# Ultramid® A3WG7 BK23210

### Polyamide 66

#### **BASF** Corporation

#### Message:

Ultramid A3WG7 BK23210 is a 35% glass fiber reinforced, pigmented black and heat resistance injection molding PA66 grade for machinery for industrial items.

#### **Applications**

Typical applications include gear wheels, solenoid valve housings, cable attachments, automotive fuel distributors and components for automotive gear shift.

General Information						
UL YellowCard	E36632-531633	E41871-233746	E41871-101468836			
Filler / Reinforcement	Glass Fiber,35% Filler by W	Glass Fiber,35% Filler by Weight				
Features	Medium Heat Resistance					
	Oil Resistant					
Uses	Automotive Applications					
	Fuel Lines					
	Gears					
	Housings					
	Industrial Applications					
	Valves/Valve Parts					
Agency Ratings	EC 1907/2006 (REACH)	EC 1907/2006 (REACH)				
RoHS Compliance	RoHS Compliant					
Appearance	Black					
Forms	Pellets					
Processing Method	Injection Molding	Injection Molding				
Multi-Point Data	Creep Modulus vs. Time (IS	O 11403-1)				
	Isochronous Stress vs. Strain (ISO 11403-1)					
	Isothermal Stress vs. Strain (ISO 11403-1)					
	Secant Modulus vs. Strain (ISO 11403-1)					
	Shear Modulus vs. Temperature (ISO 11403-1)					
	Viscosity vs. Shear Rate (ISO 11403-2)					

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm³	ISO 1183
Water Absorption			ISO 62
Saturation, 23°C	5.0	%	
Equilibrium, 23°C, 50% RH	1.6	%	
Mechanical	Nominal Value	Unit	Test Method

Tensile Stress (Break, 23°C)	190	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.5	%	ISO 527-2
Flexural Modulus (23°C)	9600	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength (23°C)	10	kJ/m²	ISO 180
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (1.8 MPa,			
Unannealed)	250	°C	ISO 75-2/A
Melting Temperature (DSC)	260	°C	ISO 3146
Injection	Nominal Value	Unit	
Drying Temperature	80.0	°C	
Drying Time	2.0 to 4.0	hr	
Suggested Max Moisture	0.15	%	
Processing (Melt) Temp	280 to 305	°C	
Mold Temperature	80.0 to 90.0	°C	
Mold Temperature  Injection Pressure	80.0 to 90.0 3.50 to 12.5	°C MPa	
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#### Recommended distributors for this material

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