

Ultradur® B 4300 G4

Polybutylene Terephthalate

BASF Corporation

Product Description
Ultradur B 4300 G4 is an easy flowing injection molding PBT with 20% glass fiber reinforcement for rigid, tough, and dimensionally stable parts.

General			
Material Status	• Commercial: Active		
Availability	• Europe	• North America	
Filler / Reinforcement	• Glass Fiber Reinforcement, 20% Filler by Weight		
Additive	• Lubricant	• Mold Release	
Features	• Good Dimensional Stability • Good Flow • Good Toughness	• High Rigidity • Lubricated • Medium Rigidity	• Semi Crystalline
Uses	• Automotive Applications • Automotive Electronics	• Automotive Exterior Parts • Cams	• Electrical/Electronic Applications • Housings
Agency Ratings	• NSF 14	• NSF 61	
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)

Physical	Nominal Value	Unit	Test Method
Specific Gravity	--	1.45 g/cm ³	ASTM D792
	--	1450 kg/m ³	ISO 1183 ²
Melt volume-flow rate (250°C/2.16 kg)		14.0 cm ³ /10min	ISO 1133 ²
Molding Shrinkage			
Flow: 3.18 mm		0.30 %	ASTM D955
Across Flow		0.43 %	ISO 294-4
Flow		1.2 %	ISO 294-4
Water Absorption			
Saturation		0.40 %	ASTM D570 ISO 62 ²
Equilibrium, 50% RH		0.20 %	ASTM D570
Equilibrium		0.20 %	ISO 62 ²
Viscosity Number		109 cm ³ /g	ISO 1628

Mechanical	Nominal Value	Unit	Test Method
Tensile modulus		7100 MPa	ISO 527-2 ²
Tensile Strength			
Break, 23°C		120 MPa	ASTM D638
Break, -40°C		173 MPa	ISO 527-2
Break		120 MPa	ISO 527-2 ²
Tensile Elongation			
Break, 23°C		3.0 %	ASTM D638
Break		3.0 %	ISO 527-2 ²
Flexural Modulus			
23°C		6140 MPa	ASTM D790
23°C		6300 MPa	ISO 178

Impact	Nominal Value	Unit	Test Method
Charpy notched impact strength (23°C)		8.00 kJ/m ²	ISO 179/1eA ²
Charpy Unnotched Impact Strength			ISO 179
-30°C		54 kJ/m ²	
23°C		58 kJ/m ²	
Notched Izod Impact (23°C)		64.0 J/m	ASTM D256

Dongguan Yi-Ming Plastic Chemical Co., Ltd.

如需要更多物性资料请查阅 www.kedisujiao.com

备注：以上原料物性数据由厂家发布, 我公司仅提供参考！数据如有变动，请联系原料生产厂家获知。我公司不承担任何法律责任！

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Saturday, December 12, 2009

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	220	°C	ASTM D648
0.45 MPa	220	°C	ISO 75-2 ²
1.8 MPa, Unannealed	205	°C	ASTM D648
1.8 MPa	205	°C	ISO 75-2 ²
Melting Temperature	223	°C	ASTM D3418 ISO 3146
CLTE - Flow	0.000035	cm/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity ³	1.0E+13	ohms	ASTM D257 IEC 60093 ²
Volume Resistivity			
1.50 mm	> 1.0E+13	ohm·cm	ASTM D257
--	> 1.0E+11	ohm·m	IEC 60093 ²
Relative Permittivity			IEC 60250 ²
100 Hz	3.70		
1 MHz	3.70		
Dissipation Factor			IEC 60250 ²
100 Hz	12		
1 MHz	150		
Comparative tracking index	300		IEC 60112 ²
Flammability	Nominal Value	Unit	Test Method
Flame Rating - UL (1.50 mm)	HB		UL 94
UL 746	Nominal Value	Unit	Test Method
RTI Str (1.50 mm)	130	°C	UL 746
RTI Imp (1.50 mm)	125	°C	UL 746
RTI Elec (1.50 mm)	130	°C	UL 746
Injection	Nominal Value	Unit	
Drying Temperature	100 to 120	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.040	%	
Processing (Melt) Temp	250 to 270	°C	
Mold Temperature	60.0 to 100	°C	
Injection Rate	Fast		
Back Pressure	< 1.00	MPa	

Notes

¹ Typical properties: these are not to be construed as specifications.

² Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.

³ 1.5 mm

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