

SABIC Innovative Plastics LNP THERMOCOMP PF004 PA 6 (Europe-Africa-Middle East)

Category : Polymer , Thermoplastic , Nylon , Nylon 6

Material Notes:

20% glass fibre reinforced Polyamide 6 injection moulding resin.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-LNP-THERMOCOMP-PF004-PA-6-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Density	1.27 g/cc	0.0459 lb/in ³	ISO 1183
Moisture Absorption	1.40 %	1.40 %	23 ^o C / 50% RH; ISO 62
Water Absorption at Saturation	6.8 %	6.8 %	ISO 62
Linear Mold Shrinkage, Flow	0.0030 - 0.0060 cm/cm	0.0030 - 0.0060 in/in	on Tensile Bar; SABIC Method

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell L	123	123	ISO 2039-2
Tensile Strength at Break	145 MPa	21000 psi	5 mm/min; ISO 527
Elongation at Break	3.8 %	3.8 %	5 mm/min; ISO 527
Tensile Modulus	6.50 GPa	943 ksi	1 mm/min; ISO 527
Flexural Strength	200 MPa	29000 psi	2 mm/min; ISO 178
Flexural Modulus	5.80 GPa	841 ksi	2 mm/min; ISO 178
Izod Impact, Notched (ISO)	8.00 kJ/m ²	3.81 ft-lb/in ²	80*10*4; ISO 180/1A
	6.00 kJ/m ²	2.86 ft-lb/in ²	80*10*4; ISO 180/1A
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	7.00 kJ/m ²	3.33 ft-lb/in ²	80*10*4; ISO 180/1A
	@Temperature -20.0 °C	@Temperature -4.00 °F	
	7.00 kJ/m ²	3.33 ft-lb/in ²	80*10*4; ISO 180/1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Izod Impact, Unnotched (ISO)	50.0 kJ/m ²	23.8 ft-lb/in ²	80*10*4; ISO 180/1U
	40.0 kJ/m ²	19.0 ft-lb/in ²	

Mechanical Properties	Metric @ Temperature -30.0 Â°C	English @ Temperature -22.0 Â°F	80*10*4- ISO 180/1U Comments
Charpy Impact Unnotched	5.50 J/cmÂ²	26.2 ft-lb/inÂ²	Edgew 80*10*4 sp=62mm; ISO 179/1eU
	4.50 J/cmÂ² @Temperature -30.0 Â°C	21.4 ft-lb/inÂ² @Temperature -22.0 Â°F	Edgew 80*10*4 sp=62mm; ISO 179/1eU
Charpy Impact, Notched	0.700 J/cmÂ²	3.33 ft-lb/inÂ²	Edgew 80*10*4 sp=62mm; ISO 179/1eA
	0.600 J/cmÂ² @Temperature -30.0 Â°C	2.86 ft-lb/inÂ² @Temperature -22.0 Â°F	Edgew 80*10*4 sp=62mm; ISO 179/1eA
Taber Abrasion, mg/1000 Cycles	20	20	CS-17, 1 kg; SABIC Method

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	35.0 Âµm/m-Â°C @Temperature 23.0 - 60.0 Â°C	19.4 Âµin/in-Â°F @Temperature 73.4 - 140 Â°F	ISO 11359-2
CTE, linear, Transverse to Flow	95.0 Âµm/m-Â°C @Temperature 23.0 - 60.0 Â°C	52.8 Âµin/in-Â°F @Temperature 73.4 - 140 Â°F	ISO 11359-2
Thermal Conductivity	0.330 W/m-K	2.29 BTU-in/hr-ftÂ²- Â°F	ISO 8302
Deflection Temperature at 0.46 MPa (66 psi)	216 Â°C	421 Â°F	Edgew 120*10*4 sp=100mm; ISO 75/Be
Deflection Temperature at 1.8 MPa (264 psi)	198 Â°C	388 Â°F	Edgew 120*10*4 sp=100mm; ISO 75/Ae
Vicat Softening Point	206 Â°C	403 Â°F	Rate B/120; ISO 306
	208 Â°C	406 Â°F	Rate B/50; ISO 306
Flammability, UL94	HB @Thickness 0.750 mm	HB @Thickness 0.0295 in	UL 94 by SABIC-IP
Oxygen Index	24 %	24 %	ISO 4589
Glow Wire Test	650 Â°C @Thickness 2.00 mm	1200 Â°F @Thickness 0.0787 in	IEC 60695-2-12

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+16 ohm-cm	>= 1.00e+16 ohm-cm	IEC 60093

Electrical Properties	Metric	English	Comments
Surface Resistance	$\geq 1.00 \times 10^{16} \text{ ohm}$	$\geq 1.00 \times 10^{16} \text{ ohm}$	ROA, IEC 60093
Dielectric Constant	3.4	3.4	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	3.6	3.6	IEC 60250
	@Frequency 50.0 - 60.0 Hz	@Frequency 50.0 - 60.0 Hz	
Dielectric Strength	20.0 kV/mm	508 kV/in	in oil; IEC 60243-1
	@Thickness 3.20 mm	@Thickness 0.126 in	
Dissipation Factor	0.0061	0.0061	IEC 60250
	@Frequency 50.0 - 60.0 Hz	@Frequency 50.0 - 60.0 Hz	
	0.016	0.016	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Comparative Tracking Index	$\geq 400 \text{ V}$	$\geq 400 \text{ V}$	IEC 60112
	500 V	500 V	IEC 60112

Descriptive Properties	Value	Comments
Ball Pressure Test, 125 $\hat{\text{A}}$ °C +/- 2 $\hat{\text{A}}$ °C	PASSES	IEC 60695-10-2

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