



LNP* Thermocomp* Compound EC002E

Asia Pacific: COMMERCIAL

Also known as: LNP* Thermocomp* Compound EC-1002 EM

Product reorder name: EC002E

LNP THERMOCOMP* EC002E is a compound based on Polyetherimide resin containing Carbon Fiber. Added features of this material include: Easy Molding.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	UNIT	STANDARD
MECHANICAL			
Tensile Stress, break	1640	kgf/cm ²	ASTM D 638
Tensile Strain, break	1.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	118800	kgf/cm ²	ASTM D 638
Flexural Stress	2460	kgf/cm ²	ASTM D 790
Flexural Modulus	110100	kgf/cm ²	ASTM D 790
Tensile Stress, break	137	MPa	ISO 527
Tensile Strain, break	1.2	%	ISO 527
Tensile Modulus, 1 mm/min	12630	MPa	ISO 527
Flexural Stress	216	MPa	ISO 178
Flexural Modulus	10310	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	43	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	5	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	112	cm-kgf	ASTM D 3763
Multiaxial Impact	20	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	28	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	205	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.42E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	3.24E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	3.33E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	3.3E-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	207	°C	ISO 75/Af
PHYSICAL			
Density	1.31	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.3	%	ASTM D 570
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	1.31	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.35	%	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	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