

SABIC Innovative Plastics Valox® HX312C PBT (Europe-Africa-Middle East)

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

Material Notes:

Unreinforced PBT with release. For medical devices and pharmaceutical applications. Healthcare management of change, biocompatible (ISO 10993 or USP Class VI), food contact compliant. EtO and steam sterilizable.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Valox-HX312C-PBT-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.31 g/cc	1.31 g/cc	ASTM D792
Density	1.31 g/cc	0.0473 lb/in ³	ISO 1183
Moisture Absorption	0.0800 %	0.0800 %	23Â°C / 50% RH; ISO 62
Water Absorption at Saturation	0.35 %	0.35 %	ISO 62
Linear Mold Shrinkage, Flow	0.0090 - 0.016 cm/cm @Thickness 3.20 mm	0.0090 - 0.016 in/in @Thickness 0.126 in	SABIC Method
Melt Flow	35 g/10 min @Load 1.20 kg, Temperature 250 Â°C	35 g/10 min @Load 2.65 lb, Temperature 482 Â°F	ASTM D1238
Melt Index of Compound	31 g/10 min @Load 1.20 kg, Temperature 250 Â°C	31 g/10 min @Load 2.65 lb, Temperature 482 Â°F	MVR [cm ³ /10 min]; ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	30.0 MPa	4350 psi	Type I, 50 mm/min; ASTM D638
	30.0 MPa	4350 psi	50 mm/min; ISO 527
Tensile Strength, Yield	51.0 MPa	7400 psi	Type I, 50 mm/min; ASTM D638
	58.0 MPa	8410 psi	50 mm/min; ISO 527
Elongation at Break	25 %	25 %	Type I, 50 mm/min; ASTM D638
	25 %	25 %	50 mm/min; ISO 527
Elongation at Yield	6.0 %	6.0 %	Type I, 50 mm/min; ASTM D638
	6.0 %	6.0 %	50 mm/min; ISO 527
Tensile Modulus	2.50 GPa	363 ksi	50 mm/min; ASTM D638

Mechanical Properties	2.50 GPa Metric	363 ksi English	1 mm/min; ISO 527 Comments
Flexural Yield Strength	82.0 MPa	11900 psi	1.3 mm/min, 50 mm span; ASTM D790
	85.0 MPa	12300 psi	2 mm/min; ISO 178
Flexural Modulus	2.34 GPa	339 ksi	1.3 mm/min, 50 mm span; ASTM D790
	2.40 GPa	348 ksi	2 mm/min; ISO 178
Izod Impact, Notched	0.530 J/cm	0.993 ft-lb/in	ASTM D256
	0.530 J/cm	0.993 ft-lb/in	ASTM D256
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Izod Impact, Notched (ISO)	3.00 kJ/mÂ²	1.43 ft-lb/inÂ²	80*10*4; ISO 180/1A
	3.00 kJ/mÂ²	1.43 ft-lb/inÂ²	80*10*4; ISO 180/1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Izod Impact, Unnotched (ISO)	NB	NB	80*10*4; ISO 180/1U
	NB	NB	80*10*4; ISO 180/1U
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Charpy Impact Unnotched	NB	NB	Edgew 80*10*4 sp=62mm; ISO 179/1eU
	NB	NB	Edgew 80*10*4 sp=62mm; ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Charpy Impact, Notched	0.300 J/cmÂ²	1.43 ft-lb/inÂ²	Edgew 80*10*4 sp=62mm; ISO 179/1eA
	0.200 J/cmÂ²	0.952 ft-lb/inÂ²	Edgew 80*10*4 sp=62mm; ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Dart Drop, Total Energy	40.0 J	29.5 ft-lb	ASTM D3763
	@Temperature 23.0 °C	@Temperature 73.4 Â°F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	100 Âµm/m-Â°C	55.6 Âµin/in-Â°F	ASTM E 831
	@Temperature -40.0 - 40.0 Â°C	@Temperature -40.0 - 104 Â°F	

Thermal Properties	Metric	English	Comments
	100 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	55.6 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ISO 11359-2
	@Temperature 23.0 - 80.0 $\text{Å}^\circ\text{C}$	@Temperature 73.4 - 176 $\text{Å}^\circ\text{F}$	
CTE, linear, Transverse to Flow	100 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	55.6 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E 831
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
	100 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	55.6 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ISO 11359-2
	@Temperature 23.0 - 80.0 $\text{Å}^\circ\text{C}$	@Temperature 73.4 - 176 $\text{Å}^\circ\text{F}$	
Deflection Temperature at 1.8 MPa (264 psi)	58.0 $\text{Å}^\circ\text{C}$	136 $\text{Å}^\circ\text{F}$	Edgew 120*10*4 sp=100mm; ISO 75/Ae
	54.0 $\text{Å}^\circ\text{C}$	129 $\text{Å}^\circ\text{F}$	unannealed; ASTM D648
	@Thickness 3.20 mm	@Thickness 0.126 in	
Vicat Softening Point	165 $\text{Å}^\circ\text{C}$	329 $\text{Å}^\circ\text{F}$	Rate B/120; ISO 306
	175 $\text{Å}^\circ\text{C}$	347 $\text{Å}^\circ\text{F}$	Rate B/50; ASTM D1525
	175 $\text{Å}^\circ\text{C}$	347 $\text{Å}^\circ\text{F}$	Rate B/50; ISO 306

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