

Lanxess Durethan® BC 550 DUSXBL 900116 Nylon 6

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6, Heat Stabilized , Nylon 6, Impact Grade , Nylon 6, Unreinforced

Material Notes:

PA 6, non-reinforced, extrusion, Blastorm, impact modified, heat-ageing stabilized Information provided by LANXESS.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Lanxess-Durethan-BC-550-DUSXBL-900116-Nylon-6.php

Physical Properties	Metric	English	Comments
Density	1.07 g/cc	0.0387 lb/in ³	ISO 1183
Moisture Absorption at Equilibrium	2.4 %	2.4 %	50% RH; ISO 62
Water Absorption at Saturation	9.8 %	9.8 %	ISO 62
Linear Mold Shrinkage, Flow	0.013 cm/cm	0.013 in/in	60x60x2; 260°C / MT 80°C; 600 bar; ISO 294-4
Linear Mold Shrinkage, Transverse	0.015 cm/cm	0.015 in/in	60x60x2; 260°C / MT 80°C; 600 bar; ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	50.0 MPa	7250 psi	at yield, 50 mm/min; ISO 527-1,-2
Elongation at Break	110 %	110 %	50 mm/min; ISO 527-1,-2
Elongation at Yield	3.8 %	3.8 %	50 mm/min; ISO 527-1,-2
Tensile Modulus	0.470 GPa	68.2 ksi	conditioned, 1 mm/min; ISO 527-1,-2
	2.00 GPa	290 ksi	1 mm/min; ISO 527-1,-2
Flexural Strength	20.0 MPa	2900 psi	conditioned, 2 mm/min; ISO 178-A
	70.0 MPa	10200 psi	2 mm/min; ISO 178-A
Flexural Modulus	0.470 GPa	68.2 ksi	conditioned, 2 mm/min; ISO 178-A
	1.80 GPa	261 ksi	2 mm/min; ISO 178-A
Izod Impact, Notched (ISO)	20.0 kJ/m ²	9.52 ft-lb/in ²	ISO 180-1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	75.0 kJ/m ²	35.7 ft-lb/in ²	ISO 180-1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	100 kJ/m ²	47.6 ft-lb/in ²	conditioned; ISO 180-1A

Mechanical Properties	Metric @ Temperature 23.0 °C	English @ Temperature 73.4 °F	Comments
Charpy Impact, Notched	2.00 J/cm ²	9.52 ft-lb/in ²	ISO 179-1eA
	@ Temperature -30.0 °C	@ Temperature -22.0 °F	
	9.00 J/cm ²	42.8 ft-lb/in ²	ISO 179-1eA
	@ Temperature 23.0 °C	@ Temperature 73.4 °F	
	13.0 J/cm ²	61.9 ft-lb/in ²	conditioned; ISO 179-1eA
	@ Temperature 23.0 °C	@ Temperature 73.4 °F	
Puncture Energy	64.0 J	47.2 ft-lb	ISO 6603-2
	@ Temperature 23.0 °C	@ Temperature 73.4 °F	
	64.0 J	47.2 ft-lb	ISO 6603-2
	@ Temperature -30.0 °C	@ Temperature -22.0 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	150 Åµm/m-Å°C	83.3 Åµin/in-Å°F	ISO 11359-1,-2
	@ Temperature 23.0 - 55.0 Å°C	@ Temperature 73.4 - 131 Å°F	
CTE, linear, Transverse to Flow	150 Åµm/m-Å°C	83.3 Åµin/in-Å°F	ISO 11359-1,-2
	@ Temperature 23.0 - 55.0 Å°C	@ Temperature 73.4 - 131 Å°F	
Melting Point	220 Å°C	428 Å°F	10 Å°C/min; ISO 11357-1,-3
Deflection Temperature at 0.46 MPa (66 psi)	95.0 Å°C	203 Å°F	ISO 75-1,-2
Deflection Temperature at 1.8 MPa (264 psi)	53.0 Å°C	127 Å°F	ISO 75-1,-2
Shrinkage	0.100 %	0.100 %	post-shrinkage, transverse, 60x60x2; ISO 294-4
	@ Temperature 120 Å°C, Time 14400 sec	@ Temperature 248 Å°F, Time 4.00 hour	
	0.200 %	0.200 %	post-shrinkage, 60x60x2; ISO 294-4
	@ Temperature 120 Å°C, Time 14400 sec	@ Temperature 248 Å°F, Time 4.00 hour	

Processing Properties	Metric	English	Comments
Melt Temperature	260 Å°C	500 Å°F	Injection molding; ISO 294

Processing Properties	Metric	English	Comments
Mold Temperature	80.0 Å°C	176 Å°F	Injection molding; ISO 294
Dry Time	2.00 - 6.00 hour @Temperature 80.0 Å°C	2.00 - 6.00 hour @Temperature 176 Å°F	
Moisture Content	0.00 - 0.060 %	0.00 - 0.060 %	residual; Karl Fischer test

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