



LNP™ THERMOCOMP™ Compound AF002

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound AF-1002

Product reorder name: AF002

LNP THERMOCOMP* AF002 is a compound based on ABS resin containing 10% Glass Fiber.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break	680	kgf/cm ²	ASTM D 638
Tensile Strain, break	2.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	42100	kgf/cm ²	ASTM D 638
Flexural Stress	1070	kgf/cm ²	ASTM D 790
Flexural Modulus	42800	kgf/cm ²	ASTM D 790
Tensile Stress, break	64	MPa	ISO 527
Tensile Strain, break	2.7	%	ISO 527
Tensile Modulus, 1 mm/min	4200	MPa	ISO 527
Flexural Stress	107	MPa	ISO 178
Flexural Modulus	4500	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	32	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	8	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	156	cm-kgf	ASTM D 3763
Multiaxial Impact	33	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	24	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	9	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	101	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	92	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	95	°C	ISO 75/Af
PHYSICAL			
Density	1.111	g/cm ³	ASTM D 792
Mold Shrinkage, flow, 24 hrs (5)	0.4	%	ASTM D 955



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PHYSICAL			
Mold Shrinkage, xflow, 24 hrs (5)	0.4	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.41	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.38	%	ISO 294
Density	1.1	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.38	%	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	0.05 - 0.1	%
Melt Temperature	260	°C
Front - Zone 3 Temperature	265 - 275	°C
Middle - Zone 2 Temperature	230 - 245	°C
Rear - Zone 1 Temperature	205 - 215	°C
Mold Temperature	70 - 80	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm