

BASF Ultramid® B3WGM24 HPX

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.

Physical Properties	Metric	English	Comments
Density	1.36 g/cc	0.0491 lb/in ³	ISO 1183

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	110 MPa	16000 psi	ISO 527
Elongation at Break	3.0 %	3.0 %	ISO 527
Tensile Modulus	7.90 GPa	1150 ksi	ISO 527
Flexural Modulus	7.96 GPa	1150 ksi	ISO 178
Izod Impact, Notched (ISO)	4.40 kJ/m ² @Temperature -40.0 °C	2.09 ft-lb/in ² @Temperature -40.0 °F	ISO 180
	5.20 kJ/m ² @Temperature 23.0 °C	2.47 ft-lb/in ² @Temperature 73.4 °F	ISO 180
Charpy Impact, Notched	0.440 J/cm ²	2.09 ft-lb/in ²	ISO 179

Thermal Properties	Metric	English	Comments
Melting Point	220 °C	428 °F	ISO 3146
Deflection Temperature at 0.46 MPa (66 psi)	210 °C	410 °F	ISO 75
Deflection Temperature at 1.8 MPa (264 psi)	190 °C	374 °F	ISO 75

Processing Properties	Metric	English	Comments
Melt Temperature	270 - 295 °C	518 - 563 °F	
Mold Temperature	80.0 - 95.0 °C	176 - 203 °F	
Drying Temperature	80.0 °C	176 °F	
Dry Time	2 - 4 hour	2 - 4 hour	
Moisture Content	<= 0.10 %	<= 0.10 %	
Injection Pressure	35.0 - 125 MPa	5080 - 18100 psi	

Descriptive Properties	
Color	BK 23210
Commercial Status	North America