



Ultramid® A3WG5 BK00564

BASF Corporation - Polyamide 66

Monday, November 4, 2019

General Information

Product Description

Ultramid A3WG5 BK00564 is a 25% glass fiber reinforced, pigmented black and heat resistance injection molding PA66 grade.

Applications

Typical applications include machinery components and housings of high stiffness and dimensional stability such as coil formers and bearing cages. A3EG5 and A3HG5 are the preferred grades for producing electrically insulating parts.

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight
Features	• Good Heat Resistance • High Stiffness • High Dimensional Stability • Oil Resistant
Uses	• Housings • Machine/Mechanical Parts
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Automotive Specifications	• FORD WSK-M4D641-A
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.32	g/cm ³	ISO 1183
Water Absorption (Saturation, 73°F)	6.0	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.9	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	1.17E+6	psi	ISO 527-2
Tensile Stress (Break, 73°F)	21800	psi	ISO 527-2
Tensile Strain (Break, 73°F)	2.7	%	ISO 527-2
Flexural Modulus (73°F)	1.08E+6	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength (73°F)	3.2	ft-lb/in ²	ISO 180
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

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

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Injection	Nominal Value	Unit
Injection Pressure	508 to 1810	psi
Injection Rate	Fast	

Notes

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