+135-3858-6433 (GuangDong)
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LNP™ THERMOCOMP™ Compound AF004

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound AF-1004
Product reorder name: AF004

LNP THERMOCOMP AF004 is a compound based on ABS resin containing 20% Glass Fiber.

TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break	800	kgf/cm²	ASTM D 638
Tensile Strain, break	2.2	%	ASTM D 638
Tensile Modulus, 50 mm/min	62900	kgf/cm²	ASTM D 638
Flexural Stress	1320	kgf/cm²	ASTM D 790
Flexural Modulus	62700	kgf/cm²	ASTM D 790
Tensile Stress, break	81	MPa	ISO 527
Tensile Strain, break	2	%	ISO 527
Tensile Modulus, 1 mm/min	6000	MPa	ISO 527
Flexural Stress	123	MPa	ISO 178
Flexural Modulus	5860	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	40	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	8	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	112	cm-kgf	ASTM D 3763
Multiaxial Impact	31	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	23	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	103	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	93	°C	ISO 75/Af
PHYSICAL			
Density	1.198	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.24	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.2	%	ASTM D 955

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.
(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
(6) Needs hard coat to consistently pass 60 sec Vertical Burn.

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TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
PHYSICAL			
Mold Shrinkage, xflow, 24 hrs (5)	0.4	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.24	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.4	%	ISO 294
Density	1.19	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.39	%	ISO 62
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating (3)	1.5	mm	UL 94

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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

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