



LNP™ THERMOCOMP™ Compound RF006H

Americas: COMMERCIAL

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

Product reorder name: RF006H

LNP THERMOCOMP™ RF006H is a compound based on Nylon 66 resin containing 30% Glass Fiber. Added feature of this grade is: Healthcare.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	1680	kgf/cm ²	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.4	%	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	2390	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	96200	kgf/cm ²	ASTM D 790
Tensile Stress, break, 5 mm/min	154	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.4	%	ISO 527
Tensile Modulus, 1 mm/min	8980	MPa	ISO 527
Flexural Modulus, 2 mm/min	9220	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	65	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	5	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	66	cm-kgf	ASTM D 3763
Multiaxial Impact	26	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	52	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	265	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	255	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.04E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.32E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	3.04E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.32E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	243	°C	ISO 75/Af



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
PHYSICAL			
Specific Gravity	1.41	-	ASTM D 792
Density	1.4	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.69	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.3 - 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1.4 - 1.6	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.3 - 0.5	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	1.4 - 1.6	%	ISO 294
Wear Factor Washer	75	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.71	-	ASTM D 3702 Modified
Static COF	0.57	-	ASTM D 3702 Modified
Density	1.39	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	1.2	%	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	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