tensile Elongation ² (Break)	3.0	%	ASTM D3039M
Flexural Modulus ²	4.82E+6	psi	ASTM D790
Flexural Strength ²	87900	psi	ASTM D790
Flexural Elongation (Break) ²	2.01		ASTM D790
Thermal	Nominal Value	Unit	Test Method
Glass Transition Temperature ³	14.0	°F	ISO 11357-2
Melting Temperature ³	343	°F	ISO 11357-3
CLTE - Flow ⁴ (73 to 122°F)	5.6E-6	in/in/°F	ISO 11359-2
CLTE - Transverse ⁴ (73 to 122°F)	3.7E-5	in/in/°F	ISO 11359-2
Thermal Conductivity			ASTM E1461
-- ⁵	3.5	Btu·in/hr/ft ² /°F	
-- ⁶	4.8	Btu·in/hr/ft ² /°F	

Additional Information

	Nominal Value	Unit
Fiber Areal Weight	188.6	lb/ream
Tape Areal Weight	269.7	lb/ream
Tape Thickness	9.8	mil
Tape Width	12	in

UL and the UL logo are trademarks of UL LLC © 2019. All Rights Reserved.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.

Celstran® CFR-TP PP GF70-13

Celanese Corporation - Polypropylene

Notes

¹ Typical properties: these are not to be construed as specifications.

² 0°, Tape

³ 10°C/min

⁴ above Tg

⁵ Crossflow

⁶ Flow