



Edgetek™ ES-30GF/000 Black

Polyethersulfone

Key Characteristics

Product Description

Edgetek™ ES-30GF/000 Black
XP120031

General

Material Status	• Commercial: Active	
Regional Availability	• Asia Pacific	
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight	
Features	• Chemical Resistant • General Purpose	• Good Dimensional Stability • Good Strength
Uses	• Automotive Applications • Consumer Applications	• General Purpose • Industrial Applications
Forms	• Pellets	
Processing Method	• Injection Molding	

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.59	1.59	ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 2.5E-3 in/in	0.10 to 0.25 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	1.10E+6 psi	7580 MPa	ASTM D638
Tensile Strength ³ (Ultimate)	19000 psi	131 MPa	ASTM D638
Tensile Elongation ² (Break)	4.0 %	4.0 %	ASTM D638
Flexural Modulus	1.00E+6 psi	6890 MPa	ASTM D790
Flexural Strength	28500 psi	197 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.250 in (6.35 mm), Injection Molded	1.8 ft·lb/in	96 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, 0.125 in (3.18 mm)	419 °F	215 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	401 °F	205 °C	
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+14 ohms	1.0E+14 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	644 to 716 °F	340 to 380 °C
Mold Temperature	284 to 320 °F	140 to 160 °C

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Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)

³ 0.20 in/min (5.1 mm/min)

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