



Ultramid® B3WGM24 HPX BK23210

BASF Corporation - Polyamide 6

Monday, November 4, 2019

General Information

Product Description

Ultramid B3WGM24 HPX BK23210 is a very high productivity, 30% glass/mineral reinforced heat stabilized injection molding PA6 grade for components that require medium rigidity, excellent dimensional stability, low warpage out of the tool and excellent appearance.

Applications

Typical applications include automobile engine covers, housings and automotive door handles.

General

Material Status	• Commercial: Active		
Availability	• North America		
Filler / Reinforcement	• Glass/Mineral, 30% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Heat Stabilized • High Dimensional Stability	• Low Warpage • Medium Rigidity	• Oil Resistant • Pleasing Surface Appearance
Uses	• Automotive Applications	• Automotive Under the Hood	• Housings
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• FORD WSS-M4D968-B1		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.36	g/cm ³	ISO 1183
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	1.15E+6	psi	ISO 527-2
Tensile Stress (Break, 73°F)	16000	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.0	%	ISO 527-2
Flexural Modulus (73°F)	1.15E+6	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.1	ft·lb/in ²	ISO 179
Notched Izod Impact Strength			ISO 180
-40°F	2.1	ft·lb/in ²	
73°F	2.5	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	410	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	374	°F	ISO 75-2/A
Melting Temperature (DSC)	428	°F	ISO 3146

Ultramid® B3WGM24 HPX BK23210

BASF Corporation - Polyamide 6

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	181	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.15	%
Processing (Melt) Temp	518 to 563	°F
Mold Temperature	176 to 203	°F
Injection Pressure	508 to 1810	psi
Injection Rate	Fast	

Notes

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