

Durethan® BG 60 X XF 900116

Polyamide 6

LANXESS GmbH

Message:

PA 6, 60 % glass fibers/glass spheres, injection molding, heat-aging stabilized, improved flowability, low tendency to warp

General Information				
Filler / Reinforcement	Glass Bead\Glass Fiber,60% Filler by Weight			
Additive	Heat Stabilizer			
Features	Good Flow			
	Heat Stabilized			
	Low Warpage			
Processing Method	Injection Molding			
Physical	Dry	Conditioned	Unit	Test Method
Density (23°C)	1.68	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 2577
Across Flow : 290°C, 2.00 mm ¹	0.40	--	%	
Across Flow : 120°C, 4 hr, 2.00 mm ²	0.050	--	%	
Flow : 290°C, 2.00 mm ³	0.35	--	%	
Flow : 120°C, 4 hr, 2.00 mm ⁴	0.050	--	%	
Across Flow : 280°C, 3.00 mm ⁵	0.55	--	%	
Across Flow : 120°C, 4 hr, 3.00 mm ⁶	0.10	--	%	
Flow : 280°C, 3.00 mm ⁷	0.20	--	%	
Flow : 120°C, 4 hr, 3.00 mm ⁸	0.050	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	19000	12300	MPa	ISO 527-2/1
Tensile Stress (Break, 23°C)	210	135	MPa	ISO 527-2/5
Tensile Strain (Break, 23°C)	2.2	3.3	%	ISO 527-2/5
Flexural Modulus ⁹ (23°C)	18000	12000	MPa	ISO 178/A
Flexural Stress ¹⁰ (23°C)	340	210	MPa	ISO 178/A
Flexural Strain at Flexural Strength ¹¹ (23°C)	2.5	3.0	%	ISO 178/A
ISO Shortname	PA 6, GHR, 10-190, (GF+GB) 60--			ISO 1874
Residual Moisture Content	0.030 to 0.20		%	Karl Fisher
Impact	Dry	Conditioned	Unit	Test Method

Charpy Notched Impact Strength				ISO 179/1eA
-30°C	15	15	kJ/m ²	
23°C	15	20	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	75	70	kJ/m ²	
23°C	85	75	kJ/m ²	
Notched Izod Impact Strength				ISO 180/1A
-30°C	15	15	kJ/m ²	
23°C	15	20	kJ/m ²	
Unnotched Izod Impact Strength				ISO 180/1U
-30°C	75	65	kJ/m ²	
23°C	80	70	kJ/m ²	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	218	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	210	--	°C	ISO 75-2/A
Melting Temperature ¹²	221	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C	1.1E-5	--	cm/cm/°C	
Transverse : 23 to 55°C	8.5E-5	--	cm/cm/°C	
Injection	Dry	Unit	Test Method	
Drying Temperature - Dry Air Dryer	80.0		°C	
Drying Time - Dry Air Dryer	2.0 to 6.0		hr	
Processing (Melt) Temp	270 to 290		°C	
Mold Temperature	80.0 to 120		°C	
NOTE				
1.	60x60x2mm, 80°C MT, 600 bar			
2.	60x60x2mm			
3.	60x60x2mm, 80°C MT, 600 bar			
4.	60x60x2mm			
5.	150x105x3mm, 80°C MT, 500 bar			
6.	150x105x3mm			
7.	150x105x3mm, 80°C MT, 500 bar			
8.	150x105x3mm			
9.	2.0 mm/min			

10.	2.0 mm/min
11.	2 mm/min
12.	10°C/min

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

