

SABIC Innovative Plastics LNP THERMOTUF IX02582 PA6.12

Category : Polymer , Thermoplastic , Nylon , Nylon 612

Material Notes:

LNP* Thermotuf* IX02582 is a compound based on Nylon 6/12 resin containing Proprietary Filler(s). Added features of this material include: High Impact.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-LNP-THERMOTUF-IX02582-PA612.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.41 g/cc	1.41 g/cc	ASTM D792
Density	1.41 g/cc	0.0509 lb/in ³	ASTM D792
Moisture Absorption	0.160 %	0.160 %	50% RH, 24 hrs; ASTM D570
	0.280 %	0.280 %	23Â°C / 50% RH; ISO 62
Linear Mold Shrinkage, Flow	0.0010 - 0.0030 cm/cm @Time 86400 sec	0.0010 - 0.0030 in/in @Time 24.0 hour	ASTM D955
Linear Mold Shrinkage, Transverse	0.010 - 0.030 cm/cm @Time 86400 sec	0.010 - 0.030 in/in @Time 24.0 hour	ASTM D955

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	156 MPa	22600 psi	Type I, 5 mm/min; ASTM D638
	157 MPa	22800 psi	5 mm/min; ISO 527
Elongation at Break	2.8 %	2.8 %	Type I, 5 mm/min; ASTM D638
	2.8 %	2.8 %	5 mm/min; ISO 527
Tensile Modulus	11.81 GPa	1713 ksi	1 mm/min; ISO 527
	12.12 GPa	1758 ksi	50 mm/min; ASTM D638
Flexural Strength	233 MPa	33800 psi	ISO 178
	235 MPa	34100 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Yield Strength	233 MPa	33800 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	9.70 GPa	1410 ksi	1.3 mm/min, 50 mm span; ASTM D790
	9.98 GPa	1450 ksi	2 mm/min; ISO 178

Mechanical Properties	1.58 J/cm Metric	2.96 ft-lb/in English	ASTM D256 Comments
Izod Impact, Unnotched	9.95 J/cm	18.6 ft-lb/in	ASTM D4812
Izod Impact, Notched (ISO)	15.0 kJ/mÂ²	7.14 ft-lb/inÂ²	80*10*4; ISO 180/1A
Izod Impact, Unnotched (ISO)	62.0 kJ/mÂ²	29.5 ft-lb/inÂ²	80*10*4; ISO 180/1U
Dart Drop, Total Energy	20.0 J @Temperature 23.0 Â°C	14.8 ft-lb @Temperature 73.4 Â°F	ASTM D3763
Impact Test	5.00 J	3.69 ft-lb	Multiaxial Impact; ISO 6603

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	39.0 Âµm/m-Â°C @Temperature -30.0 - 30.0 Â°C	21.7 Âµin/in-Â°F @Temperature -22.0 - 86.0 Â°F	ASTM D696
CTE, linear, Transverse to Flow	75.0 Âµm/m-Â°C @Temperature -30.0 - 30.0 Â°C	41.7 Âµin/in-Â°F @Temperature -22.0 - 86.0 Â°F	ASTM D696
Deflection Temperature at 0.46 MPa (66 psi)	210 Â°C	410 Â°F	Flatw 80*10*4 sp=64mm; ISO 75/Bf
	214 Â°C @Thickness 3.20 mm	417 Â°F @Thickness 0.126 in	unannealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	196 Â°C	385 Â°F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	198 Â°C @Thickness 3.20 mm	388 Â°F @Thickness 0.126 in	unannealed; ASTM D648

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