Celanex® 2300 GV1/30

Polybutylene Terephthalate

Celanese Corporation

Message:

Chemical abbreviation according to ISO 1043-1: PBT
Moulding compound ISO 7792- PBT, MGHR, 08-100N, GF30
Polybutylene terephthalate, 30 % glass fibre reinforced.
Flammability UL 94 HB minimum thickness 1.2 mm.
Recognition by Underwriters Laboratories, USA (UL)

General Information			
UL YellowCard	E42337-234651		
Filler / Reinforcement	Glass fiber reinforced material, 30% filler by weight		
Features	General		
Uses	General		
RoHS Compliance	Contact manufacturer		
Multi-Point Data	Isochronous Stress vs. Strain (ISO 11403-1) 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/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	9.00	cm³/10min	ISO 1133
Water Absorption (Equilibrium, 23°C, 50% RH)	0.15	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	10300	MPa	ISO 527-2/1A/1
Tensile Stress (Break)	150	MPa	ISO 527-2/1A/5
Tensile Strain (Break)	2.5	%	ISO 527-2/1A/5
Tensile Creep Modulus			ISO 899-1
1 hr	9200	MPa	ISO 899-1
1000 hr	6500	MPa	ISO 899-1
Flexural Stress (23°C)	210	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	9.0	kJ/m²	ISO 179/1eA
23°C	9.5	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	60	kJ/m²	ISO 179/1eU

23°C	60	kJ/m²	ISO 179/1eU
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			
0.45 MPa, not annealed	225	°C	ISO 75-2/B
1.8 MPa, not annealed	210	°C	ISO 75-2/A
8.0 MPa, not annealed	150	°C	ISO 75-2/C
Vicat Softening Temperature	220	°C	ISO 306/B50
Melting Temperature [1]	225	°C	ISO 11357-3
CLTE - Flow	2.5E-5	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	33	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
100 Hz	4.40		IEC 60250
1 MHz	4.30		IEC 60250
Dissipation Factor			IEC 60250
100 Hz	2.0E-3		IEC 60250
1 MHz	0.019		IEC 60250
Comparative Tracking Index	425	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94
1.22 mm	HB		UL 94
1.49 mm	HB		UL 94
Oxygen Index	20	%	ISO 4589-2
Fill Analysis	**Nominal Value**	**Unit**	**Test Method**
Density of Melt	1.320	g/cm³	Internal method
Ejection Temperature	220	°C	Internal method
Specific Heat Capacity of Melt	1720	J/kg/°C	Internal method
Thermal Conductivity of Melt	0.17	W/m/K	Internal method
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

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