

# Celapex® CL 300FC30

### Celanese Corporation - Polyetheretherketone

Tuesday, November 5, 2019

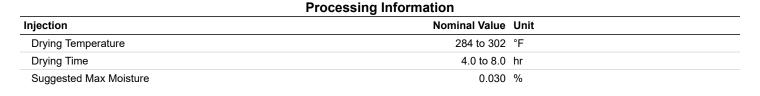
#### **General Information**

#### **Product Description**

Celapex® 300FC30 is an easy flow, 30% carbon fiber/graphite/PTFE reinforced polyether ether ketone (PEEK) for injection molding. It has excellent wear resistance, very low coefficient of friction and superior chemically resistant to aggressive environments. The typical applications of this product are standard geometry injection molded parts.

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	Carbon\Graphite\PTFE, 30% Filler by Weight			
Features	<ul><li>Chemical Resistant</li><li>Good Flow</li></ul>	<ul><li>Low Friction</li><li>Wear Resistant</li></ul>		
Processing Method	Injection Molding			

ASTM & ISO Properties 1					
Physical	Nominal Value	Unit	Test Method		
Density	1.45	g/cm³	ISO 1183		
Melt Mass-Flow Rate (MFR) (380°C/5.0 kg)	14	g/10 min	ISO 1133		
Molding Shrinkage			ISO 294-4		
Across Flow	0.70	%			
Flow	0.30	%			
Mechanical	Nominal Value	Unit	Test Method		
Tensile Stress (Break)	21000	psi	ISO 527-2/1A/5		
Tensile Strain (Break)	2.2	%	ISO 527-2/1A/5		
Flexural Modulus (73°F)	1.67E+6	psi	ISO 178		
Flexural Stress (73°F)	31900	psi	ISO 178		
Impact	Nominal Value	Unit	Test Method		
Charpy Notched Impact Strength (73°F)	1.9	ft·lb/in²	ISO 179/1eA		
Charpy Unnotched Impact Strength (73°F)	14	ft·lb/in²	ISO 179/1eU		
Notched Izod Impact Strength (73°F)	2.4	ft·lb/in²	ISO 180/A		
Unnotched Izod Impact Strength (73°F)	14	ft·lb/in²	ISO 180		
Thermal	Nominal Value	Unit	Test Method		
Heat Deflection Temperature (264 psi, Unannealed)	599	°F	ISO 75-2/A		
Glass Transition Temperature <sup>2</sup>	289	°F	ISO 11357-2		
Melting Temperature <sup>2</sup>	649	°F	ISO 11357-3		
CLTE - Flow <sup>3</sup>	6.7E-6	in/in/°F	ISO 11359-2		
Electrical	Nominal Value	Unit	Test Method		
Volume Resistivity	1.0E+8	ohms·cm	IEC 60093		





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Injection	Nominal Value Unit	
Processing (Melt) Temp	707 to 752 °F	
Mold Temperature	338 to 383 °F	
Injection Rate	Moderate-Fast	
Back Pressure	< 290 psi	

#### **Notes**

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

<sup>2 10°</sup>C/mir

<sup>&</sup>lt;sup>3</sup> below