



Edgetek™ ET9200-5006 FD NATURAL

Polyphenylene Sulfide

Key Characteristics

Product Description

The Edgetek® Engineering Thermoplastic Compounds portfolio covers a broad range of standard and custom-formulated high performance materials. This portfolio includes high-temperature materials for elevated service temperature environments, high-modulus / structural materials for load-bearing and high-strength applications and flame-retardant products. These compounds are based on select engineering thermoplastic resins that are compounded with reinforcing additives such as carbon fiber, glass fiber and glass beads.

General

Material Status	• Commercial: Active
Regional Availability	• Europe
Features	• Chemical Resistant • General Purpose • Good Thermal Stability
Uses	• Consumer Applications • General Purpose
Forms	• Pellets
Processing Method	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density (73°F (23°C))	1.35 g/cm ³	1.35 g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Flow	1.5 to 1.8 %	1.5 to 1.8 %	
Across Flow : 73°F (23°C), 0.0787 in (2.00 mm) ²	1.2 to 1.5 %	1.2 to 1.5 %	
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus (Injection Molded)	580000 psi	4000 MPa	ISO 527-2/1
Tensile Stress			ISO 527-2/5
Break, 73°F (23°C), Injection Molded	9570 psi	66.0 MPa	
Tensile Strain			ISO 527-2/5
Break, 73°F (23°C), Injection Molded	> 2.0 %	> 2.0 %	
Flexural Modulus			ISO 178
73°F (23°C), Injection Molded	566000 psi	3900 MPa	
Flexural Stress			ISO 178
73°F (23°C), Injection Molded	18900 psi	130 MPa	
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact Strength (73°F (23°C))	0.95 ft·lb/in ²	2.0 kJ/m ²	ISO 180
Unnotched Izod Impact Strength (73°F (23°C))	14 ft·lb/in ²	30 kJ/m ²	ISO 180
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	239 °F	115 °C	
Heat Deflection Temperature			ISO 75-2/C
1160 psi (8.0 MPa), Unannealed	203 °F	95.0 °C	
Glass Transition Temperature	194 °F	90.0 °C	ISO 11357-2
Melting Temperature	536 °F	280 °C	ISO 11357-3

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	580 to 630 °F	304 to 332 °C

Notes

¹ Typical values are not to be construed as specifications.

² Bergmann method

The logo for PolyOne, featuring the word "PolyOne" in a stylized, italicized serif font with a horizontal line underneath.

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