

VALOX™ ENH3500 resin

Polybutylene Terephthalate
SABIC Innovative Plastics Europe

Message:
Unfilled PBT, Non-Brominated & Non-Chlorinated Flame Retardant

General Information			
UL YellowCard	E45329-100208982		
Features	Bromine Free		
	Chlorine Free		
	Flame Retardant		
RoHS Compliance	RoHS Compliant		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.31	g/cm ³	ASTM D792, ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	20.0	cm ³ /10min	ISO 1133
Molding Shrinkage - Flow ¹	1.8 to 2.8	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ²	3150	MPa	ASTM D638
--	3200	MPa	ISO 527-2/1
Tensile Strength			
Yield ³	44.0	MPa	ASTM D638
Yield	39.0	MPa	ISO 527-2/50
Break ⁴	42.0	MPa	ASTM D638
Break	38.0	MPa	ISO 527-2/50
Tensile Elongation			
Yield ⁵	3.0	%	ASTM D638
Yield	3.0	%	ISO 527-2/50
Break ⁶	10	%	ASTM D638
Break	8.0	%	ISO 527-2/50
Flexural Modulus			
50.0 mm Span ⁷	2750	MPa	ASTM D790
-- ⁸	2700	MPa	ISO 178
Flexural Stress			
--	70.0	MPa	ISO 178
Yield, 50.0 mm Span ⁹	77.0	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method

Notched Izod Impact			
23°C	40	J/m	ASTM D256
-30°C ¹⁰	5.0	kJ/m ²	ISO 180/1A
23°C ¹¹	5.0	kJ/m ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
1.8 MPa, Unannealed, 3.20 mm	60.0	°C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ¹²	60.0	°C	ISO 75-2/Af
Vicat Softening Temperature	170	°C	ISO 306/B120
Ball Pressure Test (125°C)	Pass		IEC 60695-10-2
RTI Elec	150	°C	UL 746
RTI Imp	95.0	°C	UL 746
RTI Str	140	°C	UL 746
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms · cm	ASTM D257, IEC 60093
Comparative Tracking Index (CTI)	PLC 0		UL 746
Comparative Tracking Index	600	V	IEC 60112
High Amp Arc Ignition (HAI)	PLC 0		UL 746
Hot-wire Ignition (HWI)	PLC 4		UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.800 mm)	V-0		UL 94
Injection	Nominal Value	Unit	
Drying Temperature	110 to 120	°C	
Drying Time	2.0 to 4.0	hr	
Suggested Max Moisture	0.020	%	
Hopper Temperature	40.0 to 60.0	°C	
Rear Temperature	230 to 240	°C	
Middle Temperature	235 to 250	°C	
Front Temperature	240 to 260	°C	
Nozzle Temperature	230 to 255	°C	
Processing (Melt) Temp	245 to 260	°C	
Mold Temperature	40.0 to 100	°C	
NOTE			
1.	Tensile Bar		
2.	5.0 mm/min		
3.	Type I, 50 mm/min		
4.	Type I, 50 mm/min		
5.	Type I, 50 mm/min		
6.	Type I, 50 mm/min		
7.	1.3 mm/min		
8.	2.0 mm/min		

9.	1.3 mm/min
10.	80*10*4
11.	80*10*4
12.	80*10*4 mm

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

