Ultradur® B 4300 G4 BK05110

BASF Corporation - Polybutylene Terephthalate

Monday, November 4, 2019

General Information

Product Description

Ultradur B 4300 G4 BK05110 is an easy flowing, pigmented black, injection molding PBT with 20% glass fiber reinforcement for rigid, tough, and dimensionally stable parts.

Applications
Typical applications include car door handles, housings for small electric motors, headlight retainers and drum controllers.

General			
Material Status	• Commercial: Active		
Availability	• North America		
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Features	• Good Dimensional Stability • Good Flow	• Good Rigidity • Good Toughness	
Uses	• Automotive Applications	• Electric Motor Housings	• Handles
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• FORD WSK-M4D727-A Color: Black	• FORD WSK-M4D753-A2	• PSA Peugeot-Citroën SPA X62 4201
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.45	g/cm³	ISO 1183
Water Absorption (24 hr, 73°F)	0.20	%	ISO 62
Water Absorption (Saturation, 73°F)	0.40	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Viscosity Number (Reduced Viscosity)	110.0	ml/g	ISO 1628
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress (Break, 73°F)	15500	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.5	%	ISO 527-2
Flexural Modulus (73°F)	885000	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact Strength (73°F)	2.9	ft·lb/in²	ISO 180
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (264 psi, Unannealed)	390	°F	ISO 75-2/A
Melting Temperature (DSC)	433	°F	ISO 3146

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

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Injection	Nominal Value	Unit
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.