

LNP* Thermocomp* Compound DF004

Americas:
DEVELOPMENTAL

Also known as: DF-1004

Product Reorder Name: DF004

LNP* Thermocomp* DF004 is a compound based on Polycarbonate resin containing Glass Fiber.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, break	91	MPa	ASTM D 638
Tensile Strain, break	9.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	5510	MPa	ASTM D 638
Flexural Stress	68	MPa	ASTM D 790
Flexural Modulus	5510	MPa	ASTM D 790
Tensile Stress, break	102	MPa	ISO 527
Tensile Strain, break	8	%	ISO 527
Tensile Modulus, 1 mm/min	5940	MPa	ISO 527
Flexural Stress	148	MPa	ISO 178
Flexural Modulus	6000	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	961	J/m	ASTM D 4812
Izod Impact, notched, 23°C	133	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	59	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m ²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	144	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	139	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	141	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.35	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.2	%	ASTM D 955

Mold Shrinkage, xflow, 24 hrs	0.5	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.2	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.45	%	ISO 294
Density	1.35	g/cm ³	ISO 1183

Source GMD, last updated:09/24/2008

Processing

Parameter		
Injection Molding	Value	Unit
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

Source GMD, last updated:09/24/2008

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(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.

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