Durethan® BM 29 X H2.0 EF 900116

Polyamide 6

LANXESS Asia/Pacific

Message:

PA 6, 30 % glass fibers/mineral, injection molding, improved flowability, heat-aging stabilized

General Information				
Filler / Reinforcement	Glass \mineral, 30% filler by weight			
Additive	heat stabilizer			
Features	Good liquidity Good heat aging resistance			
Processing Method	Injection molding			
Physical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Density (23°C)	1.36	--	g/cm³	ISO 1183
Apparent Density	0.80	--	g/cm³	ISO 60
Molding Shrinkage				ISO 294-4
Vertical flow direction: 280°C, 2.00mm [1]	0.63	--	%	ISO 294-4
Vertical flow direction: 120°C, 2 hours, 2.00mm [2]	0.18	--	%	ISO 294-4
Flow direction: 280°C, 2.00mm [3]	0.45	--	%	ISO 294-4
Flow direction: 120°C, 2 hours, 2.00mm [4]	0.12	--	%	ISO 294-4
Water Absorption				ISO 62
Saturated, 23°C	7.0	--	%	ISO 62
Equilibrium, 23°C, 50% RH	2.2	--	%	ISO 62
Viscosity Number	95.0	--	cm³/g	ISO 307
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Ball Indentation Hardness	189	--	MPa	ISO 2039-1
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (23°C)	6500	--	MPa	ISO 527-2/1
Tensile Stress (Break, 23°C)	110	--	MPa	ISO 527-2/5
Tensile Strain (Break, 23°C)	3.0	--	%	ISO 527-2/5
Flexural Modulus [5] (23°C)	6400	--	MPa	ISO 178/A
Flexural Stress [6]				
3.5% strain	175	--	MPa	ISO 178/A
23°C	180	--	MPa	ISO 178
Flexural Strain at Flexural Strength [7] (23°C)	4.0	--	%	

ISO Shortname	PA 6, GHR, 10-060, (GF+MD) 30-			ISO 1874
Residual Moisture Content	0.030 - 0.12		%	Karl Fisher
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	30	35	kJ/m²	ISO 179/1eU
23°C	35	110	kJ/m²	ISO 179/1eU
Notched Izod Impact				ISO 180/1A
-30°C	< 10	< 10	kJ/m²	ISO 180/1A
23°C	< 10	< 10	kJ/m²	ISO 180/1A
Unnotched Izod Impact Strength				ISO 180/1U
-30°C	25	30	kJ/m²	ISO 180/1U
23°C	30	95	kJ/m²	ISO 180/1U
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				
0.45 MPa, not annealed	210	--	°C	ISO 75-2/B
1.8 MPa, not annealed	185	--	°C	ISO 75-2/A
Vicat Softening Temperature	> 200	--	°C	ISO 306/B120
Melting Temperature [8]	222	--	°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	8.0E-5	--	cm/cm/°C	ISO 11359-2
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Comparative Tracking Index (Solution A)	425	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating (1.60 mm)	HB	--		UL 94
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 - 100		°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			

	Pull Rate: 2 mm/min; 50%
7.	RH
8.	10°C/min

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