



Ultramid® A3HG7 BK00564

BASF Corporation - Polyamide 66

Monday, November 4, 2019

General Information

Product Description

Ultramid A3HG7 BK00564 is a 35% glass fiber reinforced, pigmented black injection molding PA66 grade.

Applications

Typical applications include machinery components and housings of high stiffness and dimensional stability such as gears, solenoid valve housings, electrical flow heaters, trailing cable attachments, as well as electrically insulating parts.

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight
Features	• High Dimensional Stability • High Stiffness • Oil Resistant
Uses	• Electronic Insulation • Housings • Valves/Valve Parts • Gears • Machine/Mechanical Parts
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Automotive Specifications	• GM GMW16802P-PA66-GF35 Color: Black • GM GMW3038P-PA66-GF35H Color: Black • GM GMW16802P-PA66-GF35 Color: Natural • GM QK 003014 H Color: 00564 Black
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.40	g/cm ³	ISO 1183
Water Absorption (Saturation, 73°F)	5.0	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.6	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	1.61E+6	psi	ISO 527-2
Tensile Stress (Break, 73°F)	27600	psi	ISO 527-2
Tensile Strain (Break, 73°F)	2.6	%	ISO 527-2
Flexural Modulus (73°F)	1.42E+6	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength (73°F)	4.3	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	%

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Injection	Nominal Value	Unit
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.