Lanxess DurethanÂ® BG 30 X W1 000000 Nylon 6, Glass Fiber Reinforced

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6, Glass Bead Filled

Material Notes:

PA 6, 30% glass fibers/glass spheres, injection molding, low tendency to warp, weather stabilizedInformation provided by LANXESS.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Lanxess-Durethan-BG-30-X-W1-000000-Nylon-6-Glass-Fiber-Reinforced.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.36 g/cc	1.36 g/cc	ISO 1183
Bulk Density	0.700 g/cc	0.0253 lb/inÂ³	ISO 60
Moisture Absorption at Equilibrium	2.2 %	2.2 %	50% RH; ISO 62
Water Absorption at Saturation	7.0 %	7.0 %	ISO 62
Linear Mold Shrinkage, Flow	0.0010 cm/cm	0.0010 in/in	Post-shrinkage, 60x60x2; 120Â°C; 4 hour; ISO 294-4
	0.0030 cm/cm	0.0030 in/in	60x60x2; 280Â°C / MT 80Â°C; 600 bar; ISO 294-4
Linear Mold Shrinkage, Transverse	0.0020 cm/cm	0.0020 in/in	Post-shrinkage, 60x60x2; 120Â°C; 4 hour; ISO 294-4
	0.0030 cm/cm	0.0030 in/in	60x60x2; 280Â°C / MT 80Â°C; 600 bar; ISO 294-4

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	185 MPa	26800 psi	ISO 2039-1
Tensile Strength at Break	65.0 MPa	9430 psi	cond.; ISO 527-1, -2; 5 mm/min
	125 MPa	18100 psi	d.a.m.; ISO 527-1, -2; 5 mm/min
Elongation at Break	4.0 %	4.0 %	d.a.m.; ISO 527-1, -2; 5 mm/min
	10 %	10 %	cond.; ISO 527-1, -2; 5 mm/min
Tensile Modulus	3.20 GPa	464 ksi	cond.; ISO 527-1, -2; 1 mm/min
	6.40 GPa	928 ksi	d.a.m.; ISO 527-1, -2; 1 mm/min
Flexural Strength	100 MPa @Strain 8.00 %	14500 psi @Strain 8.00 %	cond., 2 mm/min; ISO 178-A
	185 MPa @Strain 5.00 %	26800 psi @Strain 5.00 %	d.a.m., 2 mm/min; ISO 178-A
	80.0 MPa	11600 psi	

Mechanical Properties	Metric	English	Comments
Flexural Yield Strength	@Strain 3.50 %	@Strain 3.50 %	cond., 2 mm/min; ISO 178-A
	175 MPa @Strain 3.50 %	25400 psi @Strain 3.50 %	d.a.m., 2 mm/min; ISO 178-A
Flexural Modulus	2.80 GPa	406 ksi	cond., 2 mm/min; ISO 178-A
	5.80 GPa	841 ksi	d.a.m., 2 mm/min; ISO 178-A
Izod Impact, Notched (ISO)	<= 10.0 kJ/mÂ² @Temperature 23.0 Â°C	<= 4.76 ft-lb/inÂ² @Temperature 73.4 Â°F	d.a.m.; ISO 180-1A
	<= 10.0 kJ/mÂ² @Temperature 23.0 Â°C	<= 4.76 ft-lb/inÂ² @Temperature 73.4 Â°F	cond.; ISO 180-1A
	<= 10.0 kJ/mÂ² @Temperature -30.0 Â°C	<= 4.76 ft-lb/inÂ² @Temperature -22.0 Â°F	d.a.m.; ISO 180-1A
	<= 10.0 kJ/mÂ² @Temperature -30.0 Â°C	<= 4.76 ft-lb/inÂ² @Temperature -22.0 Â°F	cond.; ISO 180-1A
Izod Impact, Unnotched (ISO)	30.0 kJ/mÂ² @Temperature -30.0 Â°C	14.3 ft-lb/inÂ² @Temperature -22.0 Â°F	d.a.m.; ISO 180-1U
	35.0 kJ/mÂ² @Temperature 23.0 Â°C	16.7 ft-lb/inÂ² @Temperature 73.4 Â°F	d.a.m.; ISO 180-1U
	40.0 kJ/mÂ² @Temperature -30.0 Â°C	19.0 ft-lb/inÂ² @Temperature -22.0 Â°F	cond.; ISO 180-1U
	80.0 kJ/mÂ² @Temperature 23.0 Â°C	38.1 ft-lb/inÂ² @Temperature 73.4 Â°F	cond.; ISO 180-1U
Charpy Impact Unnotched	4.00 J/cmÂ² @Temperature -30.0 Â°C	19.0 ft-lb/inÂ² @Temperature -22.0 Â°F	d.a.m.; ISO 179-1eU
	4.50 J/cmÂ² @Temperature 23.0 Â°C	21.4 ft-lb/inÂ² @Temperature 73.4 Â°F	d.a.m.; ISO 179-1eU
	4.50 J/cmÂ²	21.4 ft-lb/inÂ²	

