

SABIC Innovative Plastics LNP THERMOCOMP DF003E PC

Category : Polymer , Thermoplastic , Polycarbonate (PC)

Material Notes:

LNP* Thermocomp* DF003E is a compound based on Polycarbonate resin containing 15% Glass Fiber. Added features of this material include: Easy Molding.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-LNP-THERMOCOMP-DF003E-PC.php

Physical Properties	Metric	English	Comments
Density	1.31 g/cc	0.0473 lb/in ³	ASTM D792
	1.31 g/cc	0.0473 lb/in ³	ISO 1183
Moisture Absorption	0.100 %	0.100 %	50% RH, 24 hrs; ASTM D570
Linear Mold Shrinkage, Flow	0.0040 - 0.0060 cm/cm	0.0040 - 0.0060 in/in	ASTM D955
	@Time 86400 sec	@Time 24.0 hour	
	0.0054 cm/cm	0.0054 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	
	0.0063 cm/cm	0.0063 in/in	ISO 294
	@Time 86400 sec	@Time 24.0 hour	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	77.0 MPa	11200 psi	ASTM D638
	78.0 MPa	11300 psi	ISO 527
Tensile Strength, Yield	82.0 MPa	11900 psi	ASTM D638
	82.0 MPa	11900 psi	ISO 527
Elongation at Break	4.4 %	4.4 %	ISO 527
	5.0 %	5.0 %	ASTM D638
Elongation at Yield	3.2 %	3.2 %	ASTM D638
	3.3 %	3.3 %	ISO 527
Tensile Modulus	4.75 GPa	689 ksi	1 mm/min; ISO 527

Mechanical Properties	4.82 GPa Metric	699 ksi English	50 mm/min; ASTM D638 Comments
Flexural Strength	130 MPa	18900 psi	ISO 178
Flexural Modulus	4.13 GPa	599 ksi	ASTM D790
	4.30 GPa	624 ksi	ISO 178
Izod Impact, Notched	0.800 J/cm	1.50 ft-lb/in	ASTM D256
Izod Impact, Unnotched	9.07 J/cm	17.0 ft-lb/in	ASTM D4812
Izod Impact, Notched (ISO)	7.00 kJ/mÂ²	3.33 ft-lb/inÂ²	80*10*4; ISO 180/1A
Izod Impact, Unnotched (ISO)	55.0 kJ/mÂ²	26.2 ft-lb/inÂ²	80*10*4; ISO 180/1U
Dart Drop, Total Energy	20.0 J	14.8 ft-lb	Instrumented Impact Energy @ peak; ASTM D3763
Impact Test	6.00 J	4.43 ft-lb	Multiaxial Impact; ISO 6603

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	68.0 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	37.8 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ISO 11359-2
	68.4 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	38.0 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ASTM E 831
CTE, linear, Transverse to Flow	34.2 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	19.0 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ASTM E 831
	35.0 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	19.4 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ISO 11359-2
Deflection Temperature at 0.46 MPa (66 psi)	144 Â°C	291 Â°F	Flatw 80*10*4 sp=64mm; ISO 75/Bf
	143 Â°C @Thickness 3.20 mm	289 Â°F @Thickness 0.126 in	unannealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	139 Â°C	282 Â°F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	138 Â°C @Thickness 3.20 mm	280 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