

SABIC Innovative Plastics ULTEM HU1110 PEI (Europe-Africa-Middle East)

Category : Polymer , Thermoplastic , Polyetherimide (PEI)

Material Notes:

Enhanced flow Polyetherimide (Tg 217C). RoHS compliant. For medical devices and pharmaceutical applications. Healthcare management of change, biocompatible (ISO 10993 or USP Class VI), food contact compliant. EtO and steam sterilizable. UL94 V0 and 5VA listed.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-ULTEM-HU1110-PEI-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Density	1.36 g/cc	0.0491 lb/in ³	ISO 1183
Moisture Absorption	0.650 %	0.650 %	23 ^o C / 50% RH; ISO 62
Water Absorption at Saturation	1.2 %	1.2 %	ISO 62
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm @Thickness 3.20 mm	0.0050 - 0.0070 in/in @Thickness 0.126 in	SABIC Method
Melt Index of Compound	12 g/10 min @Load 5.00 kg, Temperature 340 ^o C	12 g/10 min @Load 11.0 lb, Temperature 644 ^o F	MVR [cm ³ /10 min]; ISO 1133
	21 g/10 min @Load 5.00 kg, Temperature 360 ^o C	21 g/10 min @Load 11.0 lb, Temperature 680 ^o F	MVR [cm ³ /10 min]; ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, H358/30	145 MPa	21000 psi	ISO 2039-1
Tensile Strength, Yield	110 MPa	16000 psi	5 mm/min; ISO 527
Elongation at Break	60 %	60 %	5 mm/min; ISO 527
Elongation at Yield	6.0 %	6.0 %	5 mm/min; ISO 527
Tensile Modulus	3.50 GPa	508 ksi	1 mm/min; ISO 527
Flexural Yield Strength	140 MPa	20300 psi	2 mm/min; ISO 178
Flexural Modulus	3.30 GPa	479 ksi	2 mm/min; ISO 178
Izod Impact, Notched (ISO)	4.00 kJ/m ²	1.90 ft-lb/in ²	80*10*4; ISO 180/1A
	4.00 kJ/m ² @Temperature -30.0 ^o C	1.90 ft-lb/in ² @Temperature -22.0 ^o F	80*10*4; ISO 180/1A

Mechanical Properties	Metric	English	Comments
Taber Abrasion, mg/1000 Cycles	10	10	CS-17, 1 kg; SABIC Method

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	50.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	27.8 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ISO 11359-2
	@Temperature 23.0 - 150 $\text{Å}^\circ\text{C}$	@Temperature 73.4 - 302 $\text{Å}^\circ\text{F}$	
	55.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	30.6 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTME 831
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
	55.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	30.6 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ISO 11359-2
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
CTE, linear, Transverse to Flow	50.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	27.8 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ISO 11359-2
	@Temperature 23.0 - 150 $\text{Å}^\circ\text{C}$	@Temperature 73.4 - 302 $\text{Å}^\circ\text{F}$	
	55.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	30.6 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTME 831
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
	55.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	30.6 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ISO 11359-2
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
Thermal Conductivity	0.260 W/m-K	1.80 BTU-in/hr-ft $\text{Å}^2\cdot\text{Å}^\circ\text{F}$	ISO 8302
Deflection Temperature at 0.46 MPa (66 psi)	200 $\text{Å}^\circ\text{C}$	392 $\text{Å}^\circ\text{F}$	Edgew 120*10*4 sp=100mm; ISO 75/Be
Deflection Temperature at 1.8 MPa (264 psi)	185 $\text{Å}^\circ\text{C}$	365 $\text{Å}^\circ\text{F}$	Edgew 120*10*4 sp=100mm; ISO 75/Ae
	210 $\text{Å}^\circ\text{C}$	410 $\text{Å}^\circ\text{F}$	Flatw 80*10*4 sp=64mm; ISO 75/Af
Vicat Softening Point	200 $\text{Å}^\circ\text{C}$	392 $\text{Å}^\circ\text{F}$	Rate B/50; ISO 306
	205 $\text{Å}^\circ\text{C}$	401 $\text{Å}^\circ\text{F}$	Rate B/120; ISO 306
	210 $\text{Å}^\circ\text{C}$	410 $\text{Å}^\circ\text{F}$	Rate A/50; ISO 306
Glass Transition Temp, Tg	217 $\text{Å}^\circ\text{C}$	423 $\text{Å}^\circ\text{F}$	
UL RTI, Electrical	170 $\text{Å}^\circ\text{C}$	338 $\text{Å}^\circ\text{F}$	UL 746B
UL RTI, Mechanical with Impact	170 $\text{Å}^\circ\text{C}$	338 $\text{Å}^\circ\text{F}$	UL 746B

UL RTI Mechanical without Impact Thermal Properties	170 Â°C Metric	338 Â°F English	UL 746B Comments
Flammability, UL94	V-0 @Thickness 1.50 mm	V-0 @Thickness 0.0591 in	UL 94
	5VA @Thickness 3.00 mm	5VA @Thickness 0.118 in	UL 94
Oxygen Index	47 %	47 %	ISO 4589
Glow Wire Test	960 Â°C @Thickness 3.20 mm	1760 Â°F @Thickness 0.126 in	IEC 60695-2-12

Descriptive Properties	Value	Comments
Ball Pressure Test, 125Â°C +/- 2Â°C	PASSES	IEC 60695-10-2

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