

## Ultramid® B3WG13 HPX BK00102

### **BASF Corporation - Polyamide 6**

Monday, November 4, 2019

#### **General Information**

#### **Product Description**

Ultramid B3WG13 HPX BK00102 is a 63% glass reinforced, injection molding, high modulus nylon designed to have high strength and stiffness for metal replacement applications. It also has excellent moldability and outstanding surface appearance.

General			
Material Status	Commercial: Active		
Availability	North America		
Filler / Reinforcement	Glass Fiber, 63% Filler by Weight		
Features	<ul><li> Good Moldability</li><li> High Stiffness</li></ul>	<ul><li>High Strength</li><li>Oil Resistant</li></ul>	Pleasing Surface Appearance
Uses	<ul> <li>Metal Replacement</li> </ul>		
Agency Ratings	• EC 1907/2006 (REACH)		

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RoHS Compliance	<ul> <li>RoHS Compliant</li> </ul>

Appearance • Black
Forms • Pellets

Processing Method • Injection Molding

ASTM & ISO Properties 1					
Physical	Dry	Conditioned	Unit	Test Method	
Density	1.74		g/cm³	ISO 1183	
Mechanical	Dry	Conditioned	Unit	Test Method	
Tensile Modulus (73°F)	3.10E+6	2.13E+6	psi	ISO 527-2	
Tensile Stress (Break, 73°F)	32600	24500	psi	ISO 527-2	
Tensile Strain (Break, 73°F)	2.0	3.4	%	ISO 527-2	
Flexural Modulus (73°F)	3.05E+6	2.25E+6	psi	ISO 178	
Flexural Stress (73°F)	55000	41300	psi	ISO 178	
Impact	Dry	Conditioned	Unit	Test Method	
Charpy Notched Impact Strength				ISO 179	
-22°F	6.2		ft·lb/in²		
73°F	6.7	8.6	ft·lb/in²		
Charpy Unnotched Impact Strength				ISO 179	
-22°F	42		ft·lb/in²		
73°F	45	49	ft·lb/in²		
Notched Izod Impact Strength				ISO 180	
-40°F	5.7		ft·lb/in²		
73°F	6.7	8.1	ft·lb/in²		
Thermal	Dry	Conditioned	Unit	Test Method	
Heat Deflection Temperature				ISO 75-2/A	
264 psi, Unannealed	419		°F		
Melting Temperature (DSC)	428		°F	ISO 3146	

Processing Information			
Injection	Dry Unit		
Drying Temperature	176 °F		



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Injection	Dry	Unit
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.12	%
Rear Temperature	527 to 572	°F
Middle Temperature	545 to 590	°F
Front Temperature	572 to 608	°F
Nozzle Temperature	572 to 608	°F
Processing (Melt) Temp	572 to 608	°F
Mold Temperature	176 to 203	°F
Injection Pressure	508 to 1810	psi
Injection Rate	Fast	

#### Notes

<sup>&</sup>lt;sup>1</sup> Typical properties: these are not to be construed as specifications.