



Ultramid® A3WG6 BK00564

BASF Corporation - Polyamide 66

Monday, November 4, 2019

General Information

Product Description

Ultramid A3WG6 BK00564 is a 30% glass fiber reinforced, pigmented black and heat resistance injection molding PA66 grade for machinery components and housings of high stiffness and dimensional stability. A3EG6 is the preferred grade for producing electrically insulating parts.

Applications

Typical applications include lamp socket housings, cooling fans, insulating profiles for aluminum window frames, water containers for automotive cooling systems.

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Features	• Good Heat Resistance • High Dimensional Stability • High Stiffness • Oil Resistant
Uses	• Automotive Applications • Containers • Housings • Machine/Mechanical Parts • Profiles
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Automotive Specifications	• FORD WSK-M4D642-A • FORD WSK-M4D642-A2 • GM GMW15702-001321 PA66-GF30 • GM GMW3038P-PA66-GF30H • GM QK 003013 H • IMDS ID 111794 Color: 00564 Black • PSA Peugeot-Citroën SPA X62 4116 Color: 00564 Black
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.36	g/cm ³	ISO 1183
Water Absorption (Saturation, 73°F)	5.5	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.7	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Break, 73°F)	26000	psi	ISO 527-2
Tensile Strain (Break, 73°F)	2.6	%	ISO 527-2
Flexural Modulus (73°F)	1.27E+6	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength (73°F)	4.0	ft-lb/in ²	ISO 180

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Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	482	°F	ISO 75-2/A
Melting Temperature (DSC)	500	°F	ISO 3146
RTI Elec			UL 746
0.028 in	257	°F	
0.06 in	257	°F	
0.12 in	257	°F	
RTI Imp			UL 746
0.06 in	239	°F	
0.12 in	248	°F	
RTI Str			UL 746
0.06 in	239	°F	
0.12 in	266	°F	
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.028 in	HB		
0.06 in	HB		
0.12 in	HB		

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
Injection Rate	Fast	

Notes

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