

# LNP™ THERMOCOMP™ Compound DFB03GR **Europe-Africa-Middle East: COMMERCIAL**

Also known as: LNP™ THERMOCOMP™ Compound DF-1003 MG MR

Product reorder name: DFB03GR

LNP\* THERMOCOMP\* DFB03GR is a compound based on Polycarbonate resin containing a mixture of Glass Fiber and Glass Beads. Added features of this material include: Easy Molding.

TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield, 5 mm/min	78	MPa	ISO 527
Tensile Strain, break, 5 mm/min	4.7	%	ISO 527
Tensile Modulus, 1 mm/min	3970	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	119	MPa	ISO 178
Flexural Strain, break, 2 mm/min	6.1	%	ISO 178
Flexural Modulus, 2 mm/min	3400	MPa	ISO 178
IMPACT			
Izod Impact, unnotched 80*10*4 +23°C	60	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	10	kJ/m²	ISO 180/1A
THERMAL			
CTE, 23°C to 60°C, flow	4.5E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	7.4E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	144	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	137	°C	ISO 75/Af
PHYSICAL			
Mold Shrinkage, flow (5)	0.3 - 0.6	%	SABIC Method
Density	1.29	g/cm³	ISO 1183
Water Absorption, 23°C/24hrs	0.16	%	ISO 62-1

(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 mo shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

### Source GMD, last updated:

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<sup>(1)</sup> 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.



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ROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120	°C
Drying Time	4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	305 - 325	°C
Front - Zone 3 Temperature	320 - 330	°C
Middle - Zone 2 Temperature	310 - 320	°C
Rear - Zone 1 Temperature	295 - 305	°C
Mold Temperature	80 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

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