

SABIC Innovative Plastics Valox® 830 PBT (Europe-Africa-Middle East)

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

Material Notes:

VALOX 830 is a 30% glass fibre reinforced PBT+PET blend with excellent surface finish. Applications: hot air gun housing assemblies, industrial glue guns, appliance housings and handles.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Valox-830-PBT-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.55 g/cc	1.55 g/cc	ASTM D792
Density	1.55 g/cc	0.0560 lb/in ³	ISO 1183
Filler Content	30 %	30 %	ASTM D229
Moisture Absorption	0.0600 %	0.0600 %	23Â°C / 50% RH; ISO 62
Water Absorption at Saturation	0.15 %	0.15 %	ISO 62
Viscosity	208000 cP	208000 cP	Melt Viscosity, 260Â°C, 1500 sec-1; ISO 11443
Linear Mold Shrinkage, Flow	0.0040 - 0.0080 cm/cm	0.0040 - 0.0080 in/in	on Tensile Bar; SABIC Method
	0.0020 - 0.010 cm/cm @Thickness 3.20 mm	0.0020 - 0.010 in/in @Thickness 0.126 in	SABIC Method
Linear Mold Shrinkage, Transverse	0.0060 - 0.010 cm/cm	0.0060 - 0.010 in/in	on Tensile Bar; SABIC Method
Melt Flow	16 g/10 min	16 g/10 min	ASTM D1238
	@Load 2.16 kg, Temperature 265 Â°C	@Load 4.76 lb, Temperature 509 Â°F	
	45 g/10 min	45 g/10 min	ASTM D1238
	@Load 5.00 kg, Temperature 265 Â°C	@Load 11.0 lb, Temperature 509 Â°F	
Melt Index of Compound	14 g/10 min	14 g/10 min	MVR [cm ³ /10 min]; ISO 1133
	@Load 2.16 kg, Temperature 265 Â°C	@Load 4.76 lb, Temperature 509 Â°F	
	23 g/10 min	23 g/10 min	MVR [cm ³ /10 min]; ISO 1133
	@Load 5.00 kg, Temperature 250 Â°C	@Load 11.0 lb, Temperature 482 Â°F	
	35 g/10 min	35 g/10 min	MVR [cm ³ /10 min]; ISO 1133
	@Load 5.00 kg, Temperature 265 Â°C	@Load 11.0 lb, Temperature 509 Â°F	

Physical Properties	Metric	English	Comments
Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	123	123	ISO 2039-2
Hardness, H358/30	174 MPa	25200 psi	ISO 2039-1
Tensile Strength at Break	140 MPa	20300 psi	Type I, 5 mm/min; ASTM D638
	140 MPa	20300 psi	5 mm/min; ISO 527
Tensile Strength, Yield	140 MPa	20300 psi	Type I, 5 mm/min; ASTM D638
	140 MPa	20300 psi	5 mm/min; ISO 527
Elongation at Break	3.0 %	3.0 %	Type I, 5 mm/min; ASTM D638
	3.0 %	3.0 %	5 mm/min; ISO 527
	3.0 %	3.0 %	Flexural Strain, break, 2 mm/min; ISO 178
Elongation at Yield	3.0 %	3.0 %	Type I, 5 mm/min; ASTM D638
	3.0 %	3.0 %	5 mm/min; ISO 527
Tensile Modulus	10.5 GPa	1520 ksi	5 mm/min; ASTM D638
	10.5 GPa	1520 ksi	1 mm/min; ISO 527
Flexural Strength	200 MPa	29000 psi	2 mm/min; ISO 178
	205 MPa	29700 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Yield Strength	205 MPa	29700 psi	1.3 mm/min, 50 mm span; ASTM D790
	215 MPa	31200 psi	2 mm/min; ISO 178
Flexural Modulus	7.40 GPa	1070 ksi	1.3 mm/min, 50 mm span; ASTM D790
	8.80 GPa	1280 ksi	2 mm/min; ISO 178
Izod Impact, Notched	0.900 J/cm	1.69 ft-lb/in	ASTM D256
	0.900 J/cm	1.69 ft-lb/in	ASTM D256
	@Temperature 0.000 Å°C	@Temperature 32.0 Å°F	
	0.900 J/cm	1.69 ft-lb/in	ASTM D256
	@Temperature -30.0 Å°C	@Temperature -22.0 Å°F	
Izod Impact, Unnotched	8.00 J/cm	15.0 ft-lb/in	ASTM D4812

