

Durethan® BKV 215 000000

Polyamide Copolymer

LANXESS GmbH

Message:

PA 6-Copolymer, 15 % glass fibers, injection molding, improved impact strength

General Information				
Filler / Reinforcement		Glass fiber reinforced material, 15% filler by weight		
Features		Impact resistance, good		
Agency Ratings		EC 1907/2006 (REACH)		
Processing Method		Injection molding		
Physical	Dry	Conditioned	Unit	Test Method
Density (23°C)	1.18	--	g/cm ³	ISO 1183
Apparent Density	0.60	--	g/cm ³	ISO 60
Molding Shrinkage				ISO 2577
Vertical flow direction: 280°C, 2.00mm ¹	0.61	--	%	ISO 2577
Vertical flow direction: 120°C, 4 hours, 2.00mm ²	0.15	--	%	ISO 2577
Flow direction: 280°C, 2.00mm ³	0.59	--	%	ISO 2577
Flow direction: 120°C, 4 hours, 2.00mm ⁴	0.14	--	%	ISO 2577
Water Absorption				ISO 62
Saturated, 23°C	7.0	--	%	ISO 62
Equilibrium, 23°C, 50% RH	2.0	--	%	ISO 62
Hardness	Dry	Conditioned	Unit	Test Method
Ball Indentation Hardness	110	55.0	MPa	ISO 2039-1
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	4500	2400	MPa	ISO 527-2/1
Tensile Stress (Break, 23°C)	85.0	55.0	MPa	ISO 527-2/5
Tensile Strain (Break, 23°C)	4.5	15	%	ISO 527-2/5
Flexural Modulus ⁵ (23°C)	4000	2200	MPa	ISO 178/A
Flexural Stress				ISO 178/A
3.5% strain, 23°C	125	60.0	MPa	ISO 178/A
23°C ⁶	130	80.0	MPa	ISO 178/A
Flexural Strain at Flexural Strength ⁷ (23°C)	5.0	7.0	%	ISO 178/A
Burning Behavior ⁸	passed	--		ISO 3795
ISO Shortname	PA 6/66HI, GR, 14-040, GF15	--		ISO 1874
Residual Moisture Content	0.030 - 0.12		%	Karl Fisher

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	12	12	kJ/m ²	ISO 179/1eA
23°C	20	35	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	80	75	kJ/m ²	ISO 179/1eU
23°C	70	80	kJ/m ²	ISO 179/1eU
Notched Izod Impact				ISO 180/1A
-30°C	10	10	kJ/m ²	ISO 180/1A
23°C	18	30	kJ/m ²	ISO 180/1A
Multi-Axial Instrumented Impact Energy				ISO 6603-2
-30°C	4.80	--	J	ISO 6603-2
23°C	13.0	32.0	J	ISO 6603-2
Multi-Axial Instrumented Impact Peak Force				ISO 6603-2
-30°C	650	--	N	ISO 6603-2
23°C	1000	--	N	ISO 6603-2
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, not annealed	205	--	°C	ISO 75-2/B
1.8 MPa, not annealed	175	--	°C	ISO 75-2/A
8.0 MPa, not annealed	60.0	--	°C	ISO 75-2/C
Vicat Softening Temperature	200	--	°C	ISO 306/B50, ISO 306/B120
Melting Temperature ⁹	214	--	°C	ISO 11357-3
Linear thermal expansion coefficient				ISO 11359-2
Flow: 23 to 55°C	4.0E-5	--	cm/cm/°C	ISO 11359-2
Lateral: 23 to 55°C	1.5E-4	--	cm/cm/°C	ISO 11359-2
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+15	1.0E+13	ohms	IEC 60093
Volume Resistivity (23°C)	1.0E+13	1.0E+12	ohms·cm	IEC 60093
Dielectric Strength (23°C, 1.00 mm)	43	43	kV/mm	IEC 60243-1
Relative Permittivity				IEC 60250
23°C, 100 Hz	3.50	10.0		IEC 60250
23°C, 1 MHz	3.20	3.70		IEC 60250
Dissipation Factor				IEC 60250
23°C, 100 Hz	6.0E-3	0.15		IEC 60250
23°C, 1 MHz	0.015	0.080		IEC 60250

Comparative Tracking Index (Solution A)	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
1.60 mm	HB	--		UL 94
3.20 mm	HB	--		UL 94
Glow Wire Flammability Index (2.00 mm)	650	--	°C	IEC 60695-2-12
Oxygen Index ¹⁰	22	--	%	ISO 4589-2
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	260 - 290		°C	
Mold Temperature	80.0 - 100		°C	

NOTE

- 60x60x2mm, 80°C MT, 600 bar
- 60x60x2mm
- 60x60x2mm, 80°C MT, 600 bar
- 60x60x2mm
- 2.0 mm/min
- 2.0 mm/min
- 2 mm/min
- US-FMVSS302
- 10°C/min
- Procedure A

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



WECHAT