

SABIC Innovative Plastics LNP THERMOCOMP HH0420A PA11

Category : Polymer , Thermoplastic , Nylon , Nylon 11

Material Notes:

LNP* THERMOCOMP* HH0420A is a compound based on Nylon 11 containing proprietary fillers. Added features of this material are High Specific Gravity.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-LNP-THERMOCOMP-HH0420A-PA11.php

Physical Properties	Metric	English	Comments
Specific Gravity	4.30 g/cc	4.30 g/cc	ASTM D792
Density	4.28 g/cc	0.155 lb/in ³	ASTM D792
Moisture Absorption	0.0200 %	0.0200 %	50% RH, 24 hrs; ASTM D570
	0.0300 %	0.0300 %	23°C / 50% RH; ISO 62
Linear Mold Shrinkage, Flow	0.0070 - 0.0090 cm/cm @Time 86400 sec	0.0070 - 0.0090 in/in @Time 24.0 hour	ASTM D955
Linear Mold Shrinkage, Transverse	0.0070 - 0.0090 cm/cm @Time 86400 sec	0.0070 - 0.0090 in/in @Time 24.0 hour	ASTM D955

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	40.0 MPa	5800 psi	Type I, 5 mm/min; ASTM D638
	41.0 MPa	5950 psi	5 mm/min; ISO 527
Tensile Strength, Yield	40.0 MPa	5800 psi	Type I, 5 mm/min; ASTM D638
	41.0 MPa	5950 psi	5 mm/min; ISO 527
Elongation at Break	1.3 %	1.3 %	Type I, 5 mm/min; ASTM D638
	1.4 %	1.4 %	5 mm/min; ISO 527
Elongation at Yield	1.3 %	1.3 %	Type I, 5 mm/min; ASTM D638
	1.4 %	1.4 %	5 mm/min; ISO 527
Tensile Modulus	4.84 GPa	702 ksi	1 mm/min; ISO 527
	5.77 GPa	837 ksi	50 mm/min; ASTM D638
Flexural Strength	61.0 MPa	8850 psi	1.3 mm/min, 50 mm span; ASTM D790
	62.0 MPa	8990 psi	ISO 178

Mechanical Properties	Metric	English	Comments
Flexural Yield Strength	61.0 MPa	8850 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	4.77 GPa	692 ksi	2 mm/min; ISO 178
	4.88 GPa	708 ksi	1.3 mm/min, 50 mm span; ASTM D790
Izod Impact, Notched	0.330 J/cm	0.618 ft-lb/in	ASTM D256
Izod Impact, Unnotched	2.02 J/cm	3.78 ft-lb/in	ASTM D4812
Izod Impact, Notched (ISO)	6.00 kJ/m ²	2.86 ft-lb/in ²	80*10*4; ISO 180/1A
Izod Impact, Unnotched (ISO)	13.0 kJ/m ²	6.19 ft-lb/in ²	80*10*4; ISO 180/1U
Dart Drop, Total Energy	9.00 J @Temperature 23.0 Â°C	6.64 ft-lb @Temperature 73.4 Â°F	ASTM D3763
Impact Test	1.00 J	0.738 ft-lb	Multiaxial Impact; ISO 6603
Coefficient of Friction, Dynamic	0.44	0.44	ASTM D3702 Modified
Coefficient of Friction, Static	0.38	0.38	ASTM D3702 Modified
K (wear) Factor	96.7 x 10 ⁻⁸ mm ³ /N-M	48.0 x 10 ⁻¹⁰ in ³ - min/ft-lb-hr	Washer; ASTM D3702 Modified

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	66.0 Âµm/m-Â°C @Temperature -30.0 - 30.0 Â°C	36.7 Âµin/in-Â°F @Temperature -22.0 - 86.0 Â°F	ASTM D696
CTE, linear, Transverse to Flow	65.0 Âµm/m-Â°C @Temperature -30.0 - 30.0 Â°C	36.1 Âµin/in-Â°F @Temperature -22.0 - 86.0 Â°F	ASTM D696
Deflection Temperature at 0.46 MPa (66 psi)	167 Â°C	333 Â°F	Flatw 80*10*4 sp=64mm; ISO 75/Bf
	162 Â°C @Thickness 3.20 mm	324 Â°F @Thickness 0.126 in	unannealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	95.0 Â°C	203 Â°F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	84.0 Â°C @Thickness 3.20 mm	183 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