

SABIC Innovative Plastics Ultem HFATX200 PEI+PCE (Europe-Africa-Middle East)

Category : Polymer , Thermoplastic , Polyetherimide (PEI) , Polyetherimide (PEI) + PCE

Material Notes:

High flow Polyetherimide blend with internal mold release. ECO Conforming. This data was supplied by SABIC-IP for the Europe-Africa-Middle East region.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Ultem-HFATX200-PEIPCE-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.25 g/cc	1.25 g/cc	ASTM D 792
Density	1.25 g/cc	0.0452 lb/in ³	ISO 1183
Moisture Absorption at Equilibrium	0.50 %	0.50 %	23 ^o C / 50% RH; ISO 62
Water Absorption at Saturation	0.90 % @Temperature 23.0 ^o C	0.90 % @Temperature 73.4 ^o F	ISO 62
Linear Mold Shrinkage, Flow	0.0060 - 0.0080 cm/cm	0.0060 - 0.0080 in/in	on tensile bar; SABIC Method
	0.0060 - 0.0080 cm/cm @Thickness 3.20 mm	0.0060 - 0.0080 in/in @Thickness 0.126 in	SABIC Method
Linear Mold Shrinkage, Transverse	0.0060 - 0.0080 cm/cm @Thickness 3.20 mm	0.0060 - 0.0080 in/in @Thickness 0.126 in	SABIC Method
Melt Flow	8.0 g/10 min @Load 6.60 kg, Temperature 295 ^o C	8.0 g/10 min @Load 14.6 lb, Temperature 563 ^o F	ASTM D 1238
	40 g/10 min @Load 5.00 kg, Temperature 340 ^o C	40 g/10 min @Load 11.0 lb, Temperature 644 ^o F	[cm ³ /10 min] Melt Volume Rate; ISO 1133
	66 g/10 min @Load 6.60 kg, Temperature 337 ^o C	66 g/10 min @Load 14.6 lb, Temperature 639 ^o F	ASTM D 1238

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	82.0 MPa	11900 psi	Type I, 5 mm/min; ASTM D 638
	84.0 MPa	12200 psi	5 mm/min; ISO 527

Tensile Strength, Yield Mechanical Properties	92.0 MPa Metric	13300 psi English	Type I, 5 mm/min; ASTM D 638 Comments
	95.0 MPa	13800 psi	5 mm/min; ISO 527
Elongation at Break	20 %	20 %	Type I, 5 mm/min; ASTM D 638
	27 %	27 %	5 mm/min; ISO 527
Elongation at Yield	6.7 %	6.7 %	5 mm/min; ISO 527
	7.0 %	7.0 %	Type I, 5 mm/min; ASTM D 638
Tensile Modulus	2.90 GPa	421 ksi	5 mm/min; ASTM D 638
	3.08 GPa	447 ksi	1 mm/min; ISO 527
Flexural Yield Strength	138 MPa	20000 psi	2 mm/min; ISO 178
	146 MPa	21200 psi	1.3 mm/min, 50 mm span; ASTM D 790
Flexural Modulus	2.95 GPa	428 ksi	2 mm/min; ISO 178
	3.20 GPa	464 ksi	1.3 mm/min, 50 mm span; ASTM D 790
Izod Impact, Notched	0.450 J/cm @Temperature -30.0 °C	0.843 ft-lb/in @Temperature -22.0 °F	ASTM D 256
	0.480 J/cm @Temperature 23.0 °C	0.899 ft-lb/in @Temperature 73.4 °F	ASTM D 256
	15.0 J/cm @Thickness 3.20 mm	28.1 ft-lb/in @Thickness 0.126 in	reverse notched; ASTM D 256
Izod Impact, Notched (ISO)	4.00 kJ/m ² @Temperature 23.0 °C	1.90 ft-lb/in ² @Temperature 73.4 °F	80*10*4; ISO 180/1A
	5.00 kJ/m ² @Temperature -30.0 °C	2.38 ft-lb/in ² @Temperature -22.0 °F	80*10*4; ISO 180/1A
Izod Impact, Unnotched (ISO)	125 kJ/m ² @Temperature -30.0 °C	59.5 ft-lb/in ² @Temperature -22.0 °F	80*10*4; ISO 180/1U
	131 kJ/m ² @Temperature 23.0 °C	62.3 ft-lb/in ² @Temperature 73.4 °F	80*10*4; ISO 180/1U

Mechanical Properties	Metric	English	Comments
Charpy Impact, Unnotched	11.5 J/cm ²	84.7 ft-lb/in ²	10*4 sp=62mm; ISO 179/1eU
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	
	18.0 J/cm ²	85.7 ft-lb/in ²	Edgew 80*10*4 sp=62mm; ISO 179/1eU
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
Charpy Impact, Notched	0.500 J/cm ²	2.38 ft-lb/in ²	V-notch Edgew 80*10*4 sp=62mm; ISO 179/1eA
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	
	0.600 J/cm ²	2.86 ft-lb/in ²	V-notch Edgew 80*10*4 sp=62mm; ISO 179/1eA
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
Impact Test	35.0 J	25.8 ft-lb	Instrumented Impact Total Energy; ASTM D 3763
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	53.0 Âµm/m-Â°C	29.4 Âµin/in-Â°F	ASTM E 831
	@Temperature -40.0 - 150 Â°C	@Temperature -40.0 - 302 Â°F	
	53.0 Âµm/m-Â°C	29.4 Âµin/in-Â°F	ISO 11359-2
	@Temperature 23.0 - 150 Â°C	@Temperature 73.4 - 302 Â°F	
CTE, linear, Transverse to Flow	53.0 Âµm/m-Â°C	29.4 Âµin/in-Â°F	ASTM E 831
	@Temperature -40.0 - 150 Â°C	@Temperature -40.0 - 302 Â°F	
	53.0 Âµm/m-Â°C	29.4 Âµin/in-Â°F	ISO 11359-2
	@Temperature 23.0 - 150 Â°C	@Temperature 73.4 - 302 Â°F	
Deflection Temperature at 0.46 MPa (66 psi)	199 Â°C	390 Â°F	unannealed; ASTM D 648
	@Thickness 3.20 mm	@Thickness 0.126 in	
Deflection Temperature at 1.8 MPa (264 psi)	175 Â°C	347 Â°F	Edgew 120*10*4 sp=100mm; ISO 75/Ae
	180 Â°C	356 Â°F	unannealed; ASTM D 648
	@Thickness 3.20 mm	@Thickness 0.126 in	
	186 Â°C	367 Â°F	unannealed; ASTM D 648
	@Thickness 6.40 mm	@Thickness 0.252 in	

Vicat Softening Point Thermal Properties	192 Â°C Metric	378 Â°F English	Rate B/50; ISO 306 Comments
	201 Â°C	394 Â°F	Rate B/120; ISO 306
	201 Â°C	394 Â°F	Rate B/50; ASTM D 1525

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