

SABIC Innovative Plastics LNP Thermocomp 5C003

Category : Polymer , Thermoplastic , Fluoropolymer , PVDF , Polyvinylidene fluoride (PVDF), with Carbon Fiber

Material Notes:

LNP THERMOCOMP* 5C003 is a compound based on Polyvinylidene Fluoride resin containing Carbon Fiber. Added features of this material include: Electrically Conductive. Also known as THERMOCOMP* FP-VC-1003 This data was supplied by SABIC-IP for the Americas region.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-LNP-Thermocomp-5C003.php

Physical Properties	Metric	English	Comments
Density	1.76 g/cc	0.0636 lb/in ³	ISO 1183
	1.769 g/cc	0.06391 lb/in ³	ASTM D 792
Moisture Absorption at Equilibrium	0.040 %	0.040 %	23Â°C / 50% RH; ISO 62
	0.030 % @Time 86400 sec	0.030 % @Time 24.0 hour	50% RH; ASTM D 570
Linear Mold Shrinkage, Flow	0.0036 cm/cm	0.0036 in/in	ISO 294
	@Time 86400 sec	@Time 24.0 hour	
	0.0030 - 0.0050 cm/cm	0.0030 - 0.0050 in/in	ASTM D 955
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Transverse	0.010 - 0.013 cm/cm	0.010 - 0.013 in/in	ASTM D 955
	@Time 86400 sec	@Time 24.0 hour	
	0.0116 cm/cm	0.0116 in/in	ISO 294
	@Time 86400 sec	@Time 24.0 hour	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	67.0 MPa	9720 psi	ISO 527
	78.0 MPa	11300 psi	ASTM D 638
Elongation at Break	0.60 %	0.60 %	ISO 527
	0.80 %	0.80 %	ASTM D 638
Tensile Modulus	14.27 GPa	2070 ksi	50 mm/min; ASTM D 638
	14.5 GPa	2100 ksi	1 mm/min; ISO 527
Flexural Strength	127 MPa	18400 psi	ASTM D 790
	147 MPa	21300 psi	ISO 178

Mechanical Properties	Metric	English	Comments
Flexural Modulus	11.79 GPa	1710 ksi	ASTM D 790
	20.92 GPa	3034 ksi	ISO 178
Izod Impact, Notched	0.580 J/cm @Temperature 23.0 Â°C	1.09 ft-lb/in @Temperature 73.4 Â°F	ASTM D 256
Izod Impact, Unnotched	2.02 J/cm @Temperature 23.0 Â°C	3.78 ft-lb/in @Temperature 73.4 Â°F	ASTM D 4812
Izod Impact, Notched (ISO)	6.00 kJ/mÂ² @Temperature 23.0 Â°C	2.86 ft-lb/inÂ² @Temperature 73.4 Â°F	80*10*4; ISO 180/1A
Izod Impact, Unnotched (ISO)	14.0 kJ/mÂ² @Temperature 23.0 Â°C	6.66 ft-lb/inÂ² @Temperature 73.4 Â°F	80*10*4; ISO 180/1U
Impact Test	3.00 J	2.21 ft-lb	Multiaxial Impact; ISO 6603
	11.0 J @Temperature 23.0 Â°C	8.11 ft-lb @Temperature 73.4 Â°F	Instrumented Impact Energy @ peak; ASTM D 3763

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	31.3 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	17.4 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ASTM E 831
	31.3 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	17.4 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ISO 11359-2
CTE, linear, Transverse to Flow	86.2 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	47.9 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ASTM E 831
	86.2 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	47.9 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ISO 11359-2
Deflection Temperature at 0.46 MPa (66 psi)	165 Â°C	329 Â°F	Flatw 80*10*4 sp=64mm; ISO 75/Bf
	165 Â°C @Thickness 3.20 mm	329 Â°F @Thickness 0.126 in	unannealed; ASTM D 648

Deflection Temperature at 1.8 MPa (150 psi) Thermal Properties	Metric 155 Â°C	English 313 Â°F	Comments Flt. 20, 10+4 sp=64mm; ISO 75/Af
	159 Â°C @Thickness 3.20 mm	318 Â°F @Thickness 0.126 in	unannealed; ASTM D 648

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