

## LNP\* Thermocomp\* Compound EC006E

**Americas: COMMERCIAL** 

Also known as: EC-1006 EM Product Reorder Name: EC006E

LNP THERMOCOMP\* EC006E is a compound based on Polyetherimide resin containing Carbon Fiber. Added features of this material include: Easy Molding.

## **Property**

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, break	230	MPa	ASTM D 638
Tensile Strain, break	1.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	23300	MPa	ASTM D 638
Flexural Stress	314	MPa	ASTM D 790
Flexural Modulus	19160	MPa	ASTM D 790
Tensile Stress, break	215	MPa	ISO 527
Tensile Strain, break	1.3	%	ISO 527
Tensile Modulus, 1 mm/min	18470	MPa	ISO 527
Flexural Stress	306	MPa	ISO 178
Flexural Modulus	20800	MPa	ISO 178
IMPACT	Value	Unit	Standard
Instrumented Impact Energy @ peak, 23°C	6	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	34	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 1.82 MPa, 3.2mm, unannealed	206	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	208	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.394	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.17	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.5	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.1	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.51	%	ISO 294
Wear Factor Washer	75	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.52	-	ASTM D 3702 Modified
Static COF	0.48	-	ASTM D 3702 Modified
Density	1.39	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.25	%	ISO 62

Source GMD, last updated:10/01/2004

## **Processing**

Parameter		
Injection Molding	Value	Unit
Drying Temperature	120 - 150	°C
Drying Time	4	hrs

Maximum Moisture Content	0.05	%
Melt Temperature	360 - 365	°C
Front - Zone 3 Temperature	365 - 375	°C
Middle - Zone 2 Temperature	355 - 365	°C
Rear - Zone 1 Temperature	345 - 355	°C
Mold Temperature	120 - 150	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	60 - 100	rpm

Source GMD, last updated:10/01/2004

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

## PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

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- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

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