

LNP* Thermocomp* Compound QF00A

Americas: COMMERCIAL

PA6.10, Glass Fiber,

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL			
	Value	Unit	Standard
Tensile Stress, yld, Type I, 5 mm/min	181	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	181	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.5	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	18680	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	280	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	285	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	11440	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	181	MPa	ISO 527
Tensile Stress, break, 5 mm/min	181	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.3	%	ISO 527
Tensile Strain, break, 5 mm/min	2.3	%	ISO 527
Tensile Modulus, 1 mm/min	15510	MPa	ISO 527
Flexural Modulus, 2 mm/min	12870	MPa	ISO 178
IMPACT			
	Value	Unit	Standard
Izod Impact, unnotched, 23°C	1305	J/m	ASTM D 4812
Izod Impact, notched, 23°C	160	J/m	ASTM D 256
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	221	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	213	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.5E+00	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.83E+00	1/°C	ASTM E 831
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	220	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	205	°C	ISO 75/Af
PHYSICAL			
	Value	Unit	Standard
Density	1.6	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.21	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.18 - 0.2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.5 - 1.5	%	ASTM D 955
Density	1.6	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.28	%	ISO 62

Source GMD, last updated:02/04/2008

Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	80	°C

Drying Time	4	hrs
Maximum Moisture Content	0.12 - 0.2	%
Melt Temperature	270 - 275	°C
Front - Zone 3 Temperature	270 - 280	°C
Middle - Zone 2 Temperature	260 - 270	°C
Rear - Zone 1 Temperature	250 - 260	°C
Mold Temperature	80 - 95	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:02/04/2008

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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