



LNP™ THERMOCOMP™ Compound RC008H

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound RC-1008

Product reorder name: RC008H

LNP THERMOCOMP™ RC008H is a compound based on Nylon 66 resin containing 40% Carbon Fiber. Added features of this material include: Electrically Conductive, Healthcare.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	2930	kgf/cm ²	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.8	%	ASTM D 638
Tensile Modulus, 5 mm/min	326300	kgf/cm ²	ASTM D 638
Flexural Stress, brk, 2.6 mm/min, 100 mm span	4370	kgf/cm ²	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	266100	kgf/cm ²	ASTM D 790
IMPACT			
Izod Impact, unnotched, 23°C	124	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	11	cm-kgf/cm	ASTM D 256
Multiaxial Impact	47	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	161	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	71	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	10	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	255	°C	ASTM D 648
CTE, -30°C to 30°C, flow	4.9E-01	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	7.24E+00	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	261	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	252	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.33	-	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.54	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.2 - 0.4	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.4 - 0.6	%	ASTM D 955
Density	1.34	g/cm ³	ISO 1183



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
PHYSICAL Moisture Absorption (23°C / 50% RH)	0.78	%	ISO 62



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.15 - 0.25	%
Melt Temperature	280 - 305	°C
Front - Zone 3 Temperature	295 - 305	°C
Middle - Zone 2 Temperature	280 - 295	°C
Rear - Zone 1 Temperature	265 - 275	°C
Mold Temperature	95 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm