Edgetek™ X4 ET3500-5004 White1

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	• Africa & Middle East • Asia Pacific	• Europe • North America
Features	• Good Dimensional Stability • Light Stabilized	• Low Shrinkage • Weather Resistant
Appearance	• White	
Forms	• Pellets	

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density (73°F (23°C))	1.21 g/cm³	1.21 g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	10 to 15 g/10 min	10 to 15 g/10 min	ISO 1133
Molding Shrinkage - Flow	< 5.0E-3 in/in	< 0.50 %	ASTM D955
Molding Shrinkage - Across Flow	< 5.0E-3 in/in	< 0.50 %	ASTM D955
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus (73°F (23°C))	352000 psi	2430 MPa	ISO 527-2
Tensile Stress (Yield, 73°F (23°C))	7830 psi	54.0 MPa	ISO 527-2
Tensile Strain (Break, 73°F (23°C))	5.2 %	5.2 %	ISO 527-2
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Charpy Notched Impact Strength (73°F (23°C))	21 ft·lb/in²	45 kJ/m²	ISO 179
Charpy Unnotched Impact Strength			ISO 179
73°F (23°C)	No Break	No Break	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Heat Deflection Temperature			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	246 °F	119 °C	
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	216 °F	102 °C	
Vicat Softening Temperature			
--	262 °F	128 °C	ISO 306/A
--	241 °F	116 °C	ISO 306/B

Additional Information

high light reflection, very good opacity

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 to 194 °F	80 to 90 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr