



LNP™ THERMOCOMP™ Compound MF004AS

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound MF-1004 HS

Product reorder name: MF004AS

LNP THERMOCOMP™ MF004AS is a compound based on Polypropylene resin containing 20% Glass Fiber. Added features of this material include: Heat Stabilized.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break	650	kgf/cm ²	ASTM D 638
Tensile Strain, break	2.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	46400	kgf/cm ²	ASTM D 638
Flexural Stress	940	kgf/cm ²	ASTM D 790
Flexural Modulus	44200	kgf/cm ²	ASTM D 790
Tensile Stress, break	65	MPa	ISO 527
Tensile Strain, break	2.2	%	ISO 527
Tensile Modulus, 1 mm/min	5100	MPa	ISO 527
Flexural Stress	104	MPa	ISO 178
Flexural Modulus	5600	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	33	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	4	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	84	cm-kgf	ASTM D 3763
Multiaxial Impact	19	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	20	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	160	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	149	°C	ASTM D 648
CTE, -40°C to 40°C, xflow	7.45E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.45E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	145	°C	ISO 75/Af





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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
PHYSICAL			
Density	1.034	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.03	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.4 - 0.7	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.9 - 1	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.72	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.95	%	ISO 294
Density	1.03	g/cm ³	ISO 1183
FLAME CHARACTERISTICS			
UL Compliant, 94HB Flame Class Rating (3)(4)	0.75	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
Melt Temperature	225 - 250	°C
Front - Zone 3 Temperature	240 - 250	°C
Middle - Zone 2 Temperature	215 - 225	°C
Rear - Zone 1 Temperature	195 - 205	°C
Mold Temperature	30 - 50	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

