



Trilliant™ HC X THC 1100 Natural Copolyester

Key Characteristics

Product Description

Trilliant™ HC high performance blends offer outstanding strength, durability and chemical resistance through the combination of Eastman Tritan™ copolyester with other various polymeric resins. Trilliant™ HC blends made with Tritan™ copolyester are available in standard grades or can be customized to meet specific performance requirements.

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Europe	• Latin America • North America	
Features	• Chemical Resistant • Good Color Stability • Good Flow	• Good Toughness • High Impact Resistance • Hydrolytically Stable	• Medium Heat Resistance
Uses	• Electrical Housing • Hospital Goods	• Housings • Medical Devices	• Medical/Healthcare Applications • Thin-walled Parts
Forms	• Pellets		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.16	1.16	ASTM D792
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	22 g/10 min	22 g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in (3.18 mm))	5.8E-3 in/in	0.58 %	ASTM D955
Molding Shrinkage - Across Flow (0.125 in (3.18 mm))	3.0E-3 in/in	0.30 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	226000 psi	1560 MPa	ASTM D638
Tensile Strength ³ (Yield)	5800 psi	40.0 MPa	ASTM D638
Tensile Strength ² (Break)	5300 psi	36.5 MPa	ASTM D638
Tensile Elongation ² (Break)	74 %	74 %	ASTM D638
Flexural Modulus ⁴	226000 psi	1560 MPa	ASTM D790
Flexural Strength ⁴	10500 psi	72.4 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	18 ft·lb/in	960 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)	203 °F	95.0 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	176 °F	80.0 °C	
CLTE - Flow (-22 to 86°F (-30 to 30°C))	3.9E-5 in/in/°F	7.1E-5 cm/cm/°C	ASTM D696

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Notes

¹ Typical values are not to be construed as specifications.

² Type I, 2.0 in/min (51 mm/min)

³ 2.0 in/min (51 mm/min)

⁴ 0.50 in/min (13 mm/min)

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