

Durethan® DP BM 65 X FM30 901510

Polyamide 6

LANXESS GmbH

Message:

PA 6, 65 % mineral/glass fibers, injection molding, halogen free flame retardant, improved flowability despite the high degree of filling

General Information				
UL YellowCard		E245249-634788		
Filler / Reinforcement		Glass \mineral, 65% filler by weight		
Additive		Flame retardancy		
Features		Good liquidity		
		Halogen-free		
		Flame retardancy		
Agency Ratings		EC 1907/2006 (REACH)		
Processing Method		Injection molding		
Resin ID (ISO 1043)		PA (MD+GF) FR (61)		
Physical	Dry	Conditioned	Unit	Test Method
Density (23°C)	1.69	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 2577
Vertical flow direction: 280°C, 2.00mm ¹	0.50	--	%	ISO 2577
Vertical flow direction: 120°C, 4 hours, 2.00mm ²	0.10	--	%	ISO 2577
Flow direction: 280°C, 2.00mm ³	0.40	--	%	ISO 2577
Flow direction: 120°C, 4 hours, 2.00mm ⁴	0.10	--	%	ISO 2577
Water Absorption				ISO 62
Saturated, 23°C	3.5	--	%	ISO 62
Equilibrium, 23°C, 50% RH	1.2	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	12100	6000	MPa	ISO 527-2/1
Tensile Stress (Break, 23°C)	120	73.0	MPa	ISO 527-2/5
Tensile Strain (Break, 23°C)	1.6	2.2	%	ISO 527-2/5
Flexural Modulus ⁵ (23°C)	12300	6000	MPa	ISO 178/A
Flexural Stress ⁶ (23°C)	175	110	MPa	ISO 178/A
Flexural Strain at Flexural Strength ⁷ (23°C)	1.8	2.6	%	ISO 178/A
ISO Shortname	PA 6, GFHR, 14-120, (MD+GF) 65			ISO 1874
Residual Moisture Content	0.030 - 0.070		%	Karl Fisher

Impact	Dry	Conditioned	Unit	Test Method
Charpy Unnotched Impact Strength (23°C)	30	23	kJ/m ²	ISO 179/1eU
Notched Izod Impact (23°C)	< 10	< 10	kJ/m ²	ISO 180/1A
Unnotched Izod Impact Strength (23°C)	25	22	kJ/m ²	ISO 180/1U
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, not annealed	200	--	°C	ISO 75-2/B
1.8 MPa, not annealed	181	--	°C	ISO 75-2/A
Vicat Softening Temperature	204	--	°C	ISO 306/B120
Melting Temperature ⁸	220	--	°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	5.0E-5	--	cm/cm/°C	ISO 11359-2
Electrical	Dry	Conditioned	Unit	Test Method
Dielectric Strength (23°C, 1.00 mm)	26	--	kV/mm	IEC 60243-1
Comparative Tracking Index (Solution A)	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
1.20 mm	V-0	--		UL 94
1.50 mm	V-0	--		UL 94
Glow Wire Flammability Index (0.800 mm)	960	--	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (0.800 mm)	775	--	°C	IEC 60695-2-13
Oxygen Index ⁹	49	--	%	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	250 - 280		°C	
Mold Temperature	80.0 - 100		°C	
NOTE				
1.	60x60x2mm, 80°C MT, 500 bar			
2.	60x60x2mm			
3.	60x60x2mm, 80°C MT, 500 bar			
4.	60x60x2mm			

5.	2.0 mm/min
6.	2.0 mm/min
7.	2 mm/min
8.	10°C/min
9.	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

