

## SABIC Innovative Plastics LNP THERMOCOMP DE004ERP PC (Asia Pacific)

Category : Polymer , Thermoplastic , Polycarbonate (PC)

### Material Notes:

LNP\* Thermocomp\* DE004ERP is a compound based on Polycarbonate resin containing Carbon Fiber. Added features of this material include: Electrically Conductive, Easy Molding, Mold Release.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_SABIC-Innovative-Plastics-LNP-THERMOCOMP-DE004ERP-PC-Asia-Pacific.php](http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-LNP-THERMOCOMP-DE004ERP-PC-Asia-Pacific.php)

Physical Properties	Metric	English	Comments
Density	1.26 g/cc	0.0455 lb/in <sup>3</sup>	ISO 1183
	1.27 g/cc	0.0459 lb/in <sup>3</sup>	ASTM D792
Moisture Absorption	0.100 %	0.100 %	50% RH, 24 hrs; ASTM D570
Linear Mold Shrinkage, Flow	0.0019 cm/cm	0.0019 in/in	ISO 294
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Transverse	0.0010 - 0.0030 cm/cm	0.0010 - 0.0030 in/in	ASTM D955
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Transverse	0.0059 cm/cm	0.0059 in/in	ISO 294
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Transverse	0.0050 - 0.0070 cm/cm	0.0050 - 0.0070 in/in	ASTM D955
	@Time 86400 sec	@Time 24.0 hour	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	116 MPa	16800 psi	ASTM D638
	116 MPa	16800 psi	ISO 527
Tensile Strength, Yield	116 MPa	16800 psi	ASTM D638
	116 MPa	16800 psi	ISO 527
Elongation at Break	1.9 %	1.9 %	ASTM D638
	2.0 %	2.0 %	ISO 527
Elongation at Yield	1.9 %	1.9 %	ASTM D638
	2.0 %	2.0 %	ISO 527
Tensile Modulus	11.1 GPa	1610 ksi	1 mm/min; ISO 527

Mechanical Properties	11.72 GPa Metric	1700 ksi English	50 mm/min; ASTM D638 Comments
Flexural Strength	151 MPa	21900 psi	ASTM D790
	172 MPa	24900 psi	ISO 178
Flexural Modulus	8.96 GPa	1300 ksi	ASTM D790
	9.70 GPa	1410 ksi	ISO 178
Izod Impact, Notched	0.740 J/cm	1.39 ft-lb/in	ASTM D256
Izod Impact, Unnotched	4.53 J/cm	8.49 ft-lb/in	ASTM D4812
Izod Impact, Notched (ISO)	7.00 kJ/m <sup>2</sup>	3.33 ft-lb/in <sup>2</sup>	80*10*4; ISO 180/1A
Izod Impact, Unnotched (ISO)	28.0 kJ/m <sup>2</sup>	13.3 ft-lb/in <sup>2</sup>	80*10*4; ISO 180/1U
Dart Drop, Total Energy	14.0 J	10.3 ft-lb	Instrumented Impact Energy @ peak; ASTM D3763
Impact Test	3.00 J	2.21 ft-lb	Multiaxial Impact; ISO 6603

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	61.0 Åµm/m-Å°C	33.9 Åµin/in-Å°F	ISO 11359-2
	@Temperature -40.0 - 40.0 Å°C	@Temperature -40.0 - 104 Å°F	
	61.2 Åµm/m-Å°C	34.0 Åµin/in-Å°F	ASTM E 831
	@Temperature -40.0 - 40.0 Å°C	@Temperature -40.0 - 104 Å°F	
CTE, linear, Transverse to Flow	10.8 Åµm/m-Å°C	6.00 Åµin/in-Å°F	ASTM E 831
	@Temperature -40.0 - 40.0 Å°C	@Temperature -40.0 - 104 Å°F	
Deflection Temperature at 0.46 MPa (66 psi)	11.0 Åµm/m-Å°C	6.11 Åµin/in-Å°F	ISO 11359-2
	@Temperature -40.0 - 40.0 Å°C	@Temperature -40.0 - 104 Å°F	
Deflection Temperature at 0.46 MPa (66 psi)	148 Å°C	298 Å°F	Flatw 80*10*4 sp=64mm; ISO 75/Bf
	147 Å°C	297 Å°F	
	@Thickness 3.20 mm	@Thickness 0.126 in	unannealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	144 Å°C	291 Å°F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	143 Å°C	289 Å°F	
	@Thickness 3.20 mm	@Thickness 0.126 in	unannealed; ASTM D648

## **Contact Songhan Plastic Technology Co.,Ltd.**

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