

LNP* Thermotuf* Compound RF006I

Americas: COMMERCIAL

Also known as: RF-1006 HI
Product Reorder Name: RF006I

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

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
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	Value	Unit	Standard
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/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	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	Value	Unit	Standard
Density	1.38	g/cm ³	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/cm ³	ISO 1183

Source GMD, last updated:12/06/2005

Processing

Parameter

Injection Molding	Value	Unit
Drying Temperature	80	°C
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

Source GMD, last updated:12/06/2005

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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