

## BASF Ultradur® B 4300 GM42 20/10% Glass/Mineral Filled PBT

Category : Polymer , Thermoplastic , Polyester, TP , Polybutylene Terephthalate (PBT) , Polybutylene Terephthalate (PBT), Glass + Mineral Filled

### Material Notes:

Description: Is a PBT-HI, mixed glass-fiber-reinforced and mineral-reinforced injection-molding grade with good surface quality and rigidity, and with low warpage for parts such as housings and PCBs. Information provided by BASF

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_BASF-Ultradur-B-4300-GM42-2010-GlassMineral-Filled-PBT.php](http://www.lookpolymers.com/polymer_BASF-Ultradur-B-4300-GM42-2010-GlassMineral-Filled-PBT.php)

Physical Properties	Metric	English	Comments
Density	1.55 g/cc	0.0560 lb/in <sup>3</sup>	ISO 1183
Water Absorption	0.40 %	0.40 %	Saturation; DIN 53495/1L
Moisture Absorption at Equilibrium	0.20 %	0.20 %	23°C; 50% RH
Viscosity Measurement	101	101	[ml/g]; Viscosity number; ISO 1628
Linear Mold Shrinkage, Flow	0.0050 cm/cm	0.0050 in/in	Sheet
Linear Mold Shrinkage, Transverse	0.013 cm/cm	0.013 in/in	Sheet
Melt Flow	23.25 g/10 min @Load 2.16 kg, Temperature 250 °C	23.25 g/10 min @Load 4.76 lb, Temperature 482 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	195 MPa	28300 psi	ISO 2039-1
Tensile Strength, Yield	100 MPa	14500 psi	50 mm/min; ISO 527-2
Elongation at Break	2.5 %	2.5 %	50mm/min; ISO 527-2
Modulus of Elasticity	7.70 GPa	1120 ksi	ISO 527-2
Charpy Impact Unnotched	4.00 J/cm <sup>2</sup>	19.0 ft-lb/in <sup>2</sup>	ISO 179/1eU
Charpy Impact, Notched	0.400 J/cm <sup>2</sup>	1.90 ft-lb/in <sup>2</sup>	ISO 179/1eA
Dart Drop, Total Energy	6.50 J	4.79 ft-lb	W <sub>501</sub> housing; ISO 6603-1
Tensile Creep Modulus, 1000 hours	4500 MPa @Strain ≤0.500 %	653000 psi @Strain ≤0.500 %	ISO 899-1

Thermal Properties	Metric	English	Comments
	4.00 μm/m-°C	2.22 μin/in-°F	

CTE, linear, Parallel to Flow Thermal Properties	Metric @ Temperature 23.0 - 80.0 °C	English @ Temperature 73.4 - 176 °F	DIN 53752 Comments
Specific Heat Capacity	1.50 J/g-°C	0.359 BTU/lb-°F	IEC 1006
Melting Point	220 - 225 °C	428 - 437 °F	DSC; ISO 11357-3
Maximum Service Temperature, Air	120 °C	248 °F	at 50% loss of tensile strength after 20000h; IEC 216-1
	130 °C	266 °F	at 50% loss of tensile strength after 5000h; IEC 216-1
	200 °C	392 °F	
Deflection Temperature at 0.46 MPa (66 psi)	223 °C	433 °F	ISO 75-2
Deflection Temperature at 1.8 MPa (264 psi)	210 °C	410 °F	ISO 75-2
Flammability, UL94	HB	HB	
	@Thickness 1.60 mm	@Thickness 0.0630 in	
	HB	HB	
	@Thickness 0.800 mm	@Thickness 0.0315 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+16 ohm-cm	>= 1.00e+16 ohm-cm	IEC 93
Surface Resistance	1.00e+13 ohm	1.00e+13 ohm	IEC 93
Dielectric Constant	3.8	3.8	IEC 250
	@Frequency 100 Hz	@Frequency 100 Hz	
Dielectric Strength	3.8	3.8	IEC 250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Dielectric Strength	100 kV/mm	2540 kV/in	IEC 243/1
Dissipation Factor	0.0012	0.0012	IEC 250
	@Frequency 100 Hz	@Frequency 100 Hz	
Comparative Tracking Index	0.015	0.015	IEC 250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Comparative Tracking Index	125 V	125 V	Test solution B; IEC 112
	300 V	300 V	Test solution A; IEC 112

Processing Properties	Metric	English	Comments
Melt Temperature	260 °C	500 °F	for shrinkage test
	250 - 275 °C	482 - 527 °F	Injection-molding
Mold Temperature	60.0 °C	140 °F	for shrinkage test
	60.0 - 90.0 °C	140 - 194 °F	

Descriptive Properties	Value	Comments
Color	Natural, Colored, Black and Special Colors	
Commercial Status	Europe	
Primary Processing Technique	Injection Molding	

## Contact Songhan Plastic Technology Co.,Ltd.

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