

VALOX™ 451E resin

Polybutylene Terephthalate

SABIC Innovative Plastics

Message:

20% GR. Easy flow version of VALOX 451.

General Information			
UL YellowCard	E121562-220796		
Filler / Reinforcement	Glass Fiber,20% Filler by Weight		
Features	Good Flow		
Processing Method	Injection Molding		
Multi-Point Data	Viscosity vs. Shear Rate (ASTM D3835)		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.53	g/cm ³	ASTM D792
Specific Volume	0.658	cm ³ /g	ASTM D792
Molding Shrinkage			Internal Method
Flow ¹	0.60 to 0.90	%	
Flow ²	0.40 to 0.60	%	
Across Flow ³	0.40 to 0.80	%	
Across Flow ⁴	0.80 to 1.1	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ⁵ (Break)	96.5	MPa	ASTM D638
Flexural Modulus ⁶ (50.0 mm Span)	5520	MPa	ASTM D790
Flexural Strength ⁷ (Break, 50.0 mm Span)	152	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	48	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed, 6.40 mm	213	°C	
1.8 MPa, Unannealed, 6.40 mm	196	°C	
RTI Elec	120	°C	UL 746
RTI Imp	120	°C	UL 746
RTI Str	140	°C	UL 746
Electrical	Nominal Value	Test Method	
Arc Resistance ⁸	PLC 7	ASTM D495	
Comparative Tracking Index (CTI)	PLC 3	UL 746	
High Amp Arc Ignition (HAI)	PLC 0	UL 746	
High Voltage Arc Tracking Rate (HVTR)	PLC 4	UL 746	
Hot-wire Ignition (HWI)	PLC 3	UL 746	
Flammability	Nominal Value	Test Method	

Flame Rating		UL 94
0.711 mm	V-0	
3.00 mm	5VA	
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	238 to 254	°C
Middle Temperature	243 to 260	°C
Front Temperature	249 to 266	°C
Nozzle Temperature	243 to 260	°C
Processing (Melt) Temp	249 to 266	°C
Mold Temperature	65.6 to 87.8	°C
Back Pressure	0.345 to 0.689	MPa
Screw Speed	50 to 80	rpm
Vent Depth	0.025 to 0.038	mm
NOTE		
1.	3.2 to 4.6 mm	
2.	1.5 to 3.2 mm	
3.	1.5 to 3.2 mm	
4.	3.2-4.6 mm	
5.	Type I, 5.0 mm/min	
6.	1.3 mm/min	
7.	1.3 mm/min	
8.	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



WECHAT