

Celstran® CFR-TP PA6 GF60-03

Celanese Corporation - Polyamide 6

Monday, November 4, 2019

General Information

Product Description

Celstran® CFR-TP PA6 GF60-03 is a 60% E-glass by weight polyamide 6 (nylon 6) continuous fiber (uni-directional) reinforced thermoplastic composite tape. This material exhibits a high strength-to-weight ratio, excellent toughness and impact resistance. It is well suited for industrial, automotive and sporting goods applications where strength, toughness and cost are critical, as well as ease of processing. 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 Asia Pacific	EuropeLatin America	North America
Filler / Reinforcement	Glass Fiber, 60% Filler by Weight, 40% Filler by Volume		
Features	 Good Impact Resistance Good Processability	 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	1.69	g/cm³	ISO 1183	
Mechanical	Nominal Value	Unit	Test Method	
Tensile Modulus ²	4.31E+6	psi	ASTM D3039M	
Tensile Strength ²	98500	psi	ASTM D3039M	
Tensile Elongation ² (Break)	2.4	%	ASTM D3039M	
Flexural Modulus ²	4.66E+6	psi	ASTM D790	
Flexural Strength ²	109000	psi	ASTM D790	
Flexural Elongation (Break) ²	3.12		ASTM D790	
Thermal Thermal	Nominal Value	Unit	Test Method	
Glass Transition Temperature ³	135	°F	ISO 11357-2	
Melting Temperature ³	428	°F	ISO 11357-3	
Additional Information	Nominal Value	Unit		
Fiber Areal Weight	186.8	lb/ream		
Tape Areal Weight	311.5	lb/ream		
Tape Thickness	11.8	mil		
Tape Width	12	in		

Notes

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



² 0°, Tape

^{3 10°}C/min