Trilliant™ HC HC9820-0030 RS Natural

Polyetheretherketone

Key Characteristics

Product Description			
The Trilliant® specialty compounds offer a complete system of specialty engineered materials, certified processes, services and technical support that enable healthcare OEM's to get to market ahead of the competition. When specified, Trilliant® compounds may incorporate agency rated materials that meet USP Class VI, FDA or ISO 10993 testing requirements.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Biocompatible • Chemical Resistant	• Medium Impact Resistance • Specialty Grade	
Uses	• High Temperature Applications	• Hospital Goods	• Medical/Healthcare Applications
Agency Ratings	• USP Class VI		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.51	1.51	ASTM D792
Molding Shrinkage - Flow	3.0E-3 in/in	0.30 %	ASTM D955
Molding Shrinkage - Across Flow	0.011 in/in	1.1 %	ASTM D955
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Strength [2] (Yield)	25600 psi	177 MPa	ASTM D638
Tensile Elongation [2] (Break)	9.0 %	9.0 %	ASTM D638
Flexural Modulus	1.30E+6 psi	8960 MPa	ASTM D790
Flexural Strength	37600 psi	259 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	2.2 ft·lb/in	120 J/m	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Annealed, 0.125 in (3.18 mm)	> 473 °F	> 245 °C	
Melting Temperature	680 to 720 °F	360 to 382 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	220 °F	104 °C
Drying Time	3.0 hr	3.0 hr
Mold Temperature	325 to 350 °F	163 to 177 °C