

## SABIC Innovative Plastics Valox<sup>®</sup> IQNH4560 PBT (Asia Pacific)

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

### Material Notes:

Valox<sup>\*</sup> IQNH4560 resin is a non-brominated/non-chlorinated flame retardant product based on Valox<sup>\*</sup> iQ PBT resin.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_SABIC-Innovative-Plastics-Valox-IQNH4560-PBT-Asia-Pacific.php](http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Valox-IQNH4560-PBT-Asia-Pacific.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.56 g/cc	1.56 g/cc	ASTM D792
Density	1.56 g/cc	0.0564 lb/in <sup>3</sup>	ISO 1183
Moisture Absorption	0.0900 %	0.0900 %	23 <sup>°</sup> C / 50% RH; ISO 62
Water Absorption at Saturation	0.23 %	0.23 %	ISO 62
Linear Mold Shrinkage, Flow	0.0028 cm/cm @Thickness 3.20 mm	0.0028 in/in @Thickness 0.126 in	SABIC Method
Melt Index of Compound	16 g/10 min @Load 5.00 kg, Temperature 250 <sup>°</sup> C	16 g/10 min @Load 11.0 lb, Temperature 482 <sup>°</sup> F	MVR [cm <sup>3</sup> /10 min]; ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	105 MPa	15200 psi	Type I, 5 mm/min; ASTM D638
	108 MPa	15700 psi	5 mm/min; ISO 527
Tensile Strength, Yield	105 MPa	15200 psi	Type I, 5 mm/min; ASTM D638
	108 MPa	15700 psi	5 mm/min; ISO 527
Elongation at Break	2.0 %	2.0 %	Type I, 5 mm/min; ASTM D638
	2.0 %	2.0 %	5 mm/min; ISO 527
Elongation at Yield	2.0 %	2.0 %	Type I, 5 mm/min; ASTM D638
	2.0 %	2.0 %	5 mm/min; ISO 527
Tensile Modulus	11.0 GPa	1600 ksi	5 mm/min; ASTM D638
	11.0 GPa	1600 ksi	1 mm/min; ISO 527
Flexural Strength	165 MPa	23900 psi	1.3 mm/min, 50 mm span; ASTM D790
	175 MPa	25400 psi	2 mm/min; ISO 178

Mechanical Properties	Metric	English	Comments
	175 MPa	25400 psi	2 mm/min; ISO 178
Flexural Modulus	9.60 GPa	1390 ksi	1.3 mm/min, 50 mm span; ASTM D790
	10.0 GPa	1450 ksi	2 mm/min; ISO 178
Izod Impact, Notched	0.720 J/cm	1.35 ft-lb/in	ASTM D256
	0.550 J/cm	1.03 ft-lb/in	ASTM D256
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Izod Impact, Unnotched	5.70 J/cm	10.7 ft-lb/in	ASTM D4812
Izod Impact, Notched (ISO)	7.00 kJ/m <sup>2</sup>	3.33 ft-lb/in <sup>2</sup>	80*10*4; ISO 180/1A
	6.00 kJ/m <sup>2</sup>	2.86 ft-lb/in <sup>2</sup>	80*10*4; ISO 180/1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Izod Impact, Unnotched (ISO)	37.0 kJ/m <sup>2</sup>	17.6 ft-lb/in <sup>2</sup>	80*10*4; ISO 180/1U
Dart Drop, Total Energy	6.00 J	4.43 ft-lb	ASTM D3763
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	24.0 μm/m-°C	13.3 μin/in-°F	ASTM E 831
	@Temperature -40.0 - 40.0 °C	@Temperature -40.0 - 104 °F	
CTE, linear, Transverse to Flow	80.0 μm/m-°C	44.4 μin/in-°F	ASTM E 831
	@Temperature -40.0 - 40.0 °C	@Temperature -40.0 - 104 °F	
Deflection Temperature at 1.8 MPa (264 psi)	205 °C	401 °F	Flatw 80*10*4 sp=64mm; ISO 75/ Af
	200 °C	392 °F	unannealed; ASTM D648
	@Thickness 3.20 mm	@Thickness 0.126 in	
	210 °C	410 °F	unannealed; ASTM D648
	@Thickness 6.40 mm	@Thickness 0.252 in	
Vicat Softening Point	195 °C	383 °F	Rate B/50; ASTM D1525
	195 °C	383 °F	Rate B/50; ISO 306

Thermal Properties	Metric	English	Comments
Flammability, UL94	V-0	V-0	UL 94
	@Thickness 0.800 mm	@Thickness 0.0315 in	
	5VB	5VB	UL 94
	@Thickness 3.00 mm	@Thickness 0.118 in	
Glow Wire Test	800 Â°C	1470 Â°F	IEC 60695-2-13
	960 Â°C	1760 Â°F	IEC 60695-2-12
	@Thickness 1.00 mm	@Thickness 0.0394 in	

Electrical Properties	Metric	English	Comments
Comparative Tracking Index	>= 600 V	>= 600 V	UL 746A
	600 V	600 V	IEC 60112
Hot Wire Ignition, HWI	>= 120 sec	>= 120 sec	UL 746A
High Amp Arc Ignition, HAI	>= 120 arcs	>= 120 arcs	UL 746A

Descriptive Properties	Value	Comments
Ball Pressure Test, 125Â°C +/- 2Â°C	PASSES	IEC 60695-10-2

## 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