

# Celstran® CFR-TP PA66 GF60-02

## Celanese Corporation - Polyamide 66

Monday, November 4, 2019

### **General Information**

#### **Product Description**

Celstran® CFR-TP PA66 GF60-02 is a 60% E-glass by weight polyamide 66 (nylon 66) 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 weight, strength and toughness are critical, as well as higher thermal resistance of PA66 versus other nylon materials. This material is available in natural and black colors. Alternate tape widths and thicknesses may be available.

General				
Material Status	Commercial: Active			
Availability	<ul><li> Africa &amp; Middle East</li><li> Asia Pacific</li></ul>	<ul><li>Europe</li><li>Latin America</li></ul>	North America	
Filler / Reinforcement	Glass Fiber, 60% Filler by Weight, 40% Filler by Volume			
Features	<ul> <li>Good Impact Resistance</li> </ul>	Good Toughness	High Strength	
Uses	<ul> <li>Automotive Applications</li> </ul>	<ul> <li>Industrial Applications</li> </ul>	Sporting Goods	
Appearance	Black	Natural Color		
Forms	Unidirectional Prepreg			

ASTM & ISO Properties 1					
Physical	Nominal Value	Unit	Test Method		
Density	1.73	g/cm³	ISO 1183		
Mechanical	Nominal Value	Unit	Test Method		
Tensile Modulus <sup>2</sup>	4.84E+6	psi	ASTM D3039M		
Tensile Strength <sup>2</sup>	110000	psi	ASTM D3039M		
Tensile Elongation <sup>2</sup> (Break)	2.5	%	ASTM D3039M		
Flexural Modulus <sup>2</sup>	4.64E+6	psi	ASTM D790		
Flexural Strength <sup>2</sup>	115000	psi	ASTM D790		
Flexural Elongation (Break) <sup>2</sup>	3.32		ASTM D790		
Thermal	Nominal Value	Unit	Test Method		
Glass Transition Temperature <sup>3</sup>	122	°F	ISO 11357-2		
Melting Temperature <sup>3</sup>	500	°F	ISO 11357-3		
Additional Information	Nominal Value	Unit			
Fiber Areal Weight	178.8	lb/ream			
Tape Areal Weight	298.0	lb/ream			
Tape Thickness	11.8	mil			
Tape Width	12	in			

#### **Notes**

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 0°, Tape

3 10°C/min

