

Lanxess Durethan® BKV 50 H3.0 000000 Nylon 6, 50% Glass Fibers

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6, 50% Glass Fiber Filled

Material Notes:

PA 6, 50% glass fibers, injection molding, heat-ageing stabilized

Order this product through the following link:

http://www.lookpolymers.com/polymer_Lanxess-Durethan-BKV-50-H30-000000-Nylon-6-50-Glass-Fibers.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.57 g/cc	1.57 g/cc	ISO 1183
Bulk Density	0.700 g/cc	0.0253 lb/in ³	ISO 60
Moisture Absorption at Equilibrium	1.5 %	1.5 %	50% RH; ISO 62
Water Absorption at Saturation	5.0 %	5.0 %	ISO 62
Linear Mold Shrinkage, Flow	0.0016 cm/cm	0.0016 in/in	Mold Temp 80°C; Melt Temp 280°C; 400 bar; ISO 294-4
	@Thickness 3.00 mm	@Thickness 0.118 in	
Linear Mold Shrinkage, Transverse	0.0085 cm/cm	0.0085 in/in	Mold Temp 80°C; Melt Temp 280°C; 400 bar; ISO 294-4
	@Thickness 3.00 mm	@Thickness 0.118 in	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	140 MPa	20300 psi	Conditioned; ISO 527-1,-2
	220 MPa	31900 psi	ISO 527-1,-2
Elongation at Break	3.0 %	3.0 %	ISO 527-1,-2
	5.0 %	5.0 %	Conditioned; ISO 527-1,-2
Tensile Modulus	9.50 GPa	1380 ksi	Conditioned; ISO 527-1,-2
	14.5 GPa	2100 ksi	ISO 527-1,-2
Flexural Strength	230 MPa	33400 psi	Conditioned; ISO 178
	@Strain 5.00 %	@Strain 5.00 %	
	360 MPa	52200 psi	ISO 178
	@Strain 3.00 %	@Strain 3.00 %	
Flexural Yield Strength	230 MPa	33400 psi	Conditioned; ISO 178
	@Strain 5.00 %	@Strain 5.00 %	
	360 MPa	52200 psi	ISO 178

Mechanical Properties	@Strain 3.00 % Metric	@Strain 3.00 % English	Comments
Flexural Modulus	9.00 GPa	1310 ksi	Conditioned; ISO 178
	13.9 GPa	2020 ksi	ISO 178
Izod Impact, Notched (ISO)	15.0 kJ/m ²	7.14 ft-lb/in ²	ISO 180-1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	15.0 kJ/m ²	7.14 ft-lb/in ²	Conditioned; ISO 180-1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	20.0 kJ/m ²	9.52 ft-lb/in ²	ISO 180-1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	25.0 kJ/m ²	11.9 ft-lb/in ²	Conditioned; ISO 180-1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Izod Impact, Unnotched (ISO)	95.0 kJ/m ²	45.2 ft-lb/in ²	ISO 180-1U
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	95.0 kJ/m ²	45.2 ft-lb/in ²	ISO 180-1U
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	95.0 kJ/m ²	45.2 ft-lb/in ²	Conditioned; ISO 180-1U
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	100 kJ/m ²	47.6 ft-lb/in ²	Conditioned; ISO 180-1U
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact Unnotched	9.00 J/cm ²	42.8 ft-lb/in ²	ISO 179-1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	9.00 J/cm ²	42.8 ft-lb/in ²	Conditioned; ISO 179-1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	10.0 J/cm ²	47.6 ft-lb/in ²	ISO 179-1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	11.0 J/cm ²	52.3 ft-lb/in ²	

Mechanical Properties	Metric @ Temperature 23.0 Â°C	English @ Temperature 73.4 Â°F	Conditioned; ISO 179-1eU Comments
Charpy Impact, Notched	1.50 J/cmÂ²	7.14 ft-lb/inÂ²	ISO 179-1eA
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	
	1.50 J/cmÂ²	7.14 ft-lb/inÂ²	Conditioned; ISO 179-1eA
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	
	2.00 J/cmÂ²	9.52 ft-lb/inÂ²	ISO 179-1eA
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
	2.50 J/cmÂ²	11.9 ft-lb/inÂ²	Conditioned; ISO 179-1eA
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	20.0 Âµm/m-Â°C	11.1 Âµin/in-Â°F	ISO 11359-1,-2
CTE, linear, Transverse to Flow	70.0 Âµm/m-Â°C	38.9 Âµin/in-Â°F	ISO 11359-1,-2
Melting Point	222 Â°C	432 Â°F	ISO 11357-1,-3
Deflection Temperature at 0.46 MPa (66 psi)	215 Â°C	419 Â°F	ISO 75-1,-2
Deflection Temperature at 1.8 MPa (264 psi)	205 Â°C	401 Â°F	ISO 75-1,-2
Vicat Softening Point	>= 200 Â°C	>= 392 Â°F	120Â°C/h; ISO 306
	@Load 5.10 kg	@Load 11.2 lb	
	>= 200 Â°C	>= 392 Â°F	50Â°C/h; ISO 306
	@Load 5.10 kg	@Load 11.2 lb	
Flammability, UL94	HB	HB	
	@Thickness 1.60 mm	@Thickness 0.0630 in	
	HB	HB	
	@Thickness 3.20 mm	@Thickness 0.126 in	
Glow Wire Test	650 Â°C	1200 Â°F	IEC 60695-2-12
	@Diameter 2.00 mm	@Diameter 0.0787 in	
Shrinkage	0.020 %	0.020 %	Molding Post-shrinkage; ISO 294-4
	@Temperature 120 Â°C,	@Temperature 248 Â°F,	

Thermal Properties	Time 14400 sec Metric	Time 4.00 hour English	Comments
	0.050 %	0.050 %	
	@Temperature 120 Â°C, Time 14400 sec	@Temperature 248 Â°F, Time 4.00 hour	Molding Post-shrinkage; ISO 294-4

Processing Properties	Metric	English	Comments
Melt Temperature	280 Â°C	536 Â°F	Processing conditions for test specimens; ISO 294
	270 - 290 Â°C	518 - 554 Â°F	Recommended
Mold Temperature	80.0 Â°C	176 Â°F	Processing conditions for test specimens; ISO 294
	80.0 - 120 Â°C	176 - 248 Â°F	Recommended
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; Acc. To Karl Fischer

Descriptive Properties	Value	Comments
Flammability	Passed US-FMVSS302	ISO 3795
ISO Shortname	ISO 1874-PA 6,GHR,14-140,GF50	

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