

SABIC Innovative Plastics Valox® SHF4340 PBT (Europe-Africa-Middle East)

Category : Polymer , Thermoplastic , Polyester, TP , Polybutylene Terephthalate (PBT)

Material Notes:

20% GF Super High Flow PBT

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Valox-SHF4340-PBT-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.44 g/cc	1.44 g/cc	ASTM D792
Density	1.44 g/cc	0.0520 lb/in ³	ISO 1183
Filler Content	20 %	20 %	ASTM D229
Moisture Absorption	0.0300 %	0.0300 %	23 ^o C / 50% RH; ISO 62
Water Absorption at Saturation	0.15 %	0.15 %	ISO 62
Viscosity	55000 cP	55000 cP	Melt Viscosity, 260 ^o C, 1500 sec-1; ISO 11443
	95000 cP	95000 cP	Melt Viscosity, 250 ^o C, 1500 sec-1; ISO 11443
Linear Mold Shrinkage, Flow	0.0030 - 0.0070 cm/cm	0.0030 - 0.0070 in/in	on Tensile Bar; SABIC Method
Linear Mold Shrinkage, Transverse	0.0040 - 0.010 cm/cm	0.0040 - 0.010 in/in	on Tensile Bar; SABIC Method
Melt Index of Compound	40 g/10 min	40 g/10 min	MVR [cm ³ /10 min]; ISO 1133
	@Load 2.16 kg, Temperature 250 ^o C	@Load 4.76 lb, Temperature 482 ^o F	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	118	118	ISO 2039-2
Hardness, H358/30	185 MPa	26800 psi	ISO 2039-1
Tensile Strength at Break	105 MPa	15200 psi	Type I, 5 mm/min; ASTM D638
	110 MPa	16000 psi	5 mm/min; ISO 527
Tensile Strength, Yield	105 MPa	15200 psi	Type I, 5 mm/min; ASTM D638
	110 MPa	16000 psi	5 mm/min; ISO 527
Elongation at Break	2.0 %	2.0 %	Type I, 5 mm/min; ASTM D638
	3.0 %	3.0 %	5 mm/min; ISO 527

Mechanical Properties	3.0 % Metric	3.0 % English	Flexural Strain, break, 2 mm/min; ISO 178 Comments
Elongation at Yield	2.0 %	2.0 %	Type I, 5 mm/min; ASTM D638
	3.0 %	3.0 %	5 mm/min; ISO 527
Tensile Modulus	6.70 GPa	972 ksi	1 mm/min; ISO 527
	6.80 GPa	986 ksi	5 mm/min; ASTM D638
Flexural Strength	160 MPa	23200 psi	2 mm/min; ISO 178
Flexural Yield Strength	160 MPa	23200 psi	2 mm/min; ISO 178
Flexural Modulus	5.60 GPa	812 ksi	2 mm/min; ISO 178
Izod Impact, Notched	0.800 J/cm	1.50 ft-lb/in	ASTM D256
	0.800 J/cm @Temperature 0.000 Â°C	1.50 ft-lb/in @Temperature 32.0 Â°F	ASTM D256
	0.800 J/cm @Temperature -30.0 Â°C	1.50 ft-lb/in @Temperature -22.0 Â°F	ASTM D256
Izod Impact, Unnotched	3.50 J/cm	6.56 ft-lb/in	ASTM D4812
	3.30 J/cm @Temperature -30.0 Â°C	6.18 ft-lb/in @Temperature -22.0 Â°F	ASTM D4812
Izod Impact, Notched (ISO)	8.00 kJ/mÂ²	3.81 ft-lb/inÂ²	80*10*4; ISO 180/1A
	8.00 kJ/mÂ² @Temperature 0.000 Â°C	3.81 ft-lb/inÂ² @Temperature 32.0 Â°F	80*10*4; ISO 180/1A
	8.00 kJ/mÂ² @Temperature -30.0 Â°C	3.81 ft-lb/inÂ² @Temperature -22.0 Â°F	80*10*4; ISO 180/1A
Izod Impact, Unnotched (ISO)	30.0 kJ/mÂ²	14.3 ft-lb/inÂ²	80*10*4; ISO 180/1U
Charpy Impact Unnotched	3.50 J/cmÂ²	16.7 ft-lb/inÂ²	ISO 179/2C
	2.50 J/cmÂ² @Temperature -30.0 Â°C	11.9 ft-lb/inÂ² @Temperature -22.0 Â°F	ISO 179/2C
Charpy Impact, Notched	0.700 J/cmÂ²	3.33 ft-lb/inÂ²	Edgew 80*10*4 sp=62mm; ISO 179/1eA

Mechanical Properties	0.900 J/cm ² Metric	4.28 ft-lb/in ² English	ISO 179/2C Comments
	0.900 J/cm ²	4.28 ft-lb/in ²	ISO 179/2C
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	40.0 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	22.2 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ISO 11359-2
CTE, linear, Transverse to Flow	100 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	55.6 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ISO 11359-2
Deflection Temperature at 0.46 MPa (66 psi)	223 Â°C	433 Â°F	Flatw 80*10*4 sp=64mm; ISO 75/Bf
	223 Â°C @Thickness 3.20 mm	433 Â°F @Thickness 0.126 in	unannealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	205 Â°C	401 Â°F	Flatw 80*10*4 sp=64mm; ISO 75/ Af
	205 Â°C @Thickness 3.20 mm	401 Â°F @Thickness 0.126 in	unannealed; ASTM D648
Vicat Softening Point	200 Â°C	392 Â°F	Rate B/120; ISO 306
	205 Â°C	401 Â°F	Rate B/50; ISO 306
	205 Â°C	401 Â°F	Rate B/50; ASTM D1525
	220 Â°C	428 Â°F	Rate A/50; ISO 306
	220 Â°C	428 Â°F	Rate A/50; ASTM D1525

Electrical Properties	Metric	English	Comments
Dielectric Strength	18.6 kV/mm @Thickness 3.20 mm	472 kV/in @Thickness 0.126 in	in oil; IEC 60243-1
	25.3 kV/mm @Thickness 1.60 mm	643 kV/in @Thickness 0.0630 in	in oil; IEC 60243-1
	33.0 kV/mm @Thickness 0.800 mm	838 kV/in @Thickness 0.0315 in	in oil; IEC 60243-1
	0.0182	0.0182	

Electrical Properties	Metric @Frequency 1.00e+6	English @Frequency 1.00e+6	Comments
	Hz	Hz	
Comparative Tracking Index	375 V	375 V	IEC 60112

Descriptive Properties	Value	Comments
Ball Pressure Test, 125Å°C +/- 2Å°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