SABIC Innovative Plastics XenoyÂ® X4870HH PC+PET

Category : Polymer , Thermoplastic , Polycarbonate (PC) , Polyester, TP , Polyethylene Terephthalate (PET)

Material Notes:

Xenoy X4870HH is a high heat, very high modulus and ductile PC/PET blend. Furthermore this resin provides chemical resistance, very low creep, low CTE, excellent fatique and high heat dimensional stability. The X4870HH could be positioned for body panels, housings, medical device enclosures, outdoor sports equipment.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-Xenoy-X4870HH-PCPET.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.34 g/cc	1.34 g/cc	ASTM D 792
Density	1.34 g/cc	0.0484 lb/inÂ³	ISO 1183
Moisture Absorption at Equilibrium	0.14 %	0.14 %	23Â°C / 50% RH; ISO 62
Water Absorption at Saturation	0.42 % @Temperature 23.0 Â°C	0.42 % @Temperature 73.4 Â°F	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 Flow	7.0 g/10 min @Load 5.00 kg, Temperature 265 Â°C	7.0 g/10 min @Load 11.0 lb, Temperature 509 Â°F	[cm^3/10 min] Melt Volume Rate; ISO 1133
	8.0 g/10 min @Load 5.00 kg, Temperature 266 Â°C	8.0 g/10 min @Load 11.0 lb, Temperature 511 Â°F	ASTM D 1238

Mechanical Properties	Metric	English	Comments
Hardness, H358/30	105 MPa	15200 psi	ISO 2039-1
Tensile Strength at Break	45.0 MPa	6530 psi	Type I, 5 mm/min; ASTM D 638
	45.0 MPa	6530 psi	5 mm/min; ISO 527
	45.0 MPa	6530 psi	50 mm/min; ISO 527
	50.0 MPa	7250 psi	Type I, 50 mm/min; ASTM D 638
Tensile Strength, Yield	61.0 MPa	8850 psi	Type I, 5 mm/min; ASTM D 638
	63.0 MPa	9140 psi	5 mm/min; ISO 527

Mechanical Properties	Metric	English	Comments
	65.0 MPa	9430 psi	Type I, 50 mm/min; ASTM D 638
	67.0 MPa	9720 psi	50 mm/min; ISO 527
Elongation at Break	10 %	10 %	5 mm/min; ISO 527
	10 %	10 %	50 mm/min; ISO 527
	30 %	30 %	Type I, 50 mm/min; ASTM D 638
	60 %	60 %	Type I, 5 mm/min; ASTM D 638
Elongation at Yield	3.3 %	3.3 %	Type I, 50 mm/min; ASTM D 638
	3.6 %	3.6 %	5 mm/min; ISO 527
	3.7 %	3.7 %	Type I, 5 mm/min; ASTM D 638
	3.8 %	3.8 %	50 mm/min; ISO 527
Tensile Modulus	4.30 GPa	624 ksi	1 mm/min; ISO 527
	4.60 GPa	667 ksi	5 mm/min; ASTM D 638
Flexural Yield Strength	98.0 MPa	14200 psi	2 mm/min; ISO 178
	104 MPa	15100 psi	1.3 mm/min, 50 mm span; ASTM D 790
Flexural Modulus	4.00 GPa	580 ksi	2 mm/min; ISO 178
	4.25 GPa	616 ksi	1.3 mm/min, 50 mm span; ASTM D 790
Izod Impact, Notched	0.700 J/cm @Temperature -30.0 Â°C	1.31 ft-lb/in @Temperature -22.0 Â°F	ASTM D 256
	0.800 J/cm @Temperature 0.000 Â°C	1.50 ft-lb/in @Temperature 32.0 Â°F	ASTM D 256
	0.900 J/cm @Temperature 23.0 Â°C	1.69 ft-lb/in @Temperature 73.4 Â°F	ASTM D 256
Izod Impact, Notched (ISO)	6.00 kJ/mÂ² @Temperature -30.0 Â°C	2.86 ft-lb/inÂ² @Temperature -22.0 Â°F	80*10*4; ISO 180/1A
	10.0 kJ/mÂ² @Temperature 23.0 Â°C	4.76 ft-lb/inÂ² @Temperature 73.4 Â°F	80*10*4; ISO 180/1A

Mechanical Properties	Metric	English	Comments
Izod Impact, Unnotched (ISO)	NB @Temperature 23.0 Â°C	NB @Temperature 73.4 Â°F	80*10*4; ISO 180/1U
Charpy Impact Unnotched	NB @Temperature 23.0 Â°C	NB @Temperature 73.4 Â°F	Edgew 80*10*4 sp=62mm; ISO 179/1eU
Charpy Impact, Notched	0.700 J/cmÂ² @Temperature -30.0 Â°C	3.33 ft-lb/inÂ² @Temperature -22.0 Â°F	V-notch Edgew 80*10*4 sp=62mm; ISO 179/1eA
	1.10 J/cmÂ² @Temperature 23.0 Â°C	5.23 ft-lb/inÂ² @Temperature 73.4 Â°F	V-notch Edgew 80*10*4 sp=62mm; ISO 179/1eA
Impact Test	90.0 J	66.4 ft-lb	Multiaxial Impact; ISO 6603
	60.0 J @Temperature 23.0 Â°C	44.3 ft-lb @Temperature 73.4 Â°F	Instrumented Impact Total Energy; ASTM D 3763
	60.0 J @Temperature -20.0 Â°C	44.3 ft-lb @Temperature -4.00 Â°F	Instrumented Impact Total Energy; ASTM D 3763
Taber Abrasion, mg/1000 Cycles	30 @Load 1.00 kg	30 @Load 2.20 lb	CS-17; SABIC Method

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	43.0 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	23.9 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ASTM E 831
	48.0 Âµm/m-Â°C @Temperature -30.0 - 80.0 Â°C	26.7 Âµin/in-Â°F @Temperature -22.0 - 176 Â°F	ISO 11359-2
CTE, linear, Transverse to Flow	64.0 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	35.6 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ASTM E 831
	68.0 Âµm/m-Â°C @Temperature -30.0 - 80.0 Â°C	37.8 Âµin/in-Â°F @Temperature -22.0 - 176 Â°F	ISO 11359-2
Thermal Conductivity	0.200 W/m-K	1.39 BTU-in/hr-ftÂ²-Â°F	ISO 8302
Deflection Temperature at 0.46 MPa	131 Â°C	268 Â°F	

Thermal Properties	Metric	English	Comments
(66 psi)			Flatw 80*10*4 sp=64mm; ISO 75/Bf
	132 Â°C @Thickness 3.20 mm	270 Â°F @Thickness 0.126 in	unannealed; ASTM D 648
Deflection Temperature at 1.8 MPa (264 psi)	113 Â°C	235 Â°F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	113 Â°C @Thickness 3.20 mm	235 Â°F @Thickness 0.126 in	unannealed; ASTM D 648
Vicat Softening Point	137 Â°C	279 Â°F	Rate B/50; ASTM D 1525
	137 Â°C	279 Â°F	Rate B/50; ISO 306
	139 Â°C	282 Â°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