PolyOne™

Edgetek™ ET9700-5015 X1 BLACK
Polyphthalamide

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 reflectivity, high-modulus / structural materials for load-bearing and high-strength applications and flame-retardant products. These compounds are based on selected engineering thermoplastic resins which are compounded with reinforcing additives such as glass fiber and mineral fillers.

General

Material Status	• Commercial: Active	
Regional Availability	• Africa & Middle East	• Europe
Filler / Reinforcement	• Glass Fiber	
Features	• High Heat Resistance	• Light Stabilized
Uses	• Consumer Applications • Electrical/Electronic Applications	• General Purpose • Industrial Applications
Forms	• Pellets	
Processing Method	• Injection Molding	

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.57 g/cm³	1.57 g/cm³	ISO 1183
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus	2.45E+6 psi	16900 MPa	ISO 527-2
Tensile Stress	35500 psi	245 MPa	ISO 527-2
Tensile Strain (Break)	2.5 %	2.5 %	ISO 527-2
Flexural Modulus	1.84E+6 psi	12700 MPa	ISO 178
Flexural Stress	47100 psi	325 MPa	ISO 178
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Charpy Notched Impact Strength	4.8 ft·lb/in²	10 kJ/m²	ISO 179
Charpy Unnotched Impact Strength	36 ft·lb/in²	75 kJ/m²	ISO 179
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	446 °F	230 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	194 to 248 °F	90 to 120 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Processing (Melt) Temp	572 to 626 °F	300 to 330 °C
Mold Temperature	212 to 284 °F	100 to 140 °C

Notes
[1] Typical values are not to be construed as specifications.