

SABIC Innovative Plastics Valox® 420M PBT (Asia Pacific)

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

Material Notes:

30% GR PBTP. Easy flow/release. High stiffness and load bearing properties. This data was supplied by SABIC-IP for the Asia Pacific region.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Valox-420M-PBT-Asia-Pacific.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.53 g/cc	1.53 g/cc	ASTM D 792
Water Absorption	0.060 %	0.060 %	ASTM D 570
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Flow	0.0030 - 0.0050 cm/cm	0.0030 - 0.0050 in/in	SABIC Method
	@Thickness 1.50 - 3.20 mm	@Thickness 0.0591 - 0.126 in	
	0.0050 - 0.0080 cm/cm	0.0050 - 0.0080 in/in	SABIC Method
	@Thickness 3.20 - 4.60 mm	@Thickness 0.126 - 0.181 in	
Linear Mold Shrinkage, Transverse	0.0040 - 0.0060 cm/cm	0.0040 - 0.0060 in/in	SABIC Method
	@Thickness 1.50 - 3.20 mm	@Thickness 0.0591 - 0.126 in	
	0.0060 - 0.0080 cm/cm	0.0060 - 0.0080 in/in	SABIC Method
	@Thickness 3.20 - 4.60 mm	@Thickness 0.126 - 0.181 in	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	118	118	ASTM D 785
Tensile Strength at Break	119 MPa	17300 psi	Type I, 5 mm/min; ASTM D 638
Flexural Strength	189 MPa	27400 psi	1.3 mm/min, 50 mm span; ASTM D 790
Flexural Modulus	7.58 GPa	1100 ksi	1.3 mm/min, 50 mm span; ASTM D 790
Izod Impact, Notched	0.850 J/cm	1.59 ft-lb/in	ASTM D 256
	@Temperature 23.0 Å°C	@Temperature 73.4 Å°F	
Izod Impact, Unnotched	8.01 J/cm	15.0 ft-lb/in	ASTM D 4812
	@Temperature 23.0 Å°C	@Temperature 73.4 Å°F	

Mechanical Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	25.2 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	14.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E 831
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
	25.2 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	14.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E 831
	@Temperature 60.0 - 138 $\text{Å}^\circ\text{C}$	@Temperature 140 - 280 $\text{Å}^\circ\text{F}$	
Deflection Temperature at 0.46 MPa (66 psi)	215 $\text{Å}^\circ\text{C}$	419 $\text{Å}^\circ\text{F}$	unannealed; ASTM D 648
	@Thickness 6.40 mm	@Thickness 0.252 in	
Deflection Temperature at 1.8 MPa (264 psi)	207 $\text{Å}^\circ\text{C}$	405 $\text{Å}^\circ\text{F}$	unannealed; ASTM D 648
	@Thickness 6.40 mm	@Thickness 0.252 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	$\geq 3.20\text{e}+16$ ohm-cm	$\geq 3.20\text{e}+16$ ohm-cm	ASTM D 257
Dielectric Constant	3.7	3.7	ASTM D 150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	3.8	3.8	ASTM D 150
	@Frequency 100 Hz	@Frequency 100 Hz	
Dielectric Strength	18.7 kV/mm	475 kV/in	in air; ASTM D 149
	@Thickness 3.20 mm	@Thickness 0.126 in	
	24.8 kV/mm	630 kV/in	in oil; ASTM D 149
	@Thickness 1.60 mm	@Thickness 0.0630 in	
Dissipation Factor	0.0020	0.0020	ASTM D 150
	@Frequency 100 Hz	@Frequency 100 Hz	
	0.020	0.020	ASTM D 150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	

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