



Ultradur® B 4520 BK00110

BASF Corporation - Polybutylene Terephthalate

Monday, November 4, 2019

General Information

Product Description

Ultradur B 4520 BK00110 is a medium viscosity, pigmented black, rapidly freezing injection molding grade.

General

Material Status	• Commercial: Active
Availability	• North America
Additive	• Lubricant
Features	• Lubricated • Medium Viscosity
Uses	• Appliances • Housings
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Automotive Specifications	• FORD WSB-M4D636-A2 • GM QK 006511 R Color: 00110 • IMDS ID 1379570 Color: 00110 Black
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.30	g/cm ³	ISO 1183
Water Absorption (Saturation, 73°F)	0.50	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.25	%	ISO 62
Viscosity Number (Reduced Viscosity)	119.0	ml/g	ISO 1628
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	348000	psi	ISO 527-2
Tensile Stress (Yield, 73°F)	8270	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	3.5	%	ISO 527-2
Nominal Tensile Strain at Break (73°F)	15	%	ISO 527-2
Flexural Modulus (73°F)	363000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.4	ft·lb/in ²	ISO 179
Notched Izod Impact Strength			ISO 180
-40°F	2.0	ft·lb/in ²	
73°F	2.3	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	270	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	131	°F	ISO 75-2/A
Melting Temperature (DSC)	433	°F	ISO 3146
RTI Elec			UL 746
0.030 in	266	°F	
0.06 in	266	°F	
0.11 in	266	°F	

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Thermal	Nominal Value	Unit	Test Method
RTI Imp			UL 746
0.030 in	266	°F	
0.06 in	266	°F	
0.11 in	266	°F	
RTI Str			UL 746
0.030 in	284	°F	
0.06 in	284	°F	
0.11 in	284	°F	
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.030 in		HB	
0.06 in		HB	
0.11 in		HB	

Notes

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