Lanxess DurethanÂ® BKV 30 N1 000000 Nylon 6, 30% Glass Fiber

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6, 30% Glass Fiber Filled

Material Notes:

PA 6, 30% glass fiber, injection molding, flame retardantInformation provided by LANXESS.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Lanxess-Durethan-BKV-30-N1-000000-Nylon-6-30-Glass-Fiber.php

Physical Properties	Metric	English	Comments
Density	1.58 g/cc	0.0571 lb/inÂ³	ISO 1183
Moisture Absorption at Equilibrium	1.5 %	1.5 %	50% RH; ISO 62
Water Absorption at Saturation	5.1 %	5.1 %	ISO 62
Linear Mold Shrinkage, Flow	0.0022 cm/cm	0.0022 in/in	60x60x2; 280Â°C / MT 80Â°C; 600 bar; ISO 294-4
Linear Mold Shrinkage, Transverse	0.0060 cm/cm	0.0060 in/in	60x60x2; 280Â°C / MT 80Â°C; 600 bar; ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	80.0 MPa	11600 psi	at yield, conditioned, 50 mm/min; ISO 527-1,-2
	80.0 MPa	11600 psi	conditioned, 5 mm/min; ISO 527-1,-2
	140 MPa	20300 psi	5 mm/min; ISO 527-1,-2
Elongation at Break	2.0 %	2.0 %	5 mm/min; ISO 527-1,-2
	3.6 %	3.6 %	conditioned, 5 mm/min; ISO 527-1,-2
Elongation at Yield	3.5 %	3.5 %	conditioned, 50 mm/min; ISO 527-1,-2
Tensile Modulus	6.50 GPa	943 ksi	conditioned, 1 mm/min; ISO 527-1,-2
	11.7 GPa	1700 ksi	1 mm/min; ISO 527-1,-2
Flexural Strength	145 MPa	21000 psi	conditioned, 2 mm/min; ISO 178-A
	230 MPa	33400 psi	2 mm/min; ISO 178-A
Flexural Modulus	7.50 GPa	1090 ksi	conditioned, 2 mm/min; ISO 178-A
	11.0 GPa	1600 ksi	2 mm/min; ISO 178-A
Izod Impact, Notched (ISO)	<= 10.0 kJ/mÂ² @Temperature -30.0 Â°C	<= 4.76 ft-lb/inÂ² @Temperature -22.0 Â°F	ISO 180-1A

Mechanical Properties	Metric	English	Comments
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	conditioned; ISO 180-1A
	<= 10.0 kJ/mÂ² @Temperature -40.0 Â°C	<= 4.76 ft-lb/inÂ² @Temperature -40.0 Â°F	ISO 180-1A
	<= 10.0 kJ/mÂ² @Temperature -40.0 Â°C	<= 4.76 ft-lb/inÂ² @Temperature -40.0 Â°F	conditioned; ISO 180-1A
Izod Impact, Unnotched (ISO)	45.0 kJ/mÂ²	21.4 ft-lb/inÂ²	conditioned; ISO 180-1U
	50.0 kJ/mÂ²	23.8 ft-lb/inÂ²	ISO 180-1U
Charpy Impact Unnotched	4.50 J/cmÂ² @Temperature -30.0 Â°C	21.4 ft-lb/inÂ² @Temperature -22.0 Â°F	conditioned; ISO 179-1eU
	5.50 J/cmÂ² @Temperature 23.0 Â°C	26.2 ft-lb/inÂ² @Temperature 73.4 Â°F	conditioned; ISO 179-1eU
	6.00 J/cmÂ² @Temperature 23.0 Â°C	28.6 ft-lb/inÂ² @Temperature 73.4 Â°F	ISO 179-1eU
	6.00 J/cmÂ² @Temperature -30.0 Â°C	28.6 ft-lb/inÂ² @Temperature -22.0 Â°F	ISO 179-1eU
Charpy Impact, Notched	<= 1.00 J/cmÂ² @Temperature -30.0 Â°C	<= 4.76 ft-lb/inÂ² @Temperature -22.0 Â°F	ISO 179-1eA
	<= 1.00 J/cmÂ² @Temperature -30.0 Â°C	<= 4.76 ft-lb/inÂ² @Temperature -22.0 Â°F	conditioned; ISO 179-1eA
	<= 1.00 J/cmÂ² @Temperature -40.0 Â°C	<= 4.76 ft-lb/inÂ² @Temperature -40.0 Â°F	ISO 179-1eA
	<= 1.00 J/cmÂ² @Temperature -40.0 Â°C	<= 4.76 ft-lb/inÂ² @Temperature -40.0 Â°F	conditioned; ISO 179-1eA
	1.20 J/cmÂ² @Temperature 23.0	5.71 ft-lb/inÂ² @Temperature 73.4 Â°F	ISO 179-1eA

