LNP™ THERMOTUF™ COMPOUND MF004AI

MF-1004 HI
REGION ASIA

DESCRIPTION

LNP THERMOTUF MF004AI is a compound based on Polypropylene resin containing 20% Glass Fiber. Added features of this material include: High Impact.

TYPICAL PROPERTY VALUES

Revision 20181220

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
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			
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/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	14	kJ/m²	ISO 180/1A
THERMAL			
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			
Density	1.03	g/cm³	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/cm³	ISO 1183
INJECTION MOLDING			
Drying Temperature	80	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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	

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