



LNP™ THERMOCOMP™ Compound EC004XXC

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound EC-1004

Product reorder name: EC004XXC

LNP THERMOCOMP EC004XXC is a compound based on Polyetherimide resin containing 20% Carbon Fiber. Added features of this material include:
Electrically Conductive.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break	1730	kgf/cm ²	ASTM D 638
Tensile Strain, break	2	%	ASTM D 638
Flexural Stress	2640	kgf/cm ²	ASTM D 790
Flexural Modulus	125700	kgf/cm ²	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
IMPACT			
Izod Impact, unnotched, 23°C	54	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	5	cm-kgf/cm	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	30	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m ²	ISO 180/1A
THERMAL			
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
PHYSICAL			
Density	1.34	g/cm ³	ASTM D 792
Mold Shrinkage, flow, 24 hrs (5)	0.1 - 0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.3 - 0.5	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.1 - 0.3	%	ISO 294



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PHYSICAL			
Mold Shrinkage, xflow, 24 hrs (5)	0.3 - 0.5	%	ISO 294
Density	1.34	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
ELECTRICAL			
Surface Resistivity	1.E+02 - 1.E+06	Ohm	ASTM D 257
FLAME CHARACTERISTICS			
UL Compliant, 94V-0 Flame Class Rating (3)(4)	0.5	mm	UL 94 by SABIC-IP



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120 - 150	°C
Drying Time	4 - 6	hrs
Maximum Moisture Content	0.02	%
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