



LNP™ THERMOCOMP™ Compound PF006

Americas: COMMERCIAL

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

Product reorder name: PF006

LNP THERMOCOMP™ PF006 is a compound based on Nylon 6 resin containing 30% Glass Fiber.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break	1320	kgf/cm ²	ASTM D 638
Tensile Strain, break	2.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	89200	kgf/cm ²	ASTM D 638
Flexural Stress	2050	kgf/cm ²	ASTM D 790
Flexural Modulus	71000	kgf/cm ²	ASTM D 790
Tensile Stress, break	128	MPa	ISO 527
Tensile Strain, break	2.9	%	ISO 527
Tensile Modulus, 1 mm/min	8580	MPa	ISO 527
Flexural Stress	203	MPa	ISO 178
Flexural Modulus	7970	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	84	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	11	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	92	cm-kgf	ASTM D 3763
Multiaxial Impact	27	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	55	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	219	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	206	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.05E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.73E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	3.06E-05	1/°C	ISO 11359-2



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
CTE, -40°C to 40°C, xflow	6.72E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	203	°C	ISO 75/Af
PHYSICAL			
Density	1.369	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.86	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.2 - 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1 - 1.2	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.17 - 0.5	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	1 - 1.2	%	ISO 294
Density	1.36	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	1.53	%	ISO 62
FLAME CHARACTERISTICS			
UL Compliant, 94HB Flame Class Rating (3)(4)	1.5	mm	UL 94 by SABIC-IP



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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	265 - 275	°C
Front - Zone 3 Temperature	275 - 290	°C
Middle - Zone 2 Temperature	265 - 275	°C
Rear - Zone 1 Temperature	250 - 260	°C
Mold Temperature	80 - 95	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	30 - 60	rpm