

BASF Ultradur® B 4300 M2 12.5% Mineral Filled PBT

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

Material Notes:

Description: Is a PBT-HI, mineral-reinforced, impact-modified injection-molding grade for rigid parts, for example automotive power door locks. Information provided by BASF

Order this product through the following link:

http://www.lookpolymers.com/polymer_BASF-Ultradur-B-4300-M2-125-Mineral-Filled-PBT.php

Physical Properties	Metric	English	Comments
Density	1.36 g/cc	0.0491 lb/in ³	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	100	100	[ml/g]; Viscosity number; ISO 1628
Linear Mold Shrinkage, Flow	0.017 cm/cm	0.017 in/in	Sheet
Linear Mold Shrinkage, Transverse	0.019 cm/cm	0.019 in/in	Sheet
Melt Flow	29.92 g/10 min @Load 2.16 kg, Temperature 250 °C	29.92 g/10 min @Load 4.76 lb, Temperature 482 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	105 MPa	15200 psi	ISO 2039-1
Tensile Strength, Yield	40.0 MPa	5800 psi	50 mm/min; ISO 527-2
Elongation at Break	12 %	12 %	50mm/min; ISO 527-2
Elongation at Yield	3.0 %	3.0 %	50 mm/min; ISO 527-2
Modulus of Elasticity	2.50 GPa	363 ksi	ISO 527-2
Charpy Impact Unnotched	NB	NB	ISO 179/1eU
Charpy Impact, Notched	0.600 J/cm ²	2.86 ft-lb/in ²	ISO 179/1eA
Dart Drop, Total Energy	>= 40.0 J	>= 29.5 ft-lb	W₅₀₁ housing; ISO 6603-1
Tensile Creep Modulus, 1000 hours	1300 MPa @Strain <=0.500 %	189000 psi @Strain <=0.500 %	ISO 899-1

Thermal Properties	Metric	English	Comments
--------------------	--------	---------	----------

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	1.50 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$ @Temperature 23.0 - 80.0 $^{\circ}\text{C}$	28 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$ @Temperature 73.4 - 176 $^{\circ}\text{F}$	DIN 53752
Specific Heat Capacity	1.70 J/g- $^{\circ}\text{C}$	0.406 BTU/lb- $^{\circ}\text{F}$	IEC 1006
Thermal Conductivity	0.270 W/m-K	1.87 BTU-in/hr-ft 2 - $^{\circ}\text{F}$	DIN 52612
Melting Point	220 - 225 $^{\circ}\text{C}$	428 - 437 $^{\circ}\text{F}$	DSC; ISO 11357-3
Maximum Service Temperature, Air	100 $^{\circ}\text{C}$	212 $^{\circ}\text{F}$	at 50% loss of tensile strength after 5000h; IEC 216-1
	200 $^{\circ}\text{C}$	392 $^{\circ}\text{F}$	
Deflection Temperature at 0.46 MPa (66 psi)	136 $^{\circ}\text{C}$	277 $^{\circ}\text{F}$	ISO 75-2
Deflection Temperature at 1.8 MPa (264 psi)	49.0 $^{\circ}\text{C}$	120 $^{\circ}\text{F}$	ISO 75-2
Flammability, UL94	HB @Thickness 0.800 mm	HB @Thickness 0.0315 in	
	HB @Thickness 1.60 mm	HB @Thickness 0.0630 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	$\geq 1.00\text{e}+16$ ohm-cm	$\geq 1.00\text{e}+16$ ohm-cm	IEC 93
Surface Resistance	$1.00\text{e}+13$ ohm	$1.00\text{e}+13$ ohm	IEC 93
Dielectric Constant	3.6 @Frequency 1.00e+6 Hz	3.6 @Frequency 1.00e+6 Hz	IEC 250
	3.6 @Frequency 100 Hz	3.6 @Frequency 100 Hz	IEC 250
Dielectric Strength	100 kV/mm	2540 kV/in	IEC 243/1
Dissipation Factor	0.0012 @Frequency 100 Hz	0.0012 @Frequency 100 Hz	IEC 250
	0.015 @Frequency 1.00e+6 Hz	0.015 @Frequency 1.00e+6 Hz	IEC 250
Comparative Tracking Index	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	40.0 - 60.0 °C	104 - 140 °F	
	60.0 °C	140 °F	for shrinkage test

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.

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