

SABIC Innovative Plastics Valox[®] 745 PBT (Europe-Africa-Middle East)

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

Material Notes:

VALOX 745 is 30% mineral filled PBT injection moulding resin with improved toughness and low warpage. Applications: telephone ringer frames, card racks.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Valox-745-PBT-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Density	1.46 g/cc	0.0527 lb/in ³	ISO 1183
Moisture Absorption	0.0900 %	0.0900 %	23 [°] C / 50% RH; ISO 62
Water Absorption at Saturation	0.90 %	0.90 %	ISO 62
Linear Mold Shrinkage, Flow	0.012 - 0.017 cm/cm	0.012 - 0.017 in/in	on Tensile Bar; SABIC Method
Linear Mold Shrinkage, Transverse	0.012 - 0.017 cm/cm	0.012 - 0.017 in/in	on Tensile Bar; SABIC Method
Melt Index of Compound	5.0 g/10 min @Load 2.16 kg, Temperature 250 [°] C	5.0 g/10 min @Load 4.76 lb, Temperature 482 [°] F	MVR [cm ³ /10 min]; ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	112	112	ISO 2039-2
Hardness, H358/30	124 MPa	18000 psi	ISO 2039-1
Tensile Strength at Break	50.0 MPa	7250 psi	5 mm/min; ISO 527
Elongation at Break	10 %	10 %	5 mm/min; ISO 527
Tensile Modulus	3.70 GPa	537 ksi	1 mm/min; ISO 527
Flexural Strength	75.0 MPa	10900 psi	2 mm/min; ISO 178
Flexural Modulus	3.40 GPa	493 ksi	2 mm/min; ISO 178
Izod Impact, Unnotched (ISO)	50.0 kJ/m ²	23.8 ft-lb/in ²	80*10*4; ISO 180/1U
	50.0 kJ/m ² @Temperature -30.0 [°] C	23.8 ft-lb/in ² @Temperature -22.0 [°] F	80*10*4; ISO 180/1U
Charpy Impact Unnotched	NB	NB	Edgew 80*10*4 sp=62mm; ISO 179/1eU
	NB	NB	

Mechanical Properties	Metric @ Temperature -30.0 °C	English @ Temperature -22.0 °F	Comments Edgew 80*10*4 sp=62mm; ISO 179/ISO
Charpy Impact, Notched	0.700 J/cm ^Å ²	3.33 ft-lb/in ^Å ²	ISO 179/2C
Taber Abrasion, mg/1000 Cycles	26	26	CS-17, 1 kg; SABIC Method

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	75.0 Åµm/m-Å°C @ Temperature 23.0 - 80.0 Å°C	41.7 Åµin/in-Å°F @ Temperature 73.4 - 176 Å°F	ISO 11359-2
CTE, linear, Transverse to Flow	80.0 Åµm/m-Å°C @ Temperature 23.0 - 80.0 Å°C	44.4 Åµin/in-Å°F @ Temperature 73.4 - 176 Å°F	ISO 11359-2
Deflection Temperature at 0.46 MPa (66 psi)	120 Å°C	248 Å°F	Edgew 120*10*4 sp=100mm; ISO 75/Be
Deflection Temperature at 1.8 MPa (264 psi)	65.0 Å°C	149 Å°F	Edgew 120*10*4 sp=100mm; ISO 75/Ae
Vicat Softening Point	138 Å°C	280 Å°F	Rate B/50; ISO 306
	143 Å°C	289 Å°F	Rate B/120; ISO 306
UL RTI, Electrical	105 Å°C	221 Å°F	UL 746B
UL RTI, Mechanical with Impact	105 Å°C	221 Å°F	UL 746B
UL RTI, Mechanical without Impact	105 Å°C	221 Å°F	UL 746B
Flammability, UL94	HB @Thickness 1.50 mm	HB @Thickness 0.0591 in	UL 94
	HB @Thickness 3.00 mm	HB @Thickness 0.118 in	UL 94
Oxygen Index	22 %	22 %	ISO 4589
Glow Wire Test	650 Å°C @Thickness 3.20 mm	1200 Å°F @Thickness 0.126 in	IEC 60695-2-12

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	IEC 60093
Surface Resistance	>= 1.00e+15 ohm	>= 1.00e+15 ohm	ROA; IEC 60093
Dielectric Constant	3.2	3.2	IEC 60250

Electrical Properties	@Frequency 1.00e+6 Metric Hz	@Frequency 1.00e+6 English Hz	Comments
	3.3	3.3	IEC 60250
	@Frequency 50.0 - 60.0 Hz	@Frequency 50.0 - 60.0 Hz	
	3.3	3.3	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
Dielectric Strength	23.0 kV/mm	584 kV/in	in oil; IEC 60243-1
	@Thickness 3.20 mm	@Thickness 0.126 in	
	24.8 kV/mm	630 kV/in	in oil; IEC 60243-1
	@Thickness 1.60 mm	@Thickness 0.0630 in	
Dissipation Factor	0.0020	0.0020	IEC 60250
	@Frequency 50.0 - 60.0 Hz	@Frequency 50.0 - 60.0 Hz	
	0.0020	0.0020	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	0.014	0.014	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	

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