



Ultramid® A3WG7 HP BK20560

BASF Corporation - Polyamide 66

Monday, November 4, 2019

General Information

Product Description

Ultramid A3WG7 HP BK20560 is a 35% glass reinforced, heat stabilized, injection molding PA66 grade with excellent flow and surface finish.

General

Material Status	• Commercial: Active	
Availability	• Asia Pacific	• North America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight	
Additive	• Heat Stabilizer	
Features	• Good Surface Finish • Heat Stabilized	• High Flow • Oil Resistant
Agency Ratings	• EC 1907/2006 (REACH)	
RoHS Compliance	• RoHS Compliant	
Automotive Specifications	• FORD WSS-M4D673-B1	• GM QK 003014 H
Appearance	• Black	
Forms	• Pellets	
Processing Method	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.41	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.80	--	%	
Flow	0.30	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	1.62E+6	1.22E+6	psi	ISO 527-2
Tensile Stress (Break, 73°F)	30500	21200	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.4	4.7	%	ISO 527-2
Flexural Modulus (73°F)	1.45E+6	1.04E+6	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
-22°F	5.7	6.2	ft·lb/in ²	
73°F	7.1	8.6	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179
-22°F	38	36	ft·lb/in ²	
73°F	45	48	ft·lb/in ²	
Notched Izod Impact Strength				ISO 180
-40°F	5.7	6.2	ft·lb/in ²	
73°F	6.7	8.1	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				ISO 75-2/A
264 psi, Unannealed	475	--	°F	
Melting Temperature (DSC)	500	--	°F	ISO 3146

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Processing Information

Injection	Dry	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.