

VALOX™ 315 resin

Polybutylene Terephthalate
SABIC Innovative Plastics Europe

Message:

VALOX 315 is compliant with food contact regulations acc. to EC Reg. No. 10/2011. VALOX 315 can be applied for injection moulding and extrusion puposes.

General Information			
Features	Food Contact Acceptable		
Agency Ratings	EU No 10/2011		
RoHS Compliance	RoHS Compliant		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Density	1.31	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR)			ISO 1133
250°C/1.2 kg	6.00	cm ³ /10min	
250°C/2.16 kg	9.00	cm ³ /10min	
Molding Shrinkage ¹			Internal Method
Flow	1.1 to 1.8	%	
Across Flow	0.90 to 1.8	%	
Water Absorption			ISO 62
Saturation, 23°C	0.34	%	
Equilibrium, 23°C, 50% RH	0.080	%	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	117		ISO 2039-2
Ball Indentation Hardness (H 358/30)	110	MPa	ISO 2039-1
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2400	MPa	ISO 527-2/1
Tensile Stress			ISO 527-2/50
Yield	55.0	MPa	
Break	30.0	MPa	
Tensile Strain			ISO 527-2/50
Yield	3.5	%	
Break	100	%	
Flexural Modulus ²	2300	MPa	ISO 178
Flexural Stress	75.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ³			ISO 179/1eA
-30°C	4.0	kJ/m ²	
23°C	5.5	kJ/m ²	

Charpy Unnotched Impact Strength ⁴			ISO 179/1eU
-30°C	No Break		
23°C	No Break		
Notched Izod Impact Strength ⁵			ISO 180/1A
-30°C	5.0	kJ/m ²	
23°C	6.0	kJ/m ²	
Unnotched Izod Impact Strength ⁶			ISO 180/1U
-30°C	No Break		
23°C	No Break		
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature ⁷			
0.45 MPa, Unannealed, 100 mm Span	120	°C	ISO 75-2/Be
1.8 MPa, Unannealed, 100 mm Span	55.0	°C	ISO 75-2/Ae
Vicat Softening Temperature			
--	220	°C	ISO 306/A50
--	170	°C	ISO 306/B50, ISO 306/B120
Ball Pressure Test (125°C)	Pass		IEC 60695-10-2
CLTE			ISO 11359-2
Flow : 23 to 80°C	1.2E-4	cm/cm/°C	
Transverse : 23 to 80°C	1.3E-4	cm/cm/°C	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms · cm	IEC 60093
Electric Strength			IEC 60243-1
0.800 mm, in Oil	29	kV/mm	
1.60 mm, in Oil	24	kV/mm	
3.20 mm, in Oil	15	kV/mm	
Relative Permittivity			IEC 60250
50 Hz	2.90		
60 Hz	2.90		
100 Hz	3.30		
1 MHz	2.40		
Dissipation Factor			IEC 60250
50 Hz	3.0E-4		
60 Hz	3.0E-4		
100 Hz	2.0E-3		
1 MHz	0.020		
Comparative Tracking Index			IEC 60112
--	600	V	
Solution B	350	V	
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.60 mm, Testing by SABIC)	HB		UL 94

Glow Wire Flammability Index			IEC 60695-2-12
1.00 mm	850	°C	
2.02 mm	960	°C	
Oxygen Index	21	%	ISO 4589-2
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 245	°C	
Middle Temperature	240 to 255	°C	
Front Temperature	245 to 265	°C	
Nozzle Temperature	240 to 260	°C	
Processing (Melt) Temp	250 to 270	°C	
Mold Temperature	40.0 to 100	°C	
NOTE			
1.	Tensile Bar		
2.	2.0 mm/min		
3.	80*10*4 sp=62mm		
4.	80*10*4 sp=62mm		
5.	80*10*4		
6.	80*10*4		
7.	120*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

