



Ultramid® A3W2G7 BK20560

BASF Corporation - Polyamide 66/6 Copolymer

Monday, November 4, 2019

General Information

Product Description

Ultramid A3W2G7 BK20560 is a 35% glass fiber reinforced, pigmented black, injection molding PA66+PA6 with high heat aging resistance.

Applications

Applications include automotive powertrain applications like charge air coolers.

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight
Features	• Heat Aging Resistant • Oil Resistant
Uses	• Automotive Applications
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.41	--	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR)				ISO 1133
275°C/5.0 kg	30	--	cm ³ /10min	
Molding Shrinkage				ISO 294-4
Across Flow	0.85	--	%	
Flow	0.31	--	%	
Water Absorption				ISO 62
Saturation, 73°F	5.0	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 50% RH	1.5	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	1.64E+6	943000	psi	ISO 527-2
Tensile Stress (Break, 73°F)	29700	16700	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.2	6.0	%	ISO 527-2
Flexural Modulus (73°F)	1.51E+6	885000	psi	ISO 178
Flexural Stress (73°F)	44200	26100	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
-22°F	4.3	4.3	ft·lb/in ²	
73°F	5.2	8.6	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179
-22°F	36	38	ft·lb/in ²	
73°F	45	50	ft·lb/in ²	

UL and the UL logo are trademarks of UL LLC © 2019. All Rights Reserved.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.

Ultramid® A3W2G7 BK20560 **BASF Corporation - Polyamide 66/6 Copolymer**

Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature 66 psi, Unannealed	491	--	°F	ISO 75-2/B
Heat Deflection Temperature 264 psi, Unannealed	455	--	°F	ISO 75-2/A
Melting Temperature (DSC)	500	--	°F	ISO 3146
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.06 in)	HB	--		UL 94

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.