

Nilit Nilamon B3 H7 GK 35 15% Glass Fiber, 25% Mineral Reinforced PA6

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , Glass/Mineral Reinforced

Material Notes:

Description: Nilamon B3 H7 GK 35 provides a combination between low warpage and high stiffness, while retaining a good impact strength. It has a high heat aging resistance, so that it is suitable for under the hood applications. Information provided by NILIT.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Nilit-Nilamon-B3-H7-GK-35-15-Glass-Fiber-25-Mineral-Reinforced-PA6.php

Physical Properties	Metric	English	Comments
Density	1.52 g/cc	0.0549 lb/in ³	ASTM D792, ISO 1183
Water Absorption	0.90 %	0.90 %	23°C, 24h in H ₂ O; sim. ISO 62
Water Absorption at Saturation	4.8 %	4.8 %	sim. ISO 62
Linear Mold Shrinkage, Flow	0.0030 cm/cm	0.0030 in/in	Euronil
Linear Mold Shrinkage, Transverse	0.0050 cm/cm	0.0050 in/in	Euronil

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	135 MPa	19600 psi	ISO 527, ASTM D638
Elongation at Break	3.0 %	3.0 %	ISO 527, ASTM D638
Flexural Yield Strength	200 MPa	29000 psi	ISO 178, ASTM D790
	120 MPa	17400 psi	ISO 178, ASTM D790
	@Temperature 90.0 °C	@Temperature 194 °F	
Flexural Modulus	6.90 GPa	1000 ksi	ISO 178, ASTM D790
	3.80 GPa	551 ksi	ISO 178, ASTM D790
	@Temperature 90.0 °C	@Temperature 194 °F	
Izod Impact, Notched (ISO)	3.00 kJ/m ²	1.43 ft-lb/in ²	ISO 180/1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	5.00 kJ/m ²	2.38 ft-lb/in ²	ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact Unnotched	4.00 J/cm ²	19.0 ft-lb/in ²	ISO 179
Charpy Impact, Notched	0.550 J/cm ²	2.62 ft-lb/in ²	ISO 179
	0.350 J/cm ²	1.67 ft-lb/in ²	ISO 179

Mechanical Properties	@Temperature -30.0 °C Metric	@Temperature -22.0 °F English	Comments
Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	125 °C	257 °F	20,000 hr; IEC 216
Deflection Temperature at 0.46 MPa (66 psi)	206 °C	403 °F	ISO 75, ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	192 °C	378 °F	ISO 75, ASTM D648
Vicat Softening Point	215 °C	419 °F	49 N; ISO 306, ASTM D1525
	221 °C	430 °F	9.8 N; ISO 306, ASTM D1525
Flammability, UL94	HB	HB	
	@Thickness 0.800 mm	@Thickness 0.0315 in	
	HB	HB	
	@Thickness 3.20 mm	@Thickness 0.126 in	
Oxygen Index	24 %	24 %	ASTM D2863
Glow Wire Test	650 °C	1200 °F	Glow Wire Flammability Index; IEC 694-2-12
	@Thickness 0.800 mm	@Thickness 0.0315 in	
	750 °C	1380 °F	Glow Wire Flammability Index; IEC 694-2-12
	@Thickness 3.20 mm	@Thickness 0.126 in	

Electrical Properties	Metric	English	Comments
Dielectric Strength	21.0 kV/mm	533 kV/in	ASTM D149
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Comparative Tracking Index	300 V	300 V	Sol. B; IEC 112, UL 746A
	@Thickness 3.20 mm	@Thickness 0.126 in	
	500 V	500 V	Sol. A; IEC 112, UL 746A
	@Thickness 3.20 mm	@Thickness 0.126 in	

Processing Properties	Metric	English	Comments
Nozzle Temperature	250 - 285 °C	482 - 545 °F	
Zone 1	240 - 270 °C	464 - 518 °F	hopper
Zone 2	240 - 270 °C	464 - 518 °F	
Zone 3	250 - 280 °C	482 - 536 °F	

Processing Properties	Metric	English	Comments
Melt Temperature	250 - 290 °C	482 - 554 °F	Do not melt above 310°C
Mold Temperature	90.0 - 110 °C	194 - 230 °F	Preferred
Drying Temperature	80.0 - 85.0 °C	176 - 185 °F	
Dry Time	4 hour	4 hour	
Injection Pressure	70.0 - 100 MPa	10200 - 14500 psi	

Descriptive Properties	Value	Comments
Clamping Force	in tons, 0.7 times the projected surface area in cm ²	
Heat Resistance - Ball Test	OK	at 125°C, IEC 309
	OK	at 165°C, IEC 309
Holding Pressure	90 MPa	

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