

SABIC Innovative Plastics Valox® VX3101N PBT (Europe-Africa-Middle East)

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

Material Notes:

VALOX VX3101N is an unreinforced PBT injection moulding resin, with excellent flow properties, good hydrolytical stability and chemical resistance.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Valox-VX3101N-PBT-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Density	1.31 g/cc	0.0473 lb/in ³	ISO 1183
Moisture Absorption	0.0800 %	0.0800 %	23 ^o C / 50% RH; ISO 62
Water Absorption at Saturation	0.34 %	0.34 %	ISO 62
Linear Mold Shrinkage, Flow	0.011 - 0.018 cm/cm	0.011 - 0.018 in/in	on Tensile Bar; SABIC Method
Linear Mold Shrinkage, Transverse	0.0090 - 0.018 cm/cm	0.0090 - 0.018 in/in	on Tensile Bar; SABIC Method
Melt Index of Compound	20 g/10 min @Load 1.20 kg, Temperature 250 ^o C	20 g/10 min @Load 2.65 lb, Temperature 482 ^o F	MVR [cm ³ /10 min]; ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, H358/30	100 MPa	14500 psi	ISO 2039-1
Tensile Strength at Break	50.0 MPa	7250 psi	50 mm/min; ISO 527
Tensile Strength, Yield	65.0 MPa	9430 psi	50 mm/min; ISO 527
Elongation at Break	15 %	15 %	50 mm/min; ISO 527
Elongation at Yield	3.5 %	3.5 %	50 mm/min; ISO 527
Tensile Modulus	2.80 GPa	406 ksi	1 mm/min; ISO 527
Flexural Yield Strength	85.0 MPa	12300 psi	2 mm/min; ISO 178
Flexural Modulus	2.60 GPa	377 ksi	2 mm/min; ISO 178
Izod Impact, Notched (ISO)	4.00 kJ/m ²	1.90 ft-lb/in ²	80*10*4; ISO 180/1A
	2.00 kJ/m ² @Temperature 0.000 ^o C	0.952 ft-lb/in ² @Temperature 32.0 ^o F	80*10*4; ISO 180/1A
	2.00 kJ/m ²	0.952 ft-lb/in ²	80*10*4; ISO 180/1A

Mechanical Properties	Metric @Temperature -30.0 °C	English @Temperature -22.0 °F	Comments
Izod Impact, Unnotched (ISO)	NB	NB	80*10*4; ISO 180/1U
	NB @Temperature -30.0 °C	NB @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 @Temperature -30.0 °C	NB @Temperature -22.0 °F	Edgew 80*10*4 sp=62mm; ISO 179/1eU
Charpy Impact, Notched	0.500 J/cm ²	2.38 ft-lb/in ²	Edgew 80*10*4 sp=62mm; ISO 179/1eA
	0.300 J/cm ² @Temperature -30.0 °C	1.43 ft-lb/in ² @Temperature -22.0 °F	Edgew 80*10*4 sp=62mm; ISO 179/1eA
Taber Abrasion, mg/1000 Cycles	9.0	9.0	CS-17, 1 kg; SABIC Method

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	130 $\mu\text{m}/\text{m}\cdot\text{°C}$ @Temperature 23.0 - 60.0 °C	72.2 $\mu\text{in}/\text{in}\cdot\text{°F}$ @Temperature 73.4 - 140 °F	ISO 11359-2
CTE, linear, Transverse to Flow	130 $\mu\text{m}/\text{m}\cdot\text{°C}$ @Temperature 23.0 - 60.0 °C	72.2 $\mu\text{in}/\text{in}\cdot\text{°F}$ @Temperature 73.4 - 140 °F	ISO 11359-2
Deflection Temperature at 0.46 MPa (66 psi)	175 °C	347 °F	Edgew 120*10*4 sp=100mm; ISO 75/Be
Deflection Temperature at 1.8 MPa (264 psi)	60.0 °C	140 °F	Edgew 120*10*4 sp=100mm; ISO 75/Ae
Vicat Softening Point	183 °C	361 °F	Rate B/50; ISO 306
	185 °C	365 °F	Rate B/120; ISO 306
Flammability, UL94	HB @Thickness 1.50 mm	HB @Thickness 0.0591 in	UL 94 by SABIC-IP
Oxygen Index	20 %	20 %	ISO 4589
Glow Wire Test	850 °C @Thickness 1.00 mm	1560 °F @Thickness 0.0394 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	2.9	2.9	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	3.1	3.1	IEC 60250
	@Frequency 50.0 - 60.0 Hz	@Frequency 50.0 - 60.0 Hz	
Dielectric Strength	16.0 kV/mm	406 kV/in	in oil; IEC 60243-1
	@Thickness 3.20 mm	@Thickness 0.126 in	
Dissipation Factor	0.0020	0.0020	IEC 60250
	@Frequency 50.0 - 60.0 Hz	@Frequency 50.0 - 60.0 Hz	
	0.020	0.020	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Comparative Tracking Index	600 V	600 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