Mechanical Properties	Metric	English	Comments
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	cond.; ISO 179-1eU
	7.50 J/cmÂ² @Temperature 23.0 Â°C	35.7 ft-lb/inÂ² @Temperature 73.4 Â°F	cond.; ISO 179-1eU
Charpy Impact, Notched	<= 1.00 J/cmÂ² @Temperature 23.0 Â°C	<= 4.76 ft-lb/inÂ² @Temperature 73.4 Â°F	d.a.m.; ISO 179-1eA
	<= 1.00 J/cmÂ² @Temperature -30.0 Â°C	<= 4.76 ft-lb/inÂ² @Temperature -22.0 Â°F	d.a.m.; ISO 179-1eA
	<= 1.00 J/cmÂ² @Temperature -30.0 Â°C	<= 4.76 ft-lb/inÂ² @Temperature -22.0 Â°F	cond.; ISO 179-1eA
	1.00 J/cmÂ² @Temperature 23.0 Â°C	4.76 ft-lb/inÂ² @Temperature 73.4 Â°F	cond.; ISO 179-1eA
Puncture Energy	1.70 J @Load <=70.4 kg, Temperature -30.0 Â°C	1.25 ft-lb @Load <=155 lb, Temperature -22.0 Â°F	ISO 6603-2
	2.00 J @Load <=71.4 kg, Temperature 23.0 Â°C	1.48 ft-lb @Load <=157 lb, Temperature 73.4 Â°F	ISO 6603-2

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	30.0 Âµm/m-Â°C @Temperature 23.0 - 55.0 Â°C	16.7 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	222 Â°C	432 Â°F	10Â°C/min; ISO 11357-1, -3
Deflection Temperature at 0.46 MPa (66 psi)	210 Â°C	410 Â°F	ISO 75-1, -2
Deflection Temperature at 1.8 MPa (264 psi)	190 Â°C	374 Â°F	ISO 75-1, -2
Vicat Softening Point	>= 200 Â°C @Load 5.10 kg	>= 392 Â°F @Load 11.2 lb	120Â°C/hour; ISO 306

Thermal Properties Processing Properties	Metric Metric	English English	Comments Comments
Melt Temperature	270 - 290 Â°C	518 - 554 Â°F	
	280 Â°C	536 Â°F	for test specimens; ISO 294
Mold Temperature	80.0 Â°C	176 Â°F	for test specimens; ISO 294
	80.0 - 120 Â°C	176 - 248 Â°F	
Drying Temperature	80.0 Â°C	176 Â°F	
Dry Time	2 - 6 hour	2 - 6 hour	
Moisture Content	0.030 - 0.12 %	0.030 - 0.12 %	residual; Karl Fischer Test

Descriptive Properties	Value	Comments
Flammability Test	passed	ISO 3795; US-FMVSS302
ISO Shortname	ISO 1874-PA 6, GLR, 14-060, (GB+GF)30	

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