

Evonik Corporation Vestodur® 3011 High Viscosity PBT

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

Material Notes:

Description: VESTODUR 3011 is a high viscosity polybutylene terephthalate compound for extrusion, with processing aid and an improved resistance to hydrolysis and heat exposure. This compound is especially suitable for the manufacture of stiff, small diameter tubing, e. g. as loose buffering for fiber optics. Information provided by degussa.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Evonik-Corporation-Vestodur-3011-High-Viscosity-PBT.php

Physical Properties	Metric	English	Comments
Density	1.31 g/cc	0.0473 lb/in ³	ISO 1183
Water Absorption at Saturation	0.45 %	0.45 %	ISO 62
Linear Mold Shrinkage	0.02 cm/cm @Thickness 2.00 mm	0.02 in/in @Thickness 0.0787 in	sheet with film gate at rim, mold temperature 80°C
Linear Mold Shrinkage, Transverse	0.017 cm/cm	0.017 in/in	
Melt Flow	11.79 g/10 min @Load 2.16 kg, Temperature 250 °C	11.79 g/10 min @Load 4.76 lb, Temperature 482 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	77	77	ISO 868
Tensile Strength, Yield	55.0 MPa	7980 psi	ISO 527-1/2
Elongation at Break	>= 50 %	>= 50 %	ISO 527-1/2
Elongation at Yield	9.0 %	9.0 %	ISO 527-1/2
Tensile Modulus	2.60 GPa	377 ksi	ISO 527-1/-2
Charpy Impact Unnotched	21.0 J/cm ² @Temperature -30.0 °C	99.9 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eU
	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	ISO 179/1eU
Charpy Impact, Notched	0.550 J/cm ² @Temperature -30.0 °C	2.62 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA
	0.650 J/cm ² @Temperature 23.0 °C	3.09 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eA

Mechanical Properties	Metric	English	Comments
CTE, linear	110 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	61.1 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	Longitudinal; ISO 11359, DIN 53752
	@Temperature 23.0 - 55.0 $^\circ\text{C}$	@Temperature 73.4 - 131 $^\circ\text{F}$	
CTE, linear, Transverse to Flow	110 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	61.1 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	ISO 11359, DIN 53752
	@Temperature 23.0 - 55.0 $^\circ\text{C}$	@Temperature 73.4 - 131 $^\circ\text{F}$	
Deflection Temperature at 0.46 MPa (66 psi)	150 $^\circ\text{C}$	302 $^\circ\text{F}$	ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	55.0 $^\circ\text{C}$	131 $^\circ\text{F}$	ISO 75-1/-2
Vicat Softening Point	180 $^\circ\text{C}$	356 $^\circ\text{F}$	Method B, 50 N; ISO 306
	220 $^\circ\text{C}$	428 $^\circ\text{F}$	Method A, 10 N; ISO 306
Flammability, UL94	HB	HB	IEC 60695
	@Thickness 0.800 mm	@Thickness 0.0315 in	
	HB	HB	IEC 60695
	@Thickness 1.60 mm	@Thickness 0.0630 in	
Oxygen Index	23 %	23 %	ISO 4589, ASTM D2863

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+15 ohm-cm	1.00e+15 ohm-cm	IEC 60093
Surface Resistance	1.00e+13 ohm	1.00e+13 ohm	IEC 60093
Dielectric Constant	3.3	3.3	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	3.5	3.5	IEC 60250
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Dielectric Strength	27.0 kV/mm	686 kV/in	K20/P50; IEC 60243-1
Dissipation Factor	0.0020	0.0020	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	0.023	0.023	IEC 60250
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Comparative Tracking Index	575 V	575 V	100 drops value; IEC 60112

Electrical Properties	Metric	English	Comments
			on A CTI; IEC 60112

Descriptive Properties	Value	Comments
Electrolytic Corrosion	A1	IEC 60426

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