

Durethan® BKV 30 G W1 901317

Polyamide 6

LANXESS Asia/Pacific

Message:

PA 6, 30 % glass fibers, injection molding, weather stabilized

General Information				
Filler / Reinforcement		Glass fiber reinforced material, 30% filler by weight		
Features		Good weather resistance		
Processing Method		Injection molding		
Physical	Dry	Conditioned	Unit	Test Method
Density (23°C)	1.37	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Vertical flow direction: 280°C, 2.00mm ¹	0.60	--	%	ISO 294-4
Vertical flow direction: 120°C, 2 hours, 2.00mm ²	0.20	--	%	ISO 294-4
Flow direction: 280°C, 2.00mm ³	0.20	--	%	ISO 294-4
Flow direction: 120°C, 2 hours, 2.00mm ⁴	0.10	--	%	ISO 294-4
Water Absorption				ISO 62
Saturated, 23°C	6.4	--	%	ISO 62
Equilibrium, 23°C, 50% RH	2.0	--	%	ISO 62
Hardness	Dry	Conditioned	Unit	Test Method
Ball Indentation Hardness	209	--	MPa	ISO 2039-1
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	9900	6600	MPa	ISO 527-2/1
Tensile Stress (Break, 23°C)	180	106	MPa	ISO 527-2/5
Tensile Strain (Break, 23°C)	2.7	6.1	%	ISO 527-2/5
Flexural Modulus ⁵ (23°C)	8700	6300	MPa	ISO 178/A
Flexural Stress ⁶				
3.5% strain	260	156	MPa	ISO 178/A
23°C	270	177	MPa	ISO 178
Flexural Strain at Flexural Strength ⁷ (23°C)	3.7	5.7	%	
Burning Behavior ⁸	passed	--		ISO 3795
ISO Shortname	PA 6, GLR, 14-100, GF30	--		ISO 1874
Residual Moisture Content	0.030 - 0.12		%	Karl Fisher
Films	Dry	Conditioned	Unit	Test Method
Film Puncture Energy				ISO 6603-2

-- ⁹	2.00	--	J	ISO 6603-2
-- ¹⁰	3.00	--	J	ISO 6603-2
Film Puncture Force				ISO 6603-2
-- ¹¹	740	--	N	ISO 6603-2
-- ¹²	840	--	N	ISO 6603-2
Impact	Dry	Conditioned	Unit	Test Method
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	50	40	kJ/m ²	ISO 179/1eU
23°C	60	65	kJ/m ²	ISO 179/1eU
Notched Izod Impact (23°C)	10	10	kJ/m ²	ISO 180/1A
Unnotched Izod Impact Strength				ISO 180/1U
-30°C	45	40	kJ/m ²	ISO 180/1U
23°C	50	60	kJ/m ²	ISO 180/1U
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, not annealed	215	--	°C	ISO 75-2/B
1.8 MPa, not annealed	200	--	°C	ISO 75-2/A
Vicat Softening Temperature	211	--	°C	ISO 306/B120
Melting Temperature ¹³	219	--	°C	ISO 11357-3
Linear thermal expansion coefficient				ISO 11359-2
Flow: 23 to 55°C	3.0E-5	--	cm/cm/°C	ISO 11359-2
Lateral: 23 to 55°C	8.0E-5	--	cm/cm/°C	ISO 11359-2
Electrical	Dry	Conditioned	Unit	Test Method
Comparative Tracking Index (Solution A)	500	--	V	IEC 60112
Injection	Dry	Unit	Test Method	
Drying Temperature - Dry Air Dryer	80.0		°C	
Drying Time - Dry Air Dryer	2.0 - 6.0		hr	
Processing (Melt) Temp	270 - 290		°C	
Mold Temperature	80.0 - 120		°C	
NOTE				
1.	60x60x2; MT 80°C; 600 Bar			
2.	60x60x2			
3.	60x60x2; MT 80°C; 600 Bar			
4.	60x60x2			
5.	2.0 mm/min			
6.	2.0 mm/min			

7.	Pull Rate: 2 mm/min; 50% RH
8.	US-FMVSS302
9.	-30°C
10.	23°C
11.	-30°C
12.	23°C
13.	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