Mechanical Properties	Metric 9.00 J/cm	English 75.0 ft-lb/in	Comments
	@Temperature -30.0 °C	@Temperature -22.0 °F	ASTM D4812
Izod Impact, Notched (ISO)	10.0 kJ/mÂ²	4.76 ft-lb/inÂ²	80*10*4; ISO 180/1A
	9.00 kJ/mÂ² @Temperature 0.000 °C	4.28 ft-lb/inÂ² @Temperature 32.0 °F	80*10*4; ISO 180/1A
	9.00 kJ/mÂ² @Temperature -30.0 °C	4.28 ft-lb/inÂ² @Temperature -22.0 °F	80*10*4; ISO 180/1A
Izod Impact, Unnotched (ISO)	50.0 kJ/mÂ²	23.8 ft-lb/inÂ²	80*10*4; ISO 180/1U
	50.0 kJ/mÂ² @Temperature -30.0 °C	23.8 ft-lb/inÂ² @Temperature -22.0 °F	80*10*4; ISO 180/1U
Charpy Impact Unnotched	6.00 J/cmÂ²	28.6 ft-lb/inÂ²	ISO 179/2C
	6.00 J/cmÂ²	28.6 ft-lb/inÂ²	Edgew 80*10*4 sp=62mm; ISO 179/1eU
	5.00 J/cmÂ² @Temperature -30.0 °C	23.8 ft-lb/inÂ² @Temperature -22.0 °F	Edgew 80*10*4 sp=62mm; ISO 179/1eU
	5.50 J/cmÂ² @Temperature -30.0 °C	26.2 ft-lb/inÂ² @Temperature -22.0 °F	ISO 179/2C
Charpy Impact, Notched	0.900 J/cmÂ²	4.28 ft-lb/inÂ²	Edgew 80*10*4 sp=62mm; ISO 179/1eA
	1.00 J/cmÂ²	4.76 ft-lb/inÂ²	ISO 179/2C
	0.900 J/cmÂ² @Temperature -30.0 °C	4.28 ft-lb/inÂ² @Temperature -22.0 °F	Edgew 80*10*4 sp=62mm; ISO 179/1eA
	1.00 J/cmÂ² @Temperature -30.0 °C	4.76 ft-lb/inÂ² @Temperature -22.0 °F	ISO 179/2C
Dart Drop, Total Energy	3.00 J @Temperature 23.0 °C	2.21 ft-lb @Temperature 73.4 °F	ASTM D3763
Taber Abrasion, mg/1000 Cycles	30	30	CS-17, 1 kg; SABIC Method

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	ASTM D257
	>= 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	ASTM D150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	3.2	3.2	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	3.3	3.3	IEC 60250
	@Frequency 50.0 - 60.0 Hz	@Frequency 50.0 - 60.0 Hz	
	3.6	3.6	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
Dielectric Strength	15.0 kV/mm	381 kV/in	in oil; ASTM D149
	@Thickness 3.20 mm	@Thickness 0.126 in	
	15.0 kV/mm	381 kV/in	in oil; IEC 60243-1
	@Thickness 3.20 mm	@Thickness 0.126 in	
	23.0 kV/mm	584 kV/in	in oil; ASTM D149
	@Thickness 1.60 mm	@Thickness 0.0630 in	
	23.0 kV/mm	584 kV/in	in oil; IEC 60243-1
	@Thickness 1.60 mm	@Thickness 0.0630 in	
	27.0 kV/mm	686 kV/in	in oil; ASTM D149
	@Thickness 0.800 mm	@Thickness 0.0315 in	
	27.0 kV/mm	686 kV/in	in oil; IEC 60243-1
	@Thickness 0.800 mm	@Thickness 0.0315 in	
Dissipation Factor	0.00080	0.00080	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	
	0.013	0.013	

Electrical Properties	Metric	English	Comments
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	0.013	0.013	
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	ASTM D150

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