



LNP™ THERMOCOMP™ Compound DC006

Asia Pacific: COMMERCIAL

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

Product reorder name: DC006

LNP THERMOCOMP* DC006 is a compound based on Polycarbonate resin containing Carbon Fiber. This product is also known as THERMOCOMP* DC-1006.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	1430	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	1430	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	1.9	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.9	%	ASTM D 638
Tensile Modulus, 50 mm/min	161800	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	1980	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 5 mm/min	141	MPa	ISO 527
Tensile Stress, break, 5 mm/min	141	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.8	%	ISO 527
Tensile Strain, break, 5 mm/min	1.8	%	ISO 527
Tensile Modulus, 1 mm/min	15780	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	192	MPa	ISO 178
Flexural Modulus, 2 mm/min	14300	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	59	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	7	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	122	cm-kgf	ASTM D 3763
Multiaxial Impact	40	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	44	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	147	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	142	°C	ASTM D 648



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
CTE, -40°C to 40°C, flow	2.4E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.1E-05	1/°C	ASTM E 831
CTE, 23°C to 60°C, flow	4.4E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	2.E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	148	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	143	°C	ISO 75/Af
PHYSICAL			
Density	1.33	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.12	%	ASTM D 570
Mold Shrinkage, flow (5)	0.09	%	SABIC Method
Mold Shrinkage, xflow (5)	0.33	%	SABIC Method
Mold Shrinkage, flow, 24 hrs (5)	0.1 - 0.2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.2 - 0.4	%	ASTM D 955
Density	1.33	g/cm ³	ISO 1183



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120	°C
Drying Time	4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	305 - 325	°C
Front - Zone 3 Temperature	320 - 330	°C
Middle - Zone 2 Temperature	310 - 320	°C
Rear - Zone 1 Temperature	295 - 305	°C
Mold Temperature	80 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm