



Ultramid® Structure A3WG12 LFX BK23215

BASF Corporation - Polyamide 66

Monday, November 4, 2019

General Information

Product Description

Ultramid Structure A3WG12 LFX BK23215 is a 60% long glass-fiber reinforced and heat aging resistant injection molding grade designed for applications requiring excellent strength and stiffness.

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Long Glass Fiber, 60% Filler by Weight
Features	• Heat Aging Resistant • High Strength • High Stiffness • Oil Resistant
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.70	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.70	--	%	
Flow	0.40	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	2.80E+6	2.25E+6	psi	ISO 527-2
Tensile Stress (Break, 73°F)	37000	28300	psi	ISO 527-2
Tensile Strain (Break, 73°F)	1.8	2.1	%	ISO 527-2
Flexural Modulus (73°F)	2.81E+6	2.23E+6	psi	ISO 178
Flexural Stress (73°F)	60900	46400	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
-22°F	19	18	ft·lb/in ²	
73°F	19	17	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179
-22°F	43	43	ft·lb/in ²	
73°F	43	43	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				ISO 75-2/A
264 psi, Unannealed	500	--	°F	
Melting Temperature (DSC)	500	--	°F	ISO 3146

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Processing Information		
Injection	Dry	Unit
Drying Temperature	181	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.12	%
Processing (Melt) Temp	554 to 590	°F
Mold Temperature	176 to 212	°F
Injection Pressure	508 to 1810	psi
Injection Rate	Fast	

Notes

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