



LNP™ THERMOCOMP™ Compound MC002

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound MC-1002

Product reorder name: MC002

LNP THERMOCOMP MC002 is a compound based on Polypropylene resin containing 10% Carbon Fiber. Added feature of this material is: Electrically Conductive.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	360	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	370	kgf/cm ²	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	113900	kgf/cm ²	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	560	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	47900	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 5 mm/min	24	MPa	ISO 527
Tensile Stress, break, 5 mm/min	35	MPa	ISO 527
Tensile Strain, break, 50 mm/min	3.7	%	ISO 527
Tensile Modulus, 1 mm/min	6290	MPa	ISO 527
Flexural Stress	77	MPa	ISO 178
Flexural Modulus, 2 mm/min	9590	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	30	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	4	cm-kgf/cm	ASTM D 256
Multiaxial Impact	52	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	115	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	25	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	145	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	120	°C	ASTM D 648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	139	°C	ISO 75/Bf



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	116	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	0.95	-	ASTM D 792
Density	0.95	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.04	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.7 - 1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.7 - 1	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.04	%	ISO 62



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Melt Temperature	225 - 250	°C
Front - Zone 3 Temperature	240 - 250	°C
Middle - Zone 2 Temperature	215 - 225	°C
Rear - Zone 1 Temperature	195 - 205	°C
Mold Temperature	30 - 50	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm