



LNP™ THERMOCOMP™ Compound EC006

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound EC-1006

Product reorder name: EC006

LNP THERMOCOMP™ EC006 is a compound based on Polyetherimide resin containing 30% Carbon Fiber. Added features of this material include: Electrically Conductive.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break	2000	kgf/cm ²	ASTM D 638
Tensile Strain, break	1.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	198200	kgf/cm ²	ASTM D 638
Flexural Stress	2850	kgf/cm ²	ASTM D 790
Flexural Modulus	185300	kgf/cm ²	ASTM D 790
Tensile Stress, break	183	MPa	ISO 527
Tensile Strain, break	1.1	%	ISO 527
Tensile Modulus, 1 mm/min	20870	MPa	ISO 527
Flexural Stress	269	MPa	ISO 178
Flexural Modulus	17930	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	38	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	4	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	79	cm-kgf	ASTM D 3763
Multiaxial Impact	25	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	26	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	217	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.6E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	2.16E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	3.64E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	2.25E-05	1/°C	ISO 11359-2





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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	219	°C	ISO 75/Af
PHYSICAL			
Density	1.388	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.19	%	ASTM D 570
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	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.39	%	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	1.38	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.28	%	ISO 62
ELECTRICAL			
Surface Resistivity	1.E+02 - 1.E+06	Ohm	ASTM D 257





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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

