



LNP™ THERMOCOMP™ Compound JF003XXZ

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound JF-1003

Product reorder name: JF003XXZ

LNP THERMOCