



LNP™ THERMOCOMP™ Compound 2C004

Americas: COMMERCIAL

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

Product reorder name: 2C004

LNP THERMOCOMP 2C004 is a compound based on ETFE resin containing 20% Carbon Fiber. Added features of this material include: Electrically Conductive.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break	610	kgf/cm ²	ASTM D 638
Tensile Strain, break	2.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	135600	kgf/cm ²	ASTM D 638
Flexural Stress	1090	kgf/cm ²	ASTM D 790
Flexural Modulus	107500	kgf/cm ²	ASTM D 790
Tensile Stress, break	59	MPa	ISO 527
Tensile Strain, break	2	%	ISO 527
Tensile Modulus, 1 mm/min	12180	MPa	ISO 527
Flexural Stress	120	MPa	ISO 178
Flexural Modulus	10550	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	59	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	18	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	142	cm-kgf	ASTM D 3763
Multiaxial Impact	61	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	36	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	15	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	252	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	208	°C	ASTM D 648
CTE, -40°C to 40°C, flow	2.52E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	5.4E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	2.56E-05	1/°C	ISO 11359-2





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THERMAL			
CTE, -40°C to 40°C, xflow	5.4E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	246	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	187	°C	ISO 75/Af
PHYSICAL			
Density	1.75	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.09	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.7	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	2.2	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.65	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	2.22	%	ISO 294
Density	1.74	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.12	%	ISO 62





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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Melt Temperature	315	°C
Front - Zone 3 Temperature	330 - 345	°C
Middle - Zone 2 Temperature	310 - 320	°C
Rear - Zone 1 Temperature	280 - 295	°C
Mold Temperature	95 - 120	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

