Ultramid® B3ZG7 SC

BASF Corporation - Polyamide 6

Monday, November 4, 2019

General Information

Product Description

Ultramid B3ZG7 SC is an uncolored, 35% glass reinforced, heat stabilized, impact modified PA6 injection molding grade.

General			
Material Status	• Commercial: Active		
Availability	• North America		
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight		
Additive	• Heat Stabilizer	• Impact Modifier	
Features	• Heat Stabilized	• Impact Modified	• Oil Resistant
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.37	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (235°C/5.0 kg)	3.00	cm³/10min	ISO 1133
Water Absorption (Saturation, 73°F)	6.0	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.8	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (73°F)	1.45E+6	psi	ISO 527-2
Tensile Stress (Break, 73°F)	24500	psi	ISO 527-2
Tensile Strain (Break, 73°F)	4.0	%	ISO 527-2
Flexural Modulus (73°F)	1.33E+6	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179
-22°F	8.1	ft·lb/in²	
73°F	10	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179
-22°F	51	ft·lb/in²	
73°F	49	ft·lb/in²	
Notched Izod Impact Strength			ISO 180
-40°F	8.1	ft·lb/in²	
73°F	11	ft·lb/in²	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (66 psi, Unannealed)	426	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	401	°F	ISO 75-2/A
Melting Temperature (DSC)	424	°F	ISO 3146

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	2.0 to 4.0	hr

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Injection	Nominal Value	Unit
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

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