

## Ultramid® B3ZG7 OSI BK23273

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

Monday, November 4, 2019

#### **General Information**

#### **Product Description**

Ultramid B3ZG7 OSI BK23273 is a 35% glass reinforced, pigmented black, heat stabilized, impact modified PA6 injection molding grade. It was developed to meet demanding mechanical and chemical requirements for the automotive oil pan application.

#### Applications

Typical application is automotive oil pan.

General			
Material Status	Commercial: Active		
Availability	Asia Pacific	North America	
Filler / Reinforcement	<ul> <li>Glass Fiber, 35% Filler by V</li> </ul>	Veight	
Additive	Heat Stabilizer	Impact Modifier	
Features	Heat Stabilized	<ul> <li>Impact Modified</li> </ul>	Oil Resistant
Uses	<ul> <li>Automotive Applications</li> </ul>	Automotive Under the Hood	
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	RoHS Compliant		
Automotive Specifications	<ul> <li>CHRYSLER MS-DB-41 CPN4852 Color: Black</li> </ul>	• FORD WSS-M4D578-A2	• FORD WSS-M4D578-B1
Appearance	• Black		
Forms	• Pellets		
Processing Method	Injection Molding		

ASTM & ISO Properties 1					
Physical	Dry	Conditioned	Unit	Test Method	
Density	1.36		g/cm³	ISO 1183	
Molding Shrinkage				ISO 294-4	
Across Flow	0.60		%		
Flow	0.20		%		
Mechanical	Dry	Conditioned	Unit	Test Method	
Tensile Modulus (73°F)	1.45E+6	895000	psi	ISO 527-2	
Tensile Stress (Break, 73°F)	23600	16200	psi	ISO 527-2	
Tensile Strain (Break, 73°F)	4.1	11	%	ISO 527-2	
Flexural Modulus (73°F)	1.29E+6	819000	psi	ISO 178	
Impact	Dry	Conditioned	Unit	Test Method	
Charpy Notched Impact Strength				ISO 179	
-22°F	8.6		ft·lb/in²		
73°F	11	16	ft·lb/in²		
Charpy Unnotched Impact Strength				ISO 179	
-22°F	54		ft·lb/in²		
73°F	48	50	ft·lb/in²		
Notched Izod Impact Strength				ISO 180	
-40°F	8.1		ft·lb/in²		
73°F	11	16	ft·lb/in²		



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Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				ISO 75-2/B
66 psi, Unannealed	428		°F	
Heat Deflection Temperature				ISO 75-2/A
264 psi, Unannealed	397		°F	
Melting Temperature (DSC)	428		°F	ISO 3146

Processing Information				
Injection	Dry Unit			
Drying Temperature	176 °F			
Drying Time	2.0 to 4.0 hr			
Suggested Max Moisture	0.080 %			
Rear Temperature	473 to 527 °F			
Middle Temperature	500 to 545 °F			
Front Temperature	518 to 563 °F			
Nozzle Temperature	518 to 563 °F			
Processing (Melt) Temp	518 to 563 °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.