Mechanical Properties	Metric	English	Comments
	1.20 J/cmÂ² @Temperature 23.0 Â°C	5.71 ft-lb/inÂ² @Temperature 73.4 Â°F	conditioned; ISO 179-1eA
Puncture Energy	5.00 J @Temperature -30.0 Â°C	3.69 ft-lb @Temperature -22.0 Â°F	ISO 6603-2
	7.00 J @Temperature 23.0 Â°C	5.16 ft-lb @Temperature 73.4 Â°F	ISO 6603-2
	9.00 J @Temperature 23.0 Â°C	6.64 ft-lb @Temperature 73.4 Â°F	conditioned; ISO 6603-2

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	20.0 Âµm/m-Â°C @Temperature 23.0 - 55.0 Â°C	11.1 Âµin/in-Â°F @Temperature 73.4 - 131 Â°F	ISO 11359-1,-2
CTE, linear, Transverse to Flow	90.0 Âµm/m-Â°C @Temperature 23.0 - 55.0 Â°C	50.0 Âµin/in-Â°F @Temperature 73.4 - 131 Â°F	ISO 11359-1,-2
Melting Point	225 Â°C	437 Â°F	10 Â°C/min; ISO 11357-1,-3
Deflection Temperature at 0.46 MPa (66 psi)	220 Â°C	428 Â°F	ISO 75-1,-2
Deflection Temperature at 1.8 MPa (264 psi)	205 Â°C	401 Â°F	ISO 75-1,-2
Deflection Temperature at 8.0 MPa	135 Â°C	275 Â°F	ISO 75-1,-2
Vicat Softening Point	>= 200 Â°C	>= 392 Â°F	50 N; 120 Â°C/h; ISO 306
	>= 200 Â°C	>= 392 Â°F	50 N; 50 Â°C/h; ISO 306
Flammability, UL94	V-1 @Thickness 1.60 mm	V-1 @Thickness 0.0630 in	
	V-0 @Thickness 3.20 mm	V-0 @Thickness 0.126 in	
Oxygen Index	32 %	32 %	Method A; ISO 4589-2
Glow Wire Test	775 Â°C	1430 Â°F	GWIT; IEC 60695-2-12

Thermal Properties	Metric	English	Comments
	@Thickness 1.60 mm	@Thickness 0.0630 in	
	775 Â°C @Thickness 3.00 mm	1430 Â°F @Thickness 0.118 in	GWIT; IEC 60695-2-12
	960 Â°C @Thickness 2.00 mm	1760 Â°F @Thickness 0.0787 in	GWFI; IEC 60695-2-12
	960 Â°C @Thickness 3.00 mm	1760 Â°F @Thickness 0.118 in	GWFI; IEC 60695-2-12
Shrinkage	0.0400 % @Temperature 120 Â°C, Time 14400 sec	0.0400 % @Temperature 248 Â°F, Time 4.00 hour	post-shrinkage, transverse, 60x60x2; ISO 294-4
	0.120 % @Temperature 120 Â°C, Time 14400 sec	0.120 % @Temperature 248 Â°F, Time 4.00 hour	post-shrinkage, 60x60x2; ISO 294-4

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+13 ohm-cm	1.00e+13 ohm-cm	conditioned; IEC 60093
	1.00e+14 ohm-cm	1.00e+14 ohm-cm	IEC 60093
Surface Resistance	1.00e+14 ohm	1.00e+14 ohm	conditioned; IEC 60093
	1.00e+15 ohm	1.00e+15 ohm	IEC 60093
Dielectric Constant	4.2 @Frequency 1.00e+6 Hz	4.2 @Frequency 1.00e+6 Hz	IEC 60250
	4.5 @Frequency 1.00e+6 Hz	4.5 @Frequency 1.00e+6 Hz	conditioned; IEC 60250
	4.7 @Frequency 100 Hz	4.7 @Frequency 100 Hz	IEC 60250
	8.0 @Frequency 100 Hz	8.0 @Frequency 100 Hz	conditioned; IEC 60250
Dielectric Strength	27.0 kV/mm	686 kV/in	conditioned; IEC 60243-1
	28.0 kV/mm	711 kV/in	IEC 60243-1
Dissipation Factor	0.013 @Frequency 100 Hz	0.013 @Frequency 100 Hz	IEC 60250

Electrical Properties	Metric	English	Comments
	0.019 @Frequency 1.00e+6 Hz	0.019 @Frequency 1.00e+6 Hz	IEC 60250
	0.045 @Frequency 1.00e+6 Hz	0.045 @Frequency 1.00e+6 Hz	conditioned; IEC 60250
	0.13 @Frequency 100 Hz	0.13 @Frequency 100 Hz	conditioned; IEC 60250
Comparative Tracking Index	350 V	350 V	Solution A; IEC 60112

Processing Properties	Metric	English	Comments
Melt Temperature	250 Â°C	482 Â°F	Injection molding; ISO 294
Mold Temperature	80.0 Â°C	176 Â°F	Injection molding; ISO 294
Dry Time	2.00 - 6.00 hour @Temperature 80.0 Â°C	2.00 - 6.00 hour @Temperature 176 Â°F	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com
Email : sales@lookpolymers.com
Tel : +86 021-51131842
Mobile : +86 13061808058
Skype : lookpolymers
Address : United North Road 215,Fengxian District, Shanghai City,China