

# Ultradur® B 4040 G10

## Polybutylene Terephthalate + PET

### BASF Corporation

**Product Description**  
 Injection moulding grade with 50 % glass fibres for technical parts with excellent surface finish (eg automotive exterior door-handles exterior mirror housings, rear screen wiper arms).

General	
Material Status	• Commercial: Active
Availability	• Europe
Filler / Reinforcement	• Glass Fiber Reinforcement, 50% Filler by Weight
Features	• Good Surface Finish
Uses	• Automotive Applications • Handles • Automotive Exterior Parts • Housings
RoHS Compliance	• RoHS Compliant
Appearance	• Black • Colors Available
Forms	• Pellets
Processing Method	• Extrusion • Injection Molding
Multi-Point Data	• Viscosity vs. Shear Rate (ISO 11403-2)
Resin ID (ISO 1043)	• PBT-PET

Physical	Nominal Value	Unit	Test Method
Density	1.73	g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (275°C/2.16 kg)	6.00	cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow: 3.00 mm	0.75	%	
Flow: 3.00 mm	0.10	%	
Water Absorption			ISO 62
Saturation, 23°C	0.40	%	
Equilibrium, 23°C, 50% RH	0.20	%	

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	18700	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	165	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	1.5	%	ISO 527-2

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	10	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	52	kJ/m <sup>2</sup>	ISO 179/1eU

Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, Unannealed	221	°C	ISO 75-2/B
1.8 MPa, Unannealed	205	°C	ISO 75-2/A
Melting Temperature (DSC)	235	°C	ISO 3146
CLTE - Flow (23 to 80°C)	0.000020 to 0.000030	cm/cm/°C	ISO 11359-2

Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.2E+16	ohm·cm	IEC 60093
Relative Permittivity			IEC 60250
23°C, 100 Hz	4.70		
23°C, 1 MHz	4.50		
Dissipation Factor			IEC 60250
23°C, 100 Hz	0.0020		
23°C, 1 MHz	0.015		
Comparative Tracking Index (Solution A)	225	V	IEC 60112

Dongguan Yi-Ming Plastic Chemical Co., Ltd.

如需要更多物性资料请查阅 [www.kedisujiao.com](http://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！

**Ultradur® B 4040 G10**  
**Polybutylene Terephthalate + PET**  
**BASF Corporation**

Tuesday, December 08, 2009

Flammability	Nominal Value	Unit	Test Method
Flame Rating - UL			UL 94
0.800 mm		HB	
1.60 mm		HB	

**Additional Information**

The value listed as Melting Temperature (DSC), ISO 3146, was tested in accordance with ISO 3146.  
Maximum Service Temperature (Short Cycle Operation): 210°C  
Moulding Compound ISO 7792-PBT-PET, MCGHLR, 07-190, GF50  
Specific Heat Capacity: 950 J/(kg K)  
Temperature Index at 50% Loss of Tensile Strength after 20000h, IEC 216: 140°C  
Temperature Index at 50% Loss of Tensile Strength after 5000h, IEC 216: 160°C  
Viscosity Number (solution 0.05 g/ml phenole/1,2 Dichlorbenzol 1:1), ISO 307, 1157, 1628: 90 cm³/g

Injection	Nominal Value	Unit
Processing (Melt) Temp	250 to 275	°C
Mold Temperature	60.0 to 100	°C

  

Extrusion	Nominal Value	Unit
Melt Temperature	250 to 275	°C

**Notes**

<sup>1</sup> Typical properties: these are not to be construed as specifications.

Dongguan Yi-Ming Plastic Chemical Co., Ltd.

如需要更多物性资料请查阅 [www.kedisujiao.com](http://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！