

BASF Ultradur® B 4040 G10 50% Glass Filled BK 15029 PBT + PET

Category : Polymer , Thermoplastic , Polyester, TP , Polybutylene Terephthalate (PBT) , PBT + PET Blend, Glass Filled , Polyethylene Terephthalate (PET)

Material Notes:

Description: Injection molding grade with 50% glass fibers for industrial parts with excellent surface quality, for example external door handles in vehicles, visible sunroof frames, oven door handles, toaster casings, external mirrors, rear screen wiper arms in vehicles and sunroof wind deflectors. Information provided by BASF

Order this product through the following link:

http://www.lookpolymers.com/polymer_BASF-Ultradur-B-4040-G10-50-Glass-Filled-BK-15029-PBT-PET.php

Physical Properties	Metric	English	Comments
Bulk Density	0.600 - 0.900 g/cc	0.0217 - 0.0325 lb/in ³	
Density	1.73 g/cc	0.0625 lb/in ³	ISO 1183
Water Absorption	0.40 %	0.40 %	ISO 62
Moisture Absorption at Equilibrium	0.20 %	0.20 %	ISO 62
Viscosity Measurement	90	90	[cm ³ /g]; ISO 307
Linear Mold Shrinkage, Flow	0.0010 cm/cm	0.0010 in/in	plate with film gate 150x150x3mm ³
	0.0024 cm/cm	0.0024 in/in	ISO 2577
Linear Mold Shrinkage, Transverse	0.0075 cm/cm	0.0075 in/in	plate with film gate 150x150x3mm ³
	0.0077 cm/cm	0.0077 in/in	ISO 2577
Melt Flow	67.47 g/10 min	67.47 g/10 min	ISO 1133
	@Load 10.0 kg, Temperature 275 °C	@Load 22.0 lb, Temperature 527 °F	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	165 MPa	23900 psi	50 mm/min; ISO 527-1/-2
Elongation at Break	1.5 %	1.5 %	ISO 527-1/-2
Tensile Modulus	18.7 GPa	2710 ksi	ISO 527-1/-2
Charpy Impact Unnotched	5.20 J/cm ²	24.7 ft-lb/in ²	ISO 179/1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	5.80 J/cm ²	27.6 ft-lb/in ²	ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	

Mechanical Properties Charpy Impact, Notched	1.00 J/cm ² Metric	4.76 ft-lb/in ² English	Comments ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	20.0 - 30.0 µm/m-°C @Temperature 23.0 - 80.0 °C	11.1 - 16.7 µin/in-°F @Temperature 73.4 - 176 °F	ISO 11359-1/-2
Melting Point	235 °C	455 °F	ISO 11357-1/-2
Maximum Service Temperature, Air	140 °C	284 °F	at 50% loss of tensile strength after 20,000hr
	160 °C	320 °F	at 50% loss of tensile strength after 5,000hr
	210 °C	410 °F	
Deflection Temperature at 0.46 MPa (66 psi)	221 °C	430 °F	ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	205 °C	401 °F	ISO 75-1/-2
Decomposition Temperature	>= 290 °C	>= 554 °F	
Flammability, UL94	HB @Thickness 1.60 mm	HB @Thickness 0.0630 in	
	HB @Thickness >=0.400 mm	HB @Thickness >=0.0157 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+14 ohm-cm	1.00e+14 ohm-cm	IEC 60093
Dielectric Constant	4.5 @Frequency 1.00e+6 Hz	4.5 @Frequency 1.00e+6 Hz	IEC 60250
	4.7 @Frequency 100 Hz	4.7 @Frequency 100 Hz	IEC 60250
Dissipation Factor	0.0020 @Frequency 100 Hz	0.0020 @Frequency 100 Hz	IEC 60250
	0.015 @Frequency 1.00e+6 Hz	0.015 @Frequency 1.00e+6 Hz	IEC 60250

Electrical Properties	Metric	English	Comments
-----------------------	--------	---------	----------

Processing Properties	Metric	English	Comments
Processing Temperature	80.0 °C	176 °F	Hopper Throat
Zone 1	260 °C	500 °F	Feed zone
Zone 2	265 °C	509 °F	Compression
Zone 3	270 °C	518 °F	Metering-zone
Zone 4	270 °C	518 °F	Nozzle
Melt Temperature	250 - 280 °C	482 - 536 °F	Injection molding/Extrusion
	270 °C	518 °F	Optimal
Mold Temperature	80.0 °C	176 °F	Optimal
	60.0 - 100 °C	140 - 212 °F	Injection molding
Drying Temperature	80.0 - 120 °C	176 - 248 °F	
Dry Time	4 hour	4 hour	
Moisture Content	<= 0.040 %	<= 0.040 %	

Descriptive Properties	Value	Comments
Color	BK 15029	
Commercial Status	Europe	
Ignition Temperature	350°C	ASTM D1929
Peripheral screw speed	< 0.25 m/s	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China