



LNP™ THERMOCOMP™ Compound QC006

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound QC-1006

Product reorder name: QC006

LNP THERMOCOMP™ QC006 is a compound based on Nylon 6/10 resin containing 30% Carbon Fiber. Added features of this material include: Electrically Conductive.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	2180	kgf/cm ²	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	3	%	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	3320	kgf/cm ²	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	3310	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	164100	kgf/cm ²	ASTM D 790
Tensile Stress, break, 5 mm/min	243	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.2	%	ISO 527
Tensile Modulus, 1 mm/min	23010	MPa	ISO 527
Flexural Stress	349	MPa	ISO 178
Flexural Modulus, 2 mm/min	18770	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	93	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	10	cm-kgf/cm	ASTM D 256
Multiaxial Impact	40	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	59	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	12	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	220	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	211	°C	ASTM D 648
CTE, -30°C to 30°C, flow	1.2E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	5.5E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	221	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	213	°C	ISO 75/Af



LNP™ THERMOCOMP™ Compound QC006

Americas: COMMERCIAL

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
PHYSICAL			
Specific Gravity	1.2	-	ASTM D 792
Density	1.24	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.2	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.1 - 0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.8 - 1	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.3	%	ISO 62



LNP™ THERMOCOMP™ Compound QC006

Americas: COMMERCIAL

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