

SABIC Innovative Plastics Valox® V2105U PBT

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

Material Notes:

Unreinforced, Wear resistant, UV Stabilized PBT designed for outdoor, agricultural, industrial and automotive applications. This grade has very high impact strength to stiffness ratio.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Valox-V2105U-PBT.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.28 g/cc	1.28 g/cc	ASTM D792
Density	1.28 g/cc	0.0462 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	0.029 - 0.034 cm/cm @Thickness 3.20 mm	0.029 - 0.034 in/in @Thickness 0.126 in	SABIC Method
Linear Mold Shrinkage, Transverse	0.025 - 0.030 cm/cm @Thickness 3.20 mm	0.025 - 0.030 in/in @Thickness 0.126 in	SABIC Method
Melt Flow	9.5 g/10 min @Load 5.00 kg, Temperature 266 ^o C	9.5 g/10 min @Load 11.0 lb, Temperature 511 ^o F	ASTM D1238
Melt Index of Compound	8.0 g/10 min @Load 5.00 kg, Temperature 265 ^o C	8.0 g/10 min @Load 11.0 lb, Temperature 509 ^o F	MVR [cm ³ /10 min]; ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	52.0 MPa	7540 psi	50 mm/min; ISO 527
	58.0 MPa	8410 psi	Type I, 50 mm/min; ASTM D638
Tensile Strength, Yield	39.0 MPa	5660 psi	Type I, 50 mm/min; ASTM D638
	40.0 MPa	5800 psi	50 mm/min; ISO 527
Elongation at Break	230 %	230 %	50 mm/min; ISO 527
	300 %	300 %	Type I, 50 mm/min; ASTM D638
Elongation at Yield	6.0 %	6.0 %	50 mm/min; ISO 527
	17 %	17 %	Type I, 50 mm/min; ASTM D638

Mechanical Properties	Metric	English	Comments
Tensile Modulus	2.50 GPa	368 ksi	5 mm/min; ASTM D538
	2.54 GPa	368 ksi	1 mm/min; ISO 527
Flexural Yield Strength	62.0 MPa	8990 psi	2 mm/min; ISO 178
	65.0 MPa	9430 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	1.87 GPa	271 ksi	2 mm/min; ISO 178
	2.06 GPa	299 ksi	1.3 mm/min, 50 mm span; ASTM D790
Izod Impact, Notched	11.6 J/cm	21.7 ft-lb/in	ASTM D256
	1.50 J/cm	2.81 ft-lb/in	ASTM D256
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	
Izod Impact, Notched (ISO)	98.0 kJ/mÂ²	46.6 ft-lb/inÂ²	80*10*4; ISO 180/1A
	15.0 kJ/mÂ²	7.14 ft-lb/inÂ²	80*10*4; ISO 180/1A
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	
Charpy Impact, Notched	9.00 J/cmÂ²	42.8 ft-lb/inÂ²	Edgew 80*10*4 sp=62mm; ISO 179/1eA
Dart Drop, Total Energy	63.0 J	46.5 ft-lb	ASTM D3763
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
	75.0 J	55.3 ft-lb	ASTM D3763
	@Temperature -40.0 Â°C	@Temperature -40.0 Â°F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	80.0 Âµm/m-Â°C	44.4 Âµin/in-Â°F	ISO 11359-2
	@Temperature -40.0 - 40.0 Â°C	@Temperature -40.0 - 104 Â°F	
	80.0 Âµm/m-Â°C	44.4 Âµin/in-Â°F	ASTM E 831
	@Temperature -40.0 - 40.0 Â°C	@Temperature -40.0 - 104 Â°F	
CTE, linear, Transverse to Flow	120 Âµm/m-Â°C	66.7 Âµin/in-Â°F	ASTM E 831
	@Temperature -40.0 - 40.0 Â°C	@Temperature -40.0 - 104 Â°F	
	120 Âµm/m-Â°C	66.7 Âµin/in-Â°F	

Thermal Properties	Metric @ Temperature -40.0 - 40.0 Â°C	English @ Temperature -40.0 - 104 Â°F	ISO 11359-2 Comments
Deflection Temperature at 1.8 MPa (264 psi)	47.0 Â°C	117 Â°F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	49.0 Â°C @Thickness 3.20 mm	120 Â°F @Thickness 0.126 in	unannealed; ASTM D648
Vicat Softening Point	158 Â°C	316 Â°F	Rate B/50; ISO 306
	158 Â°C	316 Â°F	Rate B/120; ISO 306
	158 Â°C	316 Â°F	Rate B/50; ASTM D1525

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