



Ultramid® 1503-2F BK ND3007

BASF Corporation - Polyamide 66

Monday, November 4, 2019

General Information

Product Description

Ultramid 1503-2F BK ND3007 is a 33% glass reinforced, heat stabilized injection molding PA6/6 grade. It is designed to provide enhanced hydrolysis resistance for under-the-hood applications.

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight
Additive	• Heat Stabilizer
Features	• Heat Stabilized • Hydrolysis Resistant
Uses	• Automotive Under the Hood
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.40	--	g/cm ³	ISO 1183
Water Absorption				ISO 62
Saturation, 73°F	5.7	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 50% RH	1.7	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	1.57E+6	--	psi	ISO 527-2
Tensile Stress (Break, 73°F)	27600	20900	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.0	--	%	ISO 527-2
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
-22°F	3.8	--	ft·lb/in ²	
73°F	5.2	--	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				ISO 75-2/B
66 psi, Unannealed	507	--	°F	
Heat Deflection Temperature				ISO 75-2/A
264 psi, Unannealed	491	--	°F	
Melting Temperature (DSC)	500	--	°F	ISO 3146

Processing Information

Injection	Dry	Unit
Drying Temperature	140	°F
Drying Time	1.0 to 2.0	hr
Suggested Max Moisture	0.040 to 0.20	%

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Injection	Dry	Unit
Processing (Melt) Temp	550 to 581	°F
Mold Temperature	140 to 212	°F
Injection Pressure	508 to 1810	psi
Injection Rate	Fast	
Back Pressure	0.00 to 50.8	psi
Screw Speed	40 to 80	rpm
Screw Compression Ratio	3.0:1.0 to 4.0:1.0	

Notes

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