

SABIC Innovative Plastics Extem UH1016M TPI Blend

Category : Polymer , Thermoplastic , Polyimide, Thermoplastic

Material Notes:

High heat amorphous TPI Blend, Chemical Resistant This data was supplied by SABIC-IP for the Americas region.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Extem-UH1016M-TPI-Blend.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.37 g/cc	1.37 g/cc	ASTM D 792
Density	1.37 g/cc	0.0495 lb/in ³	ISO 1183
Water Absorption	0.60 % @Temperature 23.0 °C, Time 173000 sec	0.60 % @Temperature 73.4 °F, Time 48.0 hour	ASTM D 570
Moisture Absorption at Equilibrium	0.00 %	0.00 %	23°C / 50% RH; ISO 62
Water Absorption at Saturation	0.00 % @Temperature 23.0 °C	0.00 % @Temperature 73.4 °F	ISO 62
Linear Mold Shrinkage, Flow	0.0080 - 0.010 cm/cm @Thickness 3.20 mm	0.0080 - 0.010 in/in @Thickness 0.126 in	SABIC Method
Melt Flow	12 g/10 min @Load 6.60 kg, Temperature 400 °C	12 g/10 min @Load 14.6 lb, Temperature 752 °F	ASTM D 1238

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	105 MPa	15200 psi	5 mm/min; ISO 527
	110 MPa	16000 psi	Type I, 5 mm/min; ASTM D 638
Tensile Strength, Yield	112 MPa	16200 psi	5 mm/min; ISO 527
	120 MPa	17400 psi	Type I, 5 mm/min; ASTM D 638
Elongation at Break	10 %	10 %	Type I, 5 mm/min; ASTM D 638
	17 %	17 %	5 mm/min; ISO 527
Elongation at Yield	9.0 %	9.0 %	5 mm/min; ISO 527
	9.0 %	9.0 %	Type I, 5 mm/min; ASTM D 638
Tensile Modulus	3.50 GPa	508 ksi	1 mm/min; ISO 527

Mechanical Properties	3.80 GPa Metric	551 ksi English	5 mm/min; ASTM D 638 Comments
Flexural Yield Strength	155 MPa	22500 psi	2 mm/min; ISO 178
	175 MPa	25400 psi	1.3 mm/min, 50 mm span; ASTM D 790
Flexural Modulus	3.00 GPa	435 ksi	2 mm/min; ISO 178
	3.52 GPa	511 ksi	1.3 mm/min, 50 mm span; ASTM D 790
Izod Impact, Notched	0.600 J/cm @Temperature 23.0 °C	1.12 ft-lb/in @Temperature 73.4 °F	ASTM D 256
Izod Impact, Notched (ISO)	8.00 kJ/m ² @Temperature 23.0 °C	3.81 ft-lb/in ² @Temperature 73.4 °F	80*10*4; ISO 180/1A
Charpy Impact, Notched	1.80 J/cm ² @Temperature 23.0 °C	8.57 ft-lb/in ² @Temperature 73.4 °F	ISO 179/2C

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	46.0 µm/m-°C @Temperature 23.0 - 150 °C	25.6 µin/in-°F @Temperature 73.4 - 302 °F	ASTM E 831
CTE, linear, Transverse to Flow	47.0 µm/m-°C @Temperature 23.0 - 150 °C	26.1 µin/in-°F @Temperature 73.4 - 302 °F	ASTM E 831
Deflection Temperature at 0.46 MPa (66 psi)	263 °C @Thickness 3.20 mm	505 °F @Thickness 0.126 in	unannealed; ASTM D 648
Deflection Temperature at 1.8 MPa (264 psi)	236 °C	457 °F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	240 °C @Thickness 3.20 mm	464 °F @Thickness 0.126 in	unannealed; ASTM D 648
Vicat Softening Point	257 °C	495 °F	Rate B/50; ASTM D 1525
	261 °C	502 °F	Rate B/50; ISO 306
	262 °C	504 °F	Rate B/120; ISO 306

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China