

LNP* Thermocomp* Compound SF00A

Americas: COMMERCIAL

Glass filled Nylon 12

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	1.7	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.7	%	ASTM D 638
Tensile Modulus, 50 mm/min	12800	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	148	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	143	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	8930	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	113	MPa	ISO 527
Tensile Stress, break, 5 mm/min	113	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.5	%	ISO 527
Tensile Strain, break, 5 mm/min	1.5	%	ISO 527
Tensile Modulus, 1 mm/min	12280	MPa	ISO 527
Flexural Modulus, 2 mm/min	10	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	577	J/m	ASTM D 4812
Izod Impact, notched, 23°C	97	J/m	ASTM D 256
Multiaxial Impact	16	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	30	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	1	kJ/m ²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	176	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	166	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	176	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.48	g/cm ³	ASTM D 792
Mold Shrinkage, flow, 24 hrs	0.2 - 0.4	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.8 - 1	%	ASTM D 955
Density	1.48	g/cm ³	ISO 1183

Source GMD, last updated:02/07/2008

Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.12 - 0.2	%
Melt Temperature	225 - 240	°C
Front - Zone 3 Temperature	225 - 240	°C

Middle - Zone 2 Temperature	220 - 230	°C
Rear - Zone 1 Temperature	215 - 225	°C
Mold Temperature	70 - 80	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:02/07/2008

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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