

LNP* Thermotuf* Compound MF004AI

Asia Pacific: COMMERCIAL

Also known as: MF-1004 HI
Product Reorder Name: MF004AI

LNP* Thermotuf* MF004AI is a compound based on Polypropylene resin containing Glass Fiber. Added features of this material include: High Impact.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, break	39	MPa	ASTM D 638
Tensile Strain, break	4.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	4820	MPa	ASTM D 638
Flexural Stress	41	MPa	ASTM D 790
Flexural Modulus	2750	MPa	ASTM D 790
Tensile Stress, break	37	MPa	ISO 527
Tensile Strain, break	4.5	%	ISO 527
Tensile Modulus, 1 mm/min	4940	MPa	ISO 527
Flexural Stress	46	MPa	ISO 178
Flexural Modulus	3000	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	437	J/m	ASTM D 4812
Izod Impact, notched, 23°C	170	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	28	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	14	kJ/m ²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	150	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	108	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.06E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.84E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.05E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.8E-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	104	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.03	g/cm ³	ASTM D 792
Mold Shrinkage, flow, 24 hrs	1.1 - 1.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.1 - 1.3	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	1.2	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.2	%	ISO 294
Density	1.03	g/cm ³	ISO 1183

Source GMD, last updated:09/24/2008

Processing

Parameter	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

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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