

SABIC Innovative Plastics Valox[®] 855 PBT

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

Material Notes:

15% GR PBTP, UL94 V-0 rated. Improved surface appearance. For external housings: steam irons, appliance housings and lighting parts.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Valox-855-PBT.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.54 g/cc	1.54 g/cc	ASTM D792
Water Absorption	0.060 %	0.060 %	ASTM D570
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Flow	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	
Linear Mold Shrinkage, Transverse	0.0050 - 0.0080 cm/cm	0.0050 - 0.0080 in/in	SABIC Method
	@Thickness 1.50 - 3.20 mm	@Thickness 0.0591 - 0.126 in	
	0.0080 - 0.011 cm/cm	0.0080 - 0.011 in/in	SABIC Method
	@Thickness 3.20 - 4.60 mm	@Thickness 0.126 - 0.181 in	
Melt Flow	81 g/10 min @Load 5.00 kg, Temperature 266 Å°C	81 g/10 min @Load 11.0 lb, Temperature 511 Å°F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	119	119	ASTM D785
Tensile Strength at Break	89.0 MPa	12900 psi	Type I, 5 mm/min; ASTM D638
Flexural Strength	137 MPa	19900 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	4.82 GPa	699 ksi	1.3 mm/min, 50 mm span; ASTM D790
Izod Impact, Notched	0.530 J/cm	0.993 ft-lb/in	ASTM D256
Izod Impact, Unnotched	3.20 J/cm	5.99 ft-lb/in	ASTM D4812

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	45.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	25.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E 831
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
	61.2 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	34.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	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)	204 $\text{Å}^\circ\text{C}$	399 $\text{Å}^\circ\text{F}$	unannealed; ASTM D648
	@Thickness 6.40 mm	@Thickness 0.252 in	
Deflection Temperature at 1.8 MPa (264 psi)	187 $\text{Å}^\circ\text{C}$	369 $\text{Å}^\circ\text{F}$	unannealed; ASTM D648
	@Thickness 6.40 mm	@Thickness 0.252 in	
UL RTI, Electrical	125 $\text{Å}^\circ\text{C}$	257 $\text{Å}^\circ\text{F}$	UL 746B
UL RTI, Mechanical with Impact	110 $\text{Å}^\circ\text{C}$	230 $\text{Å}^\circ\text{F}$	UL 746B
UL RTI, Mechanical without Impact	125 $\text{Å}^\circ\text{C}$	257 $\text{Å}^\circ\text{F}$	UL 746B
Flammability, UL94	V-0	V-0	UL 94
	@Thickness 1.47 mm	@Thickness 0.0579 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	4.50e+16 ohm-cm	4.50e+16 ohm-cm	ASTM D257
Dielectric Constant	3.4	3.4	ASTM D150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	3.5	3.5	ASTM D150
	@Frequency 100 Hz	@Frequency 100 Hz	
Dielectric Strength	20.0 kV/mm	508 kV/in	in air; ASTM D149
	@Thickness 3.20 mm	@Thickness 0.126 in	
	22.4 kV/mm	569 kV/in	in oil; ASTM D149
	@Thickness 1.60 mm	@Thickness 0.0630 in	
Dissipation Factor	0.0010	0.0010	ASTM D150
	@Frequency 100 Hz	@Frequency 100 Hz	
	0.010	0.010	ASTM D150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	

Electrical Properties	Metric	English	Comments
Comparative Tracking Index	175 - 250 V	175 - 250 V	UL 746A
Hot Wire Ignition, HWI	>= 120 sec	>= 120 sec	UL 746A
High Amp Arc Ignition, HAI	0.00 - 15 arcs	0.00 - 15 arcs	UL 746A
High Voltage Arc-Tracking Rate, HVTR	>= 150 mm/min	>= 5.91 in/min	UL 746A

Descriptive Properties	Value	Comments
Specific Volume	0.65cm ³ /g	ASTM D792

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