

EdgetekTM PK-000/000 Natural Polyetheretherketone

Key Characteristics

Product Description			
Middle Viscosity Un-filled PE	EK Resin		
Seneral			
Material Status	 Commercial: Active 		
Regional Availability	 Africa & Middle East Asia Pacific	EuropeLatin America	North America
Features	High Heat Resistance	 Specialty Grade 	
Uses	 Aerospace Applications Automotive Applications	Industrial ApplicationsMedical/Healthcare Applications	
Appearance	 Natural Color 		
Forms	 Pellets 		
Processing Method	 Injection Molding 		

Technical Properties 1

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.30	1.30	ASTM D792
Molding Shrinkage	0.70 to 1.2 %	0.70 to 1.2 %	ISO 294-4
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	537000 psi	3700 MPa	ASTM D638
Tensile Strength (Yield, 73°F (23°C))	14200 psi	98.0 MPa	ASTM D638
Tensile Elongation (Break)	> 20 %	> 20 %	ASTM D638
Flexural Modulus	486000 psi	3350 MPa	ASTM D790
Flexural Strength (Yield)	21000 psi	145 MPa	ASTM D790
mpact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact	1.1 ft·lb/in	60 J/m	ASTM D256
Unnotched Izod Impact	No Break	No Break	ASTM D256
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed	295 °F	146 °C	
Glass Transition Temperature	289 °F	143 °C	ASTM D3418
Melting Temperature	648°F	342 °C	ASTM D3418
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	> 1.0E+15 ohms	> 1.0E+15 ohms	ASTM D257

Processing Information

Injection	Typical Value (English)	Typical Value (SI)	
Drying Temperature	302 to 320 °F	150 to 160 °C	
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr	
Processing (Melt) Temp	662 to 734 °F	350 to 390 °C	
Mold Temperature	356 to 392 °F	180 to 200 °C	

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Injection Notes

Injection Pressure: MED-HIGH Hold Pressure: MED-HIGH Screw Speed: MODERATE Back Pressure: LOW

Notes

¹ Typical values are not to be construed as specifications.

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