

EXTEM™ XH1015 resin

Thermoplastic Polyimide

SABIC Innovative Plastics

Message:

Thermoplastic Polyimide Extem* XH1015 Resin.

General Information			
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.31	g/cm ³	ASTM D792, ISO 1183
Melt Mass-Flow Rate (MFR) (367°C/6.6 kg)	10	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (220°C/5.0 kg)	0.00	cm ³ /10min	ISO 1133
Molding Shrinkage - Flow (3.20 mm)	1.0 - 1.2	%	Internal method
Water Absorption			
23°C, 24 hr ¹	0.60	%	ASTM D570
Saturated, 23°C	2.3	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ²	3420	MPa	ASTM D638
--	3100	MPa	ISO 527-2/1
Tensile Strength			
Yield ³	103	MPa	ASTM D638
Yield	101	MPa	ISO 527-2/5
Fracture ⁴	96.0	MPa	ASTM D638
Fracture	74.0	MPa	ISO 527-2/5
Tensile Elongation			
Yield ⁵	7.0	%	ASTM D638
Yield	6.0	%	ISO 527-2/5
Fracture ⁶	10	%	ASTM D638
Fracture	7.0	%	ISO 527-2/5
Flexural Modulus			
50.0mm span ⁷	3130	MPa	ASTM D790
-- ⁸	2870	MPa	ISO 178
Flexural Stress			
--	120	MPa	ISO 178
Yield, 50.0mm span ⁹	168	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			
23°C	43	J/m	ASTM D256

23°C ¹⁰	4.2	kJ/m ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, unannealed, 3.20mm	250	°C	ASTM D648
1.8 MPa, unannealed, 3.20mm	235	°C	ASTM D648
1.8 MPa, unannealed, 6.40mm	237	°C	ASTM D648
1.8 MPa, unannealed, 64.0mm span ¹¹	224	°C	ISO 75-2/Af
Vicat Softening Temperature			
--	260	°C	ASTM D1525 ¹²
--	250	°C	ISO 306/B50
--	248	°C	ISO 306/B120
Linear thermal expansion coefficient			ISO 11359-2
Flow: 23 to 150°C	5.0E-5	cm/cm/°C	ISO 11359-2
Horizontal: 23 to 150°C	5.1E-5	cm/cm/°C	ISO 11359-2
Injection	Nominal Value	Unit	
Drying Temperature	175	°C	
Drying Time	4.0 - 6.0	hr	
Drying Time, Maximum	24	hr	
Suggested Max Moisture	0.020	%	
Suggested Shot Size	40 - 70	%	
Rear Temperature	360 - 385	°C	
Middle Temperature	370 - 400	°C	
Front Temperature	380 - 410	°C	
Nozzle Temperature	375 - 405	°C	
Processing (Melt) Temp	380 - 410	°C	
Mold Temperature	150 - 175	°C	
Back Pressure	0.300 - 0.700	MPa	
Screw Speed	70 - 100	rpm	
Vent Depth	0.025 - 0.076	mm	
NOTE			
1.	Results measured at 48 hrs		
2.	5.0 mm/min		
3.	Type 1, 5.0 mm/min		
4.	Type 1, 5.0 mm/min		
5.	Type 1, 5.0 mm/min		
6.	Type 1, 5.0 mm/min		
7.	1.3 mm/min		
8.	2.0 mm/min		
9.	1.3 mm/min		
10.	80*10*4		
11.	80*10*4 mm		
12.	标准 B (120°C/h), 载荷2 (50N)		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection.All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519
Phone: +86 13424755533
Email: sales@su-jiao.com
No. 215, Lianhe North Road, Fengxian District, Shanghai, China

