

Durethan® BM 430 H2.0 901510

Polyamide 6

LANXESS GmbH

Message:

PA 6, 30 % mineral, injection molding, heat-aging stabilized

General Information				
Filler / Reinforcement		Mineral filler, 30% filler by weight		
Additive		heat stabilizer		
Features		Thermal Stability		
Processing Method		Injection molding		
Physical	Dry	Conditioned	Unit	Test Method
Density (23°C)	1.37	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 2577
Vertical flow direction: 280°C, 2.00mm ¹	1.1	--	%	ISO 2577
Vertical flow direction: 120°C, 4 hours, 2.00mm ²	0.20	--	%	ISO 2577
Flow direction: 280°C, 2.00mm ³	1.2	--	%	ISO 2577
Flow direction: 120°C, 4 hours, 2.00mm ⁴	0.30	--	%	ISO 2577
Water Absorption				ISO 62
Saturated, 23°C	2.0	--	%	ISO 62
Equilibrium, 23°C, 50% RH	7.1	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	4700	1450	MPa	ISO 527-2/1
Tensile Stress (Break, 23°C)	70.0	35.0	MPa	ISO 527-2/5
Tensile Strain (Break, 23°C)	5.0	> 100	%	ISO 527-2/5
Flexural Modulus ⁵ (23°C)	4500	1590	MPa	ISO 178/A
Flexural Stress				ISO 178/A
3.5% strain, 23°C	115	35.0	MPa	ISO 178/A
23°C ⁶	120	48.0	MPa	ISO 178/A
Flexural Strain at Flexural Strength ⁷ (23°C)	5.0	7.8	%	ISO 178/A
ISO Shortname	PA 6, GHR, 14-040, MD30	--		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	< 10	< 10	kJ/m ²	ISO 179/1eA

23°C	< 10	< 10	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	60	50	kJ/m ²	ISO 179/1eU
23°C	75 kJ/m ²	No Break		ISO 179/1eU
Notched Izod Impact				ISO 180/1A
-30°C	< 10	< 10	kJ/m ²	ISO 180/1A
23°C	< 10	< 10	kJ/m ²	ISO 180/1A
Unnotched Izod Impact Strength				ISO 180/1U
-30°C	50	55	kJ/m ²	ISO 180/1U
23°C	65 kJ/m ²	No Break		ISO 180/1U
Multi-Axial Instrumented Impact Energy				ISO 6603-2
-30°C	1.50	--	J	ISO 6603-2
23°C	2.50	--	J	ISO 6603-2
Multi-Axial Instrumented Impact Peak Force				ISO 6603-2
-30°C	820	--	N	ISO 6603-2
23°C	1400	--	N	ISO 6603-2
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, not annealed	175	--	°C	ISO 75-2/B
1.8 MPa, not annealed	75.0	--	°C	ISO 75-2/A
Melting Temperature ⁸	222	--	°C	ISO 11357-3
Linear thermal expansion coefficient				ISO 11359-2
Flow: 23 to 55°C	8.0E-5	--	cm/cm/°C	ISO 11359-2
Lateral: 23 to 55°C	7.0E-5	--	cm/cm/°C	ISO 11359-2
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	270 - 290		°C	
Mold Temperature	80.0 - 100		°C	
NOTE				
1.	60x60x2mm, 80°C MT, 600 bar			
2.	60x60x2mm			
3.	60x60x2mm, 80°C MT, 600 bar			
4.	60x60x2mm			
5.	2.0 mm/min			
6.	2.0 mm/min			

7.	2 mm/min
8.	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

