

VALOX™ V3504 resin

Polybutylene Terephthalate
SABIC Innovative Plastics Asia Pacific

Message:

VALOX V3504 is an unreinforced, flame retardant PBT injection moulding resin. Applications: electrical industry, bobbins, keyboard, switches and switch components and appliance housings.

General Information			
Features	Flame Retardant		
Uses	Appliances		
	Bobbins		
	Electrical/Electronic Applications		
	Housings		
	Switches		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.40	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	11	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	8.00	cm ³ /10min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength			
Yield	57.0	MPa	Internal Method
Yield ¹	58.0	MPa	ASTM D638
Yield	58.0	MPa	ISO 527-2/50
Tensile Elongation			
Yield ²	7.0	%	ASTM D638
Break	16	%	Internal Method
Break ³	9.0	%	ASTM D638
Break	8.0	%	ISO 527-2/50
Flexural Modulus			
50.0 mm Span ⁴	2620	MPa	ASTM D790
-- ⁵	2600	MPa	ISO 178
Flexural Stress			
--	88.0	MPa	ISO 178
Yield, 50.0 mm Span ⁶	90.0	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁷ (23°C)	4.0	kJ/m ²	ISO 179/1eA
Notched Izod Impact (23°C)	52	J/m	ASTM D256

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
1.8 MPa, Unannealed, 6.40 mm	106	°C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ⁸	80.0	°C	ISO 75-2/Af
RTI Elec	120	°C	UL 746
RTI Imp	120	°C	UL 746
RTI Str	140	°C	UL 746
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+15	ohms · cm	IEC 60093
Arc Resistance ⁹	PLC 6		ASTM D495
Comparative Tracking Index (CTI)	PLC 3		UL 746
High Amp Arc Ignition (HAI)	PLC 0		UL 746
High Voltage Arc Resistance to Ignition (HVAR)	PLC 6		UL 746
High Voltage Arc Tracking Rate (HVTR)	PLC 4		UL 746
Hot-wire Ignition (HWI)	PLC 4		UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.380 mm	V-0		
3.00 mm	5VA		
Glow Wire Flammability Index (0.380 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			IEC 60695-2-13
0.400 mm	825	°C	
1.00 mm	825	°C	
Injection	Nominal Value	Unit	
Drying Temperature	121	°C	
Drying Time	3.0 to 4.0	hr	
Drying Time, Maximum	12	hr	
Suggested Max Moisture	0.020	%	
Suggested Shot Size	40 to 80	%	
Rear Temperature	232 to 249	°C	
Middle Temperature	238 to 254	°C	
Front Temperature	243 to 260	°C	
Nozzle Temperature	238 to 254	°C	
Processing (Melt) Temp	243 to 260	°C	
Mold Temperature	48.9 to 76.7	°C	
Back Pressure	0.345 to 0.689	MPa	
Screw Speed	50 to 100	rpm	
Vent Depth	0.013 to 0.025	mm	
NOTE			
1.	Type I, 50 mm/min		
2.	Type I, 50 mm/min		

3.	Type I, 50 mm/min
4.	1.3 mm/min
5.	2.0 mm/min
6.	1.3 mm/min
7.	80*10*4 sp=62mm
8.	80*10*4 mm
9.	Tungsten Electrode

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

