

Technical Data Sheet

Icorene RPE20HW16HB-GYGRY



Polyethylene, Unspecified

Product Description

Icorene RPE20HW16HB-GYGRY is a Polyethylene, Unspecified Glass Fiber, 20% filled material and is typically used in Injection Molding applications.

Processing Method	Injection Molding
Forms	Pellets
Filler/Reinforcement	Glass Fiber, 20%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	4.5	g/10 min	ASTM D1238
Density - Specific Gravity	1.1	g/cm ³	ASTM D792
Mechanical			
Tensile Strength at Yield	33.8	MPa	ASTM D638
Flexural Strength at Yield	48.3	MPa	ASTM D790
Flexural Modulus	2720	MPa	ASTM D790
Tensile Elongation at Break	4	%	ASTM D638
Impact			
Gardner Impact, (3.18 mm)	0.565	J	ASTM D3029
Unnotched Izod Impact, (23 °C)	210	J/m	ASTM D4812
Notched Izod Impact, (23 °C)	53	J/m	ASTM D256
Hardness			
Durometer Hardness, (Shore D)	67		ASTM D2240
Thermal			
Deflection Temperature Under Load Unannealed (264 psi)	93.3	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi)	124	°C	ASTM D648

Injection Parameters	Nominal Value	Units
Drying Time	2	hr
Drying Temperature	93	°C
Clamp Tonnage	2.8 to 4.1	kN/cm ²
Nozzle Temperature	216 to 249	°C
Screw Speed	40 to 100	rpm
Front Temperature	216 to 249	°C
Screw L/D Ratio	20.0-1.0	
Screw Compression Ratio	2.0-1.0	
Middle Temperature	204 to 249	°C
Rear Temperature	199 to 221	°C
Back Pressure	0.138 to 0.345	MPa
Mold Temperature	27 to 66	°C