

Ultradur® B 4300 K6

Polybutylene Terephthalate

BASF Corporation

Message:

Injection molding grade with 30 % glass beads for low-warpage technical parts (eg PCBs, chassis and housings).

General Information			
UL YellowCard	E41871-233780		
Filler / Reinforcement	Glass Bead,30% Filler by Weight		
Features	Low Warpage		
Uses	Engineering Parts		
	Housings		
	Printed Circuit Boards		
Agency Ratings	EC 1907/2006 (REACH)		
RoHS Compliance	RoHS Compliant		
Appearance	Black		
	Colors Available		
	Natural Color		
Forms	Pellets		
Processing Method	Injection Molding		
Multi-Point Data	Creep Modulus vs. Time (ISO 11403-1)		
	Isochronous Stress vs. Strain (ISO 11403-1)		
	Isothermal Stress vs. Strain (ISO 11403-1)		
	Secant Modulus vs. Strain (ISO 11403-1)		
	Viscosity vs. Shear Rate (ISO 11403-2)		
Resin ID (ISO 1043)	PBT-GB30		
Physical	Nominal Value	Unit	Test Method
Density	1.53	g/cm ³	ISO 1183
Apparent Density	0.70 to 0.80	g/cm ³	
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	9.00	cm ³ /10min	ISO 1133
Water Absorption			ISO 62
Saturation, 23°C	0.40	%	
Equilibrium, 23°C, 50% RH	0.20	%	
Viscosity Number ¹	113	cm ³ /g	ISO 307
Mold Shrinkage ²			
free, longitudinal	1.7	%	

free, transverse	1.7	%	
Maximum Service Temperature - short cycle operation	200	°C	
Temperature Index - at 50% loss of tensile strength			IEC 60216
-- ³	120	°C	
-- ⁴	130	°C	
Automotive Materials (> 1.00 mm)	Passed		FMVSS 302
Screw Speed	< 250	mm/sec	
Hardness	Nominal Value	Unit	Test Method
Ball Indentation Hardness (H 358/30)	165	MPa	ISO 2039-1
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	4000	MPa	ISO 527-2
Tensile Stress (Break)	50.0	MPa	ISO 527-2
Tensile Strain (Break)	5.0	%	ISO 527-2
Tensile Creep Modulus ⁵ (1000 hr)	2200	MPa	ISO 899-1
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	3.0	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	24	kJ/m ²	
23°C	35	kJ/m ²	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, Unannealed	200	°C	ISO 75-2/B
1.8 MPa, Unannealed	95.0	°C	ISO 75-2/A
Melting Temperature	223	°C	ISO 11357-3
CLTE - Flow (23 to 80°C)	7.0E-5 to 8.0E-5	cm/cm/°C	ISO 11359-2
Specific Heat	1500	J/kg/°C	
Thermal Conductivity	0.27	W/m/K	DIN 52612
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+13	ohms	IEC 60093
Volume Resistivity	1.0E+16	ohms · cm	IEC 60093
Relative Permittivity			IEC 60250
100 Hz	3.80		
1 MHz	3.80		
Dissipation Factor			IEC 60250
100 Hz	1.2E-3		
1 MHz	0.019		
Comparative Tracking Index			IEC 60112
Solution A	225	V	
Solution B	150	V	
Flammability	Nominal Value	Unit	Test Method
Flammability Classification			IEC 60695-11-10, -20

0.400 mm	HB	
1.60 mm	HB	
Injection	Nominal Value	Unit
Drying Temperature	80.0 to 120	°C
Drying Time	4.0	hr
Suggested Max Moisture	0.040	%
Hopper Temperature	80.0	°C
Rear Temperature	240	°C
Middle Temperature	245	°C
Front Temperature	250	°C
Nozzle Temperature	250	°C
Processing (Melt) Temp	250 to 275	°C
Mold Temperature	40.0 to 80.0	°C

NOTE

1.	solution 0,005 g/ml Phenole/1,2 Dichlorbenzol 1:1
2.	plate with film gate 150*150*3 mm ³
3.	20000 h
4.	5000 h
5.	strain <= 0,5%, 23°C

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