

Ultramid® B3WG10 BK00564

BASF Corporation - Polyamide 6

Monday, November 4, 2019

General Information

Product Description

This resin is a heat stabilized, 50% glass fiber reinforced PA6 injection molding compound offering excellent strength, stiffness, high temperature performance and dimensional stability. It is available in natural, black weather resistant and pigmented versions.

Applications

Ultramid B3WG10 BK00564 is generally recommended for applications such as power tool housings, cattle ear taggers, luggage frames, fans and pressure regulator housings.

General			
Material Status	Commercial: Active		
Availability	Asia Pacific	• Europe	North America
Filler / Reinforcement	 Glass Fiber, 50% Filler by We 	eight	
Additive	Heat Stabilizer		
Features	Heat StabilizedHigh Dimensional Stability	High Heat ResistanceHigh Stiffness	High StrengthOil Resistant
Uses	 Housings Luggage	 Molded Ear Tags Power/Other Tools	
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	RoHS Compliant		
Automotive Specifications	• FORD WSK-M4D674-A		
Appearance	Black	Colors Available	Natural Color
Forms	• Pellets		
Processing Method	Injection Molding		
Processing Method	Injection Molding		

ASTM & ISO Properties 1				
Physical	Nominal Value	Unit	Test Method	
Density	1.56	g/cm³	ISO 1183	
Water Absorption (Saturation, 73°F)	4.8	%	ISO 62	
Water Absorption (Equilibrium, 73°F, 50% RH)	1.4	%	ISO 62	
Mechanical	Nominal Value	Unit	Test Method	
Tensile Modulus (73°F)	2.42E+6	psi	ISO 527-2	
Tensile Stress (Break, 73°F)	32600	psi	ISO 527-2	
Tensile Strain (Break, 73°F)	2.5	%	ISO 527-2	
Flexural Modulus (73°F)	2.10E+6	psi	ISO 178	
Flexural Stress (73°F)	50000	psi	ISO 178	
Impact	Nominal Value	Unit	Test Method	
Charpy Notched Impact Strength (73°F)	7.1	ft·lb/in²	ISO 179	
Charpy Unnotched Impact Strength (73°F)	43	ft·lb/in²	ISO 179	
Notched Izod Impact Strength			ISO 180	
-40°F	5.7	ft·lb/in²		
73°F	7.1	ft·lb/in²		
Thermal	Nominal Value	Unit	Test Method	
Heat Deflection Temperature (66 psi, Unannealed)	428	°F	ISO 75-2/B	
Heat Deflection Temperature (264 psi, Unannealed)	419	°F	ISO 75-2/A	



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Thermal	Nominal Value Unit	Test Method
Melting Temperature (DSC)	428 °F	ISO 3146

Processing Information			
njection	Nominal Value Unit		
Drying Temperature	176 °F		
Drying Time	2.0 to 4.0 hr		
Suggested Max Moisture	0.060 %		
Processing (Melt) Temp	536 to 581 °F		
Mold Temperature	176 to 203 °F		
Injection Pressure	500 to 1500 psi		
Injection Rate	Fast		

Notes

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