Edgetek™ ET3500-5001 colored

Polycarbonate + ASA

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	• Low Warpage
RoHS Compliance	• RoHS Compliant
Forms	• Pellets

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density (73°F (23°C))	1.15 g/cm³	1.15 g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (260°C/2.16 kg)	> 22 cm³/10min	> 22 cm³/10min	ISO 1133
Molding Shrinkage - Flow	1.0E-3 to 4.0E-3 in/in	0.10 to 0.40 %	ASTM D955
Water Absorption (24 hr)	0.15 %	0.15 %	ASTM D570
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus			ISO 527-2/1
73°F (23°C), 0.157 in (4.00 mm), Injection Molded	363000 psi	2500 MPa	
Tensile Stress (Yield)	8700 psi	60.0 MPa	ISO 527-2
Tensile Strain (Yield)	5.0 %	5.0 %	ISO 527-2
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179
-22°F (-30°C)	4.8 ft·lb/in²	10 kJ/m²	
73°F (23°C), Injection Molded	19 ft·lb/in²	40 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179
-22°F (-30°C), Injection Molded	No Break	No Break	
73°F (23°C)	No Break	No Break	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Vicat Softening Temperature			
--	264 °F	129 °C	ISO 306/A50
--	243 °F	117 °C	ISO 306/B50
Electrical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Surface Resistivity	> 1.0E+14 ohms	> 1.0E+14 ohms	ASTM D257
Volume Resistivity	> 1.0E+15 ohms·cm	> 1.0E+15 ohms·cm	ASTM D257
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating	HB	HB	UL 94

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	248 °F	120 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Processing (Melt) Temp	491 to 545 °F	255 to 285 °C
Mold Temperature	180 to 230 °F	82 to 110 °C

Notes

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

Beyond Polymers.

Better Business Solutions. [SM]