

LNP* Thermocomp* Compound RF004S

Americas: COMMERCIAL

Also known as: THERMOCOMP RF-1004 HS BK8-115
Product Reorder Name: RF004S

LNP* Thermocomp* RF004S is a Nylon 6/6 containing Glass Fiber. Characteristics are Heat Stabilized.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 5 mm/min	121	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	121	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.1	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.1	%	ASTM D 638
Tensile Modulus, 50 mm/min	7930	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	187	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	188	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	5340	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	121	MPa	ISO 527
Tensile Stress, break, 5 mm/min	121	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.9	%	ISO 527
Tensile Strain, break, 5 mm/min	1.9	%	ISO 527
Tensile Modulus, 1 mm/min	7180	MPa	ISO 527
Flexural Stress	186	MPa	ISO 178
Flexural Modulus, 2 mm/min	5860	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	516	J/m	ASTM D 4812
Izod Impact, notched, 23°C	50	J/m	ASTM D 256
Multiaxial Impact	1	J	ISO 6603
Instrumented Impact Total Energy, 23°C	7	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	30	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m ²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	255	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	236	°C	ASTM D 648
CTE, -30°C to 30°C, flow	3.E-06	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	8.E-06	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	253	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	226	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.3	-	ASTM D 792
Density	1.3	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.5 - 0.8	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1 - 3	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	1.6	%	ISO 62

Parameter	Value	Unit
Injection Molding		
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:09/11/2008

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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