

Celanex® 2300 GV3/30

Polybutylene Terephthalate

Celanese Corporation

Message:

Chemical abbreviation according to ISO 1043-1: PBT
Moulding compound ISO 7792- PBT, MGHR, 08-040N, GB30
Polybutylene terephthalate, low warpage, 30 % glass beads.
Flammability UL 94 HB minimum thickness 0.82 mm.
Recognition by Underwriters Laboratories, USA (UL)

General Information			
UL YellowCard	E42337-234654		
Filler / Reinforcement	Glass beads, 30% filler by weight		
Features	Low warpage		
RoHS Compliance	Contact manufacturer		
Multi-Point Data	Isothermal Stress vs. Strain (ISO 11403-1)		
	Shear Modulus vs. Temperature (ISO 11403-1)		
	Shear Stress vs. Shear Rate (ISO 11403-1)		
Resin ID (ISO 1043)	PBT		
Physical	Nominal Value	Unit	Test Method
Density	1.55	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	10.0	cm ³ /10min	ISO 1133
Water Absorption (Equilibrium, 23°C, 50% RH)	0.15	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	4000	MPa	ISO 527-2/1A/1
Tensile Stress (Break)	50.0	MPa	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	%	ISO 527-2/1A/5
Tensile Creep Modulus			ISO 899-1
1 hr	3600	MPa	ISO 899-1
1000 hr	2500	MPa	ISO 899-1
Flexural Stress (23°C)	80.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	3.3	kJ/m ²	ISO 179/1eA
23°C	3.3	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	23	kJ/m ²	ISO 179/1eU
23°C	22	kJ/m ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method

Heat Deflection Temperature			
0.45 MPa, not annealed	190	°C	ISO 75-2/B
1.8 MPa, not annealed	90.0	°C	ISO 75-2/A
Vicat Softening Temperature	195	°C	ISO 306/B50
Melting Temperature ¹	225	°C	ISO 11357-3
CLTE - Flow	1.0E-4	cm/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms · cm	IEC 60093
Dielectric Strength	28	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
100 Hz	4.60		IEC 60250
1 MHz	4.40		IEC 60250
Dissipation Factor			IEC 60250
100 Hz	9.0E-3		IEC 60250
1 MHz	0.012		IEC 60250
Comparative Tracking Index	250	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.820 mm	HB		UL 94
1.60 mm	HB		UL 94
Oxygen Index	22	%	ISO 4589-2
Injection	Nominal Value	Unit	
Drying Temperature	120 - 140	°C	
Drying Time	2.0 - 4.0	hr	
Suggested Max Moisture	0.020	%	
Hopper Temperature	20.0 - 50.0	°C	
Rear Temperature	250 - 260	°C	
Middle Temperature	250 - 260	°C	
Front Temperature	255 - 265	°C	
Nozzle Temperature	260 - 270	°C	
Processing (Melt) Temp	260 - 270	°C	
Mold Temperature	75.0 - 100	°C	
Injection Pressure	60.0 - 100	MPa	
Injection Rate	Fast		
Holding Pressure	40.0 - 80.0	MPa	
Back Pressure	1.00 - 3.00	MPa	
Injection instructions			
Manifold Temperature: 260 to 270°CZone 4 Temperature: 255 to 265°CFeed Temperature: 190 to 200°C			
NOTE			
1.	10°C/min		

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

