

Lanxess Durethan® BC 600 HTS DUSXBL 900116 Nylon 6, Impact Modified

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6, Impact Grade

Material Notes:

PA 6, non-reinforced, extrusion, blow molding, impact modified, heat-aging stabilized Information provided by LANXESS.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Lanxess-Durethan-BC-600-HTS-DUSXBL-900116-Nylon-6-Impact-Modified.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.04 g/cc	1.04 g/cc	ISO 1183
Moisture Absorption at Equilibrium	2.1 %	2.1 %	50% RH; ISO 62
Water Absorption at Saturation	7.4 %	7.4 %	ISO 62
Linear Mold Shrinkage, Flow	0.00010 cm/cm	0.00010 in/in	Post-shrinkage, 60x60x2; 120Â°C; 4 hour; ISO 294-4
	0.017 cm/cm	0.017 in/in	60x60x2; 260Â°C / MT 80Â°C; 600 bar; ISO 294-4
Linear Mold Shrinkage, Transverse	0.0050 cm/cm	0.0050 in/in	Post-shrinkage, 60x60x2; 120Â°C; 4 hour; ISO 294-4
	0.014 cm/cm	0.014 in/in	60x60x2; 260Â°C / MT 80Â°C; 600 bar; ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	29.0 MPa	4210 psi	cond.; ISO 527-1, -2; 50 mm/min
	39.0 MPa	5660 psi	d.a.m.; ISO 527-1, -2; 50 mm/min
Elongation at Yield	6.3 %	6.3 %	d.a.m.; ISO 527-1, -2; 50 mm/min
	92 %	92 %	cond.; ISO 527-1, -2; 50 mm/min
Tensile Modulus	0.350 GPa	50.8 ksi	cond.; ISO 527-1, -2; 1 mm/min
	1.30 GPa	189 ksi	d.a.m.; ISO 527-1, -2; 1 mm/min
Flexural Strength	15.0 MPa	2180 psi	cond., 2 mm/min; ISO 178-A
	@Strain 8.00 %	@Strain 8.00 %	
	50.0 MPa	7250 psi	d.a.m., 2 mm/min; ISO 178-A
	@Strain 6.00 %	@Strain 6.00 %	
Flexural Yield Strength	11.0 MPa	1600 psi	cond., 2 mm/min; ISO 178-A
	@Strain 3.50 %	@Strain 3.50 %	
	44.0 MPa	6380 psi	

Mechanical Properties	Metric @ Strain 3.50 %	English @ Strain 3.50 %	d.a.m., 2 mm/min; ISO 178-A Comments
Flexural Modulus	0.350 GPa	50.8 ksi	cond., 2 mm/min; ISO 178-A
	1.40 GPa	203 ksi	d.a.m., 2 mm/min; ISO 178-A
Izod Impact, Notched (ISO)	70.0 kJ/m ² @Temperature -30.0 °C	33.3 ft-lb/in ² @Temperature -22.0 °F	d.a.m.; ISO 180-1A
	85.0 kJ/m ² @Temperature -30.0 °C	40.4 ft-lb/in ² @Temperature -22.0 °F	cond.; ISO 180-1A
	90.0 kJ/m ² @Temperature 23.0 °C	42.8 ft-lb/in ² @Temperature 73.4 °F	d.a.m.; ISO 180-1A
	90.0 kJ/m ² @Temperature 23.0 °C	42.8 ft-lb/in ² @Temperature 73.4 °F	cond.; ISO 180-1A
Izod Impact, Unnotched (ISO)	NB	NB	d.a.m.; ISO 180-1U
	NB	NB	cond.; ISO 180-1U
Charpy Impact Unnotched	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	d.a.m.; ISO 179-1eU
	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	cond.; ISO 179-1eU
	NB @Temperature -30.0 °C	NB @Temperature -22.0 °F	d.a.m.; ISO 179-1eU
	NB @Temperature -30.0 °C	NB @Temperature -22.0 °F	cond.; ISO 179-1eU
Charpy Impact, Notched	6.00 J/cm ² @Temperature -30.0 °C	28.6 ft-lb/in ² @Temperature -22.0 °F	cond.; ISO 179-1eA
	7.00 J/cm ² @Temperature -30.0 °C	33.3 ft-lb/in ² @Temperature -22.0 °F	d.a.m.; ISO 179-1eA
	10.0 J/cm ²		

Mechanical Properties	Metric	English	Comments
	47.6 ft-lb/in ² @Temperature 23.0 °C	47.6 ft-lb/in ² @Temperature 73.4 °F	cond.; ISO 179-1eA
	11.0 J/cm ² @Temperature 23.0 °C	52.3 ft-lb/in ² @Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	170 Âµm/m-°C @Temperature 23.0 - 55.0 °C	94.4 Âµin/in-°F @Temperature 73.4 - 131 °F	ISO 11359-1, -2
CTE, linear, Transverse to Flow	190 Âµm/m-°C @Temperature 23.0 - 55.0 °C	106 Âµin/in-°F @Temperature 73.4 - 131 °F	ISO 11359-1, -2
Melting Point	219 °C	426 °F	10°C/min; ISO 11357-1, -3
Deflection Temperature at 0.46 MPa (66 psi)	81.0 °C	178 °F	ISO 75-1, -2
Deflection Temperature at 1.8 MPa (264 psi)	55.0 °C	131 °F	ISO 75-1, -2

Processing Properties	Metric	English	Comments
Melt Temperature	230 - 280 °C	446 - 536 °F	
	260 °C	500 °F	for test specimens; ISO 294
Mold Temperature	60.0 - 90.0 °C	140 - 194 °F	
	80.0 °C	176 °F	for test specimens; ISO 294
Drying Temperature	80.0 °C	176 °F	
Dry Time	2 - 6 hour	2 - 6 hour	
Moisture Content	0.00 - 0.060 %	0.00 - 0.060 %	residual; Karl Fischer Test

Descriptive Properties	Value	Comments
ISO Shortname	ISO 1874-PA 6-HI, BHR, 14-010	

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