

## Evonik Corporation Vestodur® HI19 Polymer Modified PBT

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

### Material Notes:

Description: Degussa AG's High Performance Polymers Business Unit manufactures a range of polybutylene terephthalate compounds that are supplied under the registered trademark VESTODUR® . Material properties characterizing VESTODUR compounds are:high thermostabilityhigh stiffnesslow water absorption resulting in high dimensional stabilityhigh hardnessgood strengthgood sliding friction behavior, low abrasiongood creep behaviorgood electrical propertiesgood chemical resistancegood weathering resistancegood processabilityno tendency to form stress cracksSpecific Notes for this Material: Polymer-modified compounds, adjusted flexible, with increased impact strength, for applications such as temperature sensors and oil dipsticks. Unreinforced, stabilized, with mold release agent.Information provided by degussa.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Evonik-Corporation-Vestodur-HI19-Polymer-Modified-PBT.php](http://www.lookpolymers.com/polymer_Evonik-Corporation-Vestodur-HI19-Polymer-Modified-PBT.php)

Physical Properties	Metric	English	Comments
Density	1.26 g/cc	0.0455 lb/in <sup>3</sup>	ISO 1183
Water Absorption at Saturation	0.35 %	0.35 %	ISO 62
Linear Mold Shrinkage	0.014 cm/cm	0.014 in/in	Pigmentation can change mold shrinkage.
Linear Mold Shrinkage, Transverse	0.014 cm/cm	0.014 in/in	Pigmentation can change mold shrinkage.
Melt Flow	15.12 g/10 min @Load 2.16 kg, Temperature 250 °C	15.12 g/10 min @Load 4.76 lb, Temperature 482 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	65	65	ISO 868
Ball Indentation Hardness	50.0 MPa	7250 psi	H30; ISO 2039-1
Tensile Strength, Yield	27.0 MPa	3920 psi	50 mm/min; ISO 527-1/2
Elongation at Break	>= 50 %	>= 50 %	50 mm/min; ISO 527-1/2
Elongation at Yield	23 %	23 %	50 mm/min; ISO 527-1/2
Tensile Modulus	0.550 GPa	79.8 ksi	ISO 527-1/2
Charpy Impact Unnotched	NB	NB	ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Charpy Impact Unnotched	NB	NB	ISO 179/1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Mechanical Properties	Metric	English	Comments
Charpy Impact, Notched	0.810 J/cm <sup>2</sup>	3.12 ft-lb/in <sup>2</sup>	ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	3.00 J/cm <sup>2</sup>	14.3 ft-lb/in <sup>2</sup>	ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear	150 µm/m-°C	83.3 µin/in-°F	Longitudinal; ISO 11359
	@Temperature 23.0 - 55.0 °C	@Temperature 73.4 - 131 °F	
CTE, linear, Transverse to Flow	150 µm/m-°C	83.3 µin/in-°F	ISO 11359
	@Temperature 23.0 - 55.0 °C	@Temperature 73.4 - 131 °F	
Melting Point	200 - 205 °C	392 - 401 °F	DSC
Deflection Temperature at 0.46 MPa (66 psi)	110 °C	230 °F	ISO 75-1/2
Deflection Temperature at 1.8 MPa (264 psi)	50.0 °C	122 °F	ISO 75-1/2
Vicat Softening Point	125 °C	257 °F	50N; ISO 306
	190 °C	374 °F	10N; ISO 306
Flammability, UL94	HB	HB	
	@Thickness 0.800 mm	@Thickness 0.0315 in	
	HB	HB	
	@Thickness 1.60 mm	@Thickness 0.0630 in	
Glow Wire Test	700 °C	1290 °F	IEC 60695-2-1/0-3
	@Thickness 2.00 mm	@Thickness 0.0787 in	

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	3.6	3.6	IEC 60250
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
	4.0	4.0	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	

Dielectric Strength Electrical Properties	27.0 kV/mm Metric	686 kV/in English	K20/P50- IEC 60243-1 Comments
Dissipation Factor	0.022	0.022	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
Comparative Tracking Index	0.033	0.033	IEC 60250
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Comparative Tracking Index	575 V	575 V	Test Solution A, 100 drops; IEC 60112
	600 V	600 V	Test Solution A, CTI; IEC 60112

Descriptive Properties	Value	Comments
Electrolytic Corrosion	A1 Step	IEC 60426

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China