

## LNP\* Thermocomp\* Compound EC004XXC

Americas: COMMERCIAL

Also known as: EC-1004

Product Reorder Name: EC004XXC

LNP\* Thermocomp\* EC004XXC is a compound based on Polyetherimide resin containing Carbon Fiber. Added features of this material include: Electrically Conductive.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
	Value	Unit	Standard
<b>MECHANICAL</b>			
Tensile Stress, break	170	MPa	ASTM D 638
Tensile Strain, break	2	%	ASTM D 638
Flexural Stress	259	MPa	ASTM D 790
Flexural Modulus	12330	MPa	ASTM D 790
Tensile Stress, break	175	MPa	ISO 527
Tensile Strain, break	2	%	ISO 527
Tensile Modulus, 1 mm/min	14500	MPa	ISO 527
Flexural Stress	250	MPa	ISO 178
Flexural Modulus	12000	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, unnotched, 23°C	534	J/m	ASTM D 4812
Izod Impact, notched, 23°C	53	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	30	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL</b>			
HDT, 1.82 MPa, 3.2mm, unannealed	212	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	210	°C	ISO 75/Af
<b>PHYSICAL</b>			
Density	1.34	g/cm <sup>3</sup>	ASTM D 792
Mold Shrinkage, flow, 24 hrs	0.1 - 0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.3 - 0.5	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.1 - 0.3	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.3 - 0.5	%	ISO 294
Density	1.34	g/cm <sup>3</sup>	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
<b>ELECTRICAL</b>			
Surface Resistivity	1.E+02 - 1.E+06	Ohm	ASTM D 257
<b>FLAME CHARACTERISTICS</b>			
UL Compliant, 94V-0 Flame Class Rating (3)(4)	0.5	mm	UL 94 by GE

Source GMD, last updated:10/01/2004

### Processing

Parameter	Value	Unit
Injection Molding		

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.

(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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