

## SABIC Innovative Plastics Valox<sup>®</sup> 701 PBT (Asia Pacific)

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

### Material Notes:

35% glass/mineral alloy, excellent electrical performance to dielectric breakdown. Developed for automotive distributor caps. 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-701-PBT-Asia-Pacific.php](http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Valox-701-PBT-Asia-Pacific.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.59 g/cc	1.59 g/cc	ASTM D 792
Water Absorption	0.070 %	0.070 %	ASTM D 570
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Flow	0.0030 - 0.0040 cm/cm	0.0030 - 0.0040 in/in	SABIC Method
	@Thickness 1.50 - 3.20 mm	@Thickness 0.0591 - 0.126 in	
	0.0040 - 0.0060 cm/cm	0.0040 - 0.0060 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 - 0.0090 cm/cm	0.0060 - 0.0090 in/in	SABIC Method
	@Thickness 3.20 - 4.60 mm	@Thickness 0.126 - 0.181 in	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	119	119	ASTM D 785
Tensile Strength at Break	75.0 MPa	10900 psi	Type I, 5 mm/min; ASTM D 638
Elongation at Break	6.0 %	6.0 %	Type I, 5 mm/min; ASTM D 638
Flexural Yield Strength	124 MPa	18000 psi	1.3 mm/min, 50 mm span; ASTM D 790
Flexural Modulus	5.51 GPa	799 ksi	1.3 mm/min, 50 mm span; ASTM D 790
Izod Impact, Notched	0.320 J/cm	0.599 ft-lb/in	ASTM D 256
	@Temperature 23.0 Å°C	@Temperature 73.4 Å°F	

Mechanical Properties <i>Izod Impact, Unnotched</i>	Metric 4.27 J/cm	English 0.22 ft <sup>3</sup> lb/in	Comments ASTM D 4812
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	34.2 Âµm/m-Â°C	19.0 Âµin/in-Â°F	ASTM E 831
	@Temperature -40.0 - 40.0 Â°C	@Temperature -40.0 - 104 Â°F	
	34.2 Âµm/m-Â°C	19.0 Âµin/in-Â°F	ASTM E 831
	@Temperature 60.0 - 138 Â°C	@Temperature 140 - 280 Â°F	
Deflection Temperature at 0.46 MPa (66 psi)	215 Â°C	419 Â°F	unannealed; ASTM D 648
	@Thickness 6.40 mm	@Thickness 0.252 in	
Deflection Temperature at 1.8 MPa (264 psi)	198 Â°C	388 Â°F	unannealed; ASTM D 648
	@Thickness 6.40 mm	@Thickness 0.252 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	3.70e+16 ohm-cm	3.70e+16 ohm-cm	ASTM D 257
Dielectric Constant	3.6	3.6	ASTM D 150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	3.7	3.7	ASTM D 150
	@Frequency 100 Hz	@Frequency 100 Hz	
Dielectric Strength	22.0 kV/mm	559 kV/in	in air; ASTM D 149
	@Thickness 3.20 mm	@Thickness 0.126 in	
	25.5 kV/mm	648 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	
	0.010	0.010	ASTM D 150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	

**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