

Durethan® B 40 FA 000000

Polyamide 6

LANXESS GmbH

Message:

PA 6, non-reinforced, extrusion, high viscosity, slip agent

General Information				
Additive		slip agent		
Features		smoothness		
		Viscosity, High		
Agency Ratings		EC 1907/2006 (REACH)		
Processing Method		Extrusion		
Physical	Dry	Conditioned	Unit	Test Method
Density (23°C)	1.14	--	g/cm ³	ISO 1183
Apparent Density	0.70	--	g/cm ³	ISO 60
Melt Volume-Flow Rate (MVR) (235°C/2.16 kg)	3.00	--	cm ³ /10min	ISO 1133
Water Absorption				ISO 62
Saturated, 23°C	10	--	%	ISO 62
Equilibrium, 23°C, 50% RH	3.0	--	%	ISO 62
Hardness	Dry	Conditioned	Unit	Test Method
Ball Indentation Hardness	130	40.0	MPa	ISO 2039-1
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	2800	800	MPa	ISO 527-2/1
Tensile Stress (Yield, 23°C)	75.0	35.0	MPa	ISO 527-2/50
Tensile Strain (Yield, 23°C)	4.0	25	%	ISO 527-2/50
Nominal Tensile Strain at Break (23°C)	20	> 50	%	ISO 527-2/50
Flexural Modulus ¹ (23°C)	2600	700	MPa	ISO 178/A
Flexural Stress (3.5% Strain,23°C)	90.0	20.0	MPa	ISO 178/A
Flexural Strain at Flexural Strength ² (23°C)	5.0	8.0	%	ISO 178/A
ISO Shortname	PA 6, ES, 22-030	--		ISO 1874
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	5.0	5.0	kJ/m ²	ISO 179/1eA
23°C	5.0	50	kJ/m ²	ISO 179/1eA

Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	No Break	No Break		ISO 179/1eU
23°C	No Break	No Break		ISO 179/1eU
Notched Izod Impact (-30°C)	7.0	7.5	kJ/m²	ISO 180/1A
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, not annealed	150	--	°C	ISO 75-2/B
1.8 MPa, not annealed	50.0	--	°C	ISO 75-2/A
8.0 MPa, not annealed	40.0	--	°C	ISO 75-2/C
Vicat Softening Temperature	200	--	°C	ISO 306/B120
Melting Temperature ³	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	8.0E-5	--	cm/cm/°C	ISO 11359-2
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+14	1.0E+13	ohms	IEC 60093
Volume Resistivity (23°C)	1.0E+14	1.0E+12	ohms·cm	IEC 60093
Dielectric Strength (23°C, 1.00 mm)	30	35	kV/mm	IEC 60243-1
Relative Permittivity				IEC 60250
23°C, 100 Hz	3.90	18.0		IEC 60250
23°C, 1 MHz	3.50	4.00		IEC 60250
Comparative Tracking Index (Solution A)	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
0.800 mm	HB	--		UL 94
1.60 mm	HB	--		UL 94
Oxygen Index ⁴	24	--	%	ISO 4589-2
Injection	Dry	Unit		
Drying Temperature - Dry Air Dryer	80.0		°C	
Drying Time - Dry Air Dryer	2.0 - 6.0		hr	
NOTE				
1.	2.0 mm/min			
2.	2 mm/min			
3.	10°C/min			
4.	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

