

Ultramid® A3WG3 BK00564

BASF Corporation - Polyamide 66

Monday, November 4, 2019

General Information

Product Description

Ultramid A3WG3 BK00564 is a 15% glass fiber reinforced, pigmented black and heat aging resistance injection molding PA66 grade.

Applications

Typical applications include machine components and housings of medium stiffness. A3EG3 and A3HG3 are the preferred grades for producing electrically insulating parts.

General			
Material Status	Commercial: Active		
Availability	North America		
Filler / Reinforcement	Glass Fiber, 15% Filler b	by Weight	
Features	Good Stiffness	Heat Aging Resistant Oil Resistant	
Uses	 Housings 	Machine/Mechanical Parts	
Agency Ratings	• EC 1907/2006 (REACH		
RoHS Compliance	 RoHS Compliant 		
Automotive Specifications	• GM GMW3038P-PA66-0	GM GMW3038P-PA66-GF15H GM QK 003011 H Color: 00564 Black	
Appearance	Black		
Forms	• Pellets		
Processing Method	Injection Molding		

ASTM & ISO Properties 1				
Physical	Nominal Value	Unit	Test Method	
Density	1.23	g/cm³	ISO 1183	
Water Absorption (Saturation, 73°F)	7.0	%	ISO 62	
Water Absorption (Equilibrium, 73°F, 50% RH)	2.2	%	ISO 62	
Mechanical	Nominal Value	Unit	Test Method	
Tensile Stress (Break, 73°F)	17400	psi	ISO 527-2	
Tensile Strain (Break, 73°F)	2.5	%	ISO 527-2	
Flexural Modulus (73°F)	798000	psi	ISO 178	
Impact	Nominal Value	Unit	Test Method	
Notched Izod Impact Strength (73°F)	1.9	ft·lb/in²	ISO 180	
Thermal	Nominal Value	Unit	Test Method	
Heat Deflection Temperature (264 psi, Unannealed)	473	°F	ISO 75-2/A	
Melting Temperature (DSC)	500	°F	ISO 3146	

Processing Information		
Injection	Nominal Value Unit	
Drying Temperature	176 °F	
Drying Time	2.0 to 4.0 hr	
Suggested Max Moisture	0.15 %	
Processing (Melt) Temp	536 to 581 °F	
Mold Temperature	176 to 194 °F	
Injection Pressure	508 to 1810 psi	



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Injection	Nominal Value Unit
Injection Rate	Fast

Notes



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