

## Nilit Nilamid B G6 FR HF 30% Glass Fiber Reinforced, Flame Retardant PA6

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , 30% Glass Fiber Filled

### Material Notes:

Description: Nilamid B G6 FR HF is a NYLON 6 based flame retardant compound that does not contain any halogen or red phosphorous. It has a good overall mechanical performance, has an excellent price/performance ratio and can be colored in almost any color. It does not cause any corrosion of or deposits on electrical contacts. Laser marking grades with a very good contrast are available. Key characteristics: UL 94 V2 at 0.75 mm Halogen and red phosphorous free Good overall mechanical performance Low density Colorable in a wide range of colors Easy processing, fast cycling No corrosion of or deposits on electrical contacts Information provided by NILIT.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Nilit-Nilamid-B-G6-FR-HF-30-Glass-Fiber-Reinforced-Flame-Retardant-PA6.php](http://www.lookpolymers.com/polymer_Nilit-Nilamid-B-G6-FR-HF-30-Glass-Fiber-Reinforced-Flame-Retardant-PA6.php)

Physical Properties	Metric	English	Comments
Density	1.39 g/cc	0.0502 lb/in <sup>3</sup>	ASTM D792, ISO 1183
Water Absorption	1.0 %	1.0 %	23°C, 24h in H <sub>2</sub> O; sim. ISO 62
Water Absorption at Saturation	5.5 %	5.5 %	sim. ISO 62
Linear Mold Shrinkage, Flow	0.0030 cm/cm	0.0030 in/in	Euronil
Linear Mold Shrinkage, Transverse	0.0060 cm/cm	0.0060 in/in	Euronil

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	100 MPa	14500 psi	ISO 527, ASTM D638
Elongation at Break	3.0 %	3.0 %	ISO 527, ASTM D638
Flexural Yield Strength	145 MPa	21000 psi	ISO 178, ASTM D790
	95.0 MPa @Temperature 90.0 °C	13800 psi @Temperature 194 °F	ISO 178, ASTM D790
Flexural Modulus	7.60 GPa	1100 ksi	ISO 178, ASTM D790
	3.25 GPa @Temperature 90.0 °C	471 ksi @Temperature 194 °F	ISO 178, ASTM D790
Izod Impact, Notched (ISO)	3.00 kJ/m <sup>2</sup> @Temperature -30.0 °C	1.43 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 180/1A
	5.00 kJ/m <sup>2</sup> @Temperature 23.0 °C	2.38 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 180/1A
Charpy Impact Unnotched	2.50 J/cm <sup>2</sup>	11.9 ft-lb/in <sup>2</sup>	ISO 179

Mechanical Properties	Metric	English	Comments
<b>Thermal Properties</b>	<b>Metric</b>	<b>English</b>	<b>Comments</b>
Maximum Service Temperature, Air	110 °C	230 °F	20,000 hr; IEC 216
Deflection Temperature at 0.46 MPa (66 psi)	215 °C	419 °F	ISO 75, ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	191 °C	376 °F	ISO 75, ASTM D648
Vicat Softening Point	210 °C	410 °F	49 N; ISO 306, ASTM D1525
	217 °C	423 °F	9.8 N; ISO 306, ASTM D1525
Flammability, UL94	V-2	V-2	
	@Thickness 0.800 mm	@Thickness 0.0315 in	
	V-2	V-2	
	@Thickness 1.60 mm	@Thickness 0.0630 in	
	V-2	V-2	
	@Thickness 3.20 mm	@Thickness 0.126 in	
Oxygen Index	24 %	24 %	ASTM D2863
Glow Wire Test	960 °C	1760 °F	Glow Wire Flammability Index; IEC 694-2-12
	@Thickness 3.20 mm	@Thickness 0.126 in	
	960 °C	1760 °F	Glow Wire Flammability Index; IEC 694-2-12
	@Thickness 0.800 mm	@Thickness 0.0315 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	550 V	550 V	Sol. A; IEC 112, UL 746A
	@Thickness 3.20 mm	@Thickness 0.126 in	
	550 V	550 V	Sol. B; IEC 112, UL 746A
	@Thickness 3.20 mm	@Thickness 0.126 in	

Descriptive Properties	Value	Comments
Heat Resistance - Ball Test	OK	at 125°C, IEC 309
	OK	at 165°C, IEC 309

Descriptive Properties	Value	Comments
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## Contact Songhan Plastic Technology Co.,Ltd.

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