Ultradur® B 4406 G6 Q717

BASF Corporation - Polybutylene Terephthalate

Monday, November 4, 2019

General Information

Product Description

Ultradur B 4406 G6 Q717 is an UL V0 injection molding, PBT grade with 30% glass fiber reinforcement.

General		
Material Status	• Commercial: Active	
Availability	• Asia Pacific	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight	
Agency Ratings	• EC 1907/2006 (REACH)	
RoHS Compliance	• RoHS Compliant	
Forms	• Pellets	
Processing Method	• Injection Molding	

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.68	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (275°C/2.16 kg)	22	cm³/10min	ISO 1133
Water Absorption (Saturation, 73°F)	0.40	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Viscosity Number (Reduced Viscosity)	98.0	ml/g	ISO 1628
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (73°F)	1.67E+6	psi	ISO 527-2
Tensile Stress (Break, 73°F)	20300	psi	ISO 527-2
Tensile Strain (Break, 73°F)	2.1	%	ISO 527-2
Flexural Stress (73°F)	31900	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	3.8	ft·lb/in²	ISO 179
Charpy Unnotched Impact Strength (73°F)	24	ft·lb/in²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (66 psi, Unannealed)	428	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	401	°F	ISO 75-2/A
Melting Temperature (DSC)	433	°F	ISO 3146
RTI Elec			UL 746
0.030 in	284	°F	
0.06 in	284	°F	
0.12 in	284	°F	
RTI Imp			UL 746
0.030 in	266	°F	
0.06 in	266	°F	
0.12 in	266	°F	
RTI Str			UL 746
0.030 in	257	°F	
0.06 in	266	°F	
0.12 in	266	°F	

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Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Dielectric Constant			IEC 60250
100 Hz	3.90		
1 MHz	3.90		
Dissipation Factor			IEC 60250
100 Hz	2.0E-3		
1 MHz	0.015		
Comparative Tracking Index	200	V	IEC 60112

Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.016 in	V-0		
0.030 in	V-0		
0.06 in	V-0		
0.12 in	V-0		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	212 to 248	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.040	%
Processing (Melt) Temp	482 to 518	°F
Mold Temperature	140 to 212	°F
Injection Pressure	508 to 1810	psi
Injection Rate	Fast	
Back Pressure	< 145	psi

Notes

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