+135-3858-6433 (GuangDong)
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LNP™ THERMOCOMP™ Compound QC008

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound QC-1008
Product reorder name: QC008

LNP THERMOCOMP QC008 is a compound based on Nylon 6/10 containing 40% Carbon Fiber. Added feature of this grade is: Electrically Conductive.

TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	2370	kgf/cm²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	2370	kgf/cm²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	1.8	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	450700	kgf/cm²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	3690	kgf/cm²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	206700	kgf/cm²	ASTM D 790
Tensile Stress, yield, 5 mm/min	237	MPa	ISO 527
Tensile Stress, break, 5 mm/min	237	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.6	%	ISO 527
Tensile Strain, break, 5 mm/min	1.6	%	ISO 527
Tensile Modulus, 1 mm/min	31860	MPa	ISO 527
Flexural Modulus, 2 mm/min	22440	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	137	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	12	cm-kgf/cm	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	68	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	11	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	222	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	217	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.94E+00	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	8.27E+00	1/°C	ASTM E 831

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TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	223	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	216	°C	ISO 75/Af
PHYSICAL			
Density	1.29	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.31	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.06 - 0.08	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.6 - 0.7	%	ASTM D 955
Density	1.28	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.31	%	ISO 62

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.12 - 0.2	%
Melt Temperature	270 - 275	°C
Front - Zone 3 Temperature	270 - 280	°C
Middle - Zone 2 Temperature	260 - 270	°C
Rear - Zone 1 Temperature	250 - 260	°C
Mold Temperature	80 - 95	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm