



LNP™ THERMOCOMP™ Compound WC006

Americas: COMMERCIAL

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

Product reorder name: WC006

LNP THERMOCOMP WC006 is a compound based on PBT resin containing 30% Carbon Fiber. Added feature of this grade is: Electrically Conductive.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	1610	kgf/cm ²	ASTM D 638
Tensile Stress, break	1610	kgf/cm ²	ASTM D 638
Tensile Strain, yield	1.2	%	ASTM D 638
Tensile Strain, break	1.2	%	ASTM D 638
Tensile Modulus, 50 mm/min	203800	kgf/cm ²	ASTM D 638
Flexural Stress	2100	kgf/cm ²	ASTM D 790
Flexural Modulus	154600	kgf/cm ²	ASTM D 790
Tensile Stress, yield	158	MPa	ISO 527
Tensile Stress, break	158	MPa	ISO 527
Tensile Strain, yield	1.2	%	ISO 527
Tensile Strain, break	1.2	%	ISO 527
Tensile Modulus, 1 mm/min	20660	MPa	ISO 527
Flexural Stress	219	MPa	ISO 178
Flexural Modulus	17000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	47	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	4	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	85	cm-kgf	ASTM D 3763
Multiaxial Impact	24	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	4	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	222	°C	ASTM D 648



LNP™ THERMOCOMP™ Compound WC006

Americas: COMMERCIAL

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	211	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.2E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.8E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.2E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.8E-05	1/°C	ISO 11359-2
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	209	°C	ISO 75/Af
PHYSICAL			
Density	1.43	g/cm ³	ASTM D 792
Mold Shrinkage, flow, 24 hrs (5)	0.1 - 0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1 - 2	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.23	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	1.2	%	ISO 294
Density	1.43	g/cm ³	ISO 1183



LNP™ THERMOCOMP™ Compound WC006

Americas: COMMERCIAL

PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120	°C
Drying Time	4	hrs
Maximum Moisture Content	0.05	%
Melt Temperature	240 - 265	°C
Front - Zone 3 Temperature	260 - 270	°C
Middle - Zone 2 Temperature	245 - 255	°C
Rear - Zone 1 Temperature	220 - 230	°C
Mold Temperature	80 - 100	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm