



Ultramid® B3WG7 BK00564

BASF Corporation - Polyamide 6

Monday, November 4, 2019

General Information

Product Description

Ultramid B3WG7 BK00564 is a 35% glass fiber reinforced, pigmented black, injection molding PA6 grade for highly rigid, dimensionally stable components which are resistant to high temperature aging and have improved retention of properties in a hot water environment.

Applications

Typical applications include automotive clutch and accelerator pedals.

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight
Features	• Heat Aging Resistant • High Rigidity • High Dimensional Stability • Oil Resistant
Uses	• Automotive Applications
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Automotive Specifications	• GM GMP.PA6.009 Color: Black
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.41	--	g/cm ³	ISO 1183
Water Absorption				ISO 62
Saturation, 73°F	6.2	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 50% RH	2.0	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	1.60E+6	--	psi	ISO 527-2
Tensile Stress (Break, 73°F)	27300	--	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.0	--	%	ISO 527-2
Flexural Modulus (73°F)	1.45E+6	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
73°F	5.7	--	ft·lb/in ²	
Notched Izod Impact Strength				ISO 180
73°F	5.7	--	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				ISO 75-2/A
264 psi, Unannealed	419	--	°F	
Melting Temperature (DSC)	428	--	°F	ISO 3146

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Electrical	Dry	Conditioned	Unit	Test Method
Volume Resistivity	1.0E+15	1.0E+12	ohms·cm	IEC 60093
Dielectric Constant (1 MHz)	3.90	6.20		IEC 60250
Dissipation Factor				IEC 60250
100 Hz	0.021	0.19		
1 MHz	0.021	0.19		
Comparative Tracking Index	450	450	V	IEC 60112

Processing Information

Injection	Dry	Unit
Drying Temperature	181	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.15	%
Processing (Melt) Temp	518 to 563	°F
Mold Temperature	176 to 203	°F
Injection Pressure	508 to 1810	psi
Injection Rate	Fast	

Notes

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