LNP™ THERMOTUF™ COMPOUND RF006I

RF-1006 HI

DESCRIPTION

LNP THERMOTUF RF006I is a compound based on Nylon 66 resin containing Glass Fiber. Added features of this material include: High Impact.

TYPICAL PROPERTY VALUES

Revision 20191219

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	161	MPa	ASTM D 638
Tensile Strain, break	3.2	%	ASTM D 638
Tensile Modulus, 50 mm/min	10410	MPa	ASTM D 638
Flexural Stress	248	MPa	ASTM D 790
Flexural Modulus	8680	MPa	ASTM D 790
Tensile Stress, break	179	MPa	ISO 527
Tensile Strain, break	2.9	%	ISO 527
Tensile Modulus, 1 mm/min	10840	MPa	ISO 527
Flexural Stress	266	MPa	ISO 178
Flexural Modulus	9480	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1121	J/m	ASTM D 4812
Izod Impact, notched, 23°C	117	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	17	J	ASTM D 3763
Multiaxial Impact	5	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	75	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	259	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	121	°C	ASTM D 648
CTE, -40°C to 40°C, flow	2.75E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.08E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	2.75E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.08E-05	1/°C	ISO 11359-2
PHYSICAL			
Density	1.38	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.63	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.1	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.27	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.12	%	ISO 294
Density	1.37	g/cm³	ISO 1183
INJECTION MOLDING			
Drying Temperature	80	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Time	4	hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	280 – 305	°C	
Front - Zone 3 Temperature	295 – 305	°C	
Middle - Zone 2 Temperature	280 – 295	°C	
Rear - Zone 1 Temperature	265 – 275	°C	
Mold Temperature	95 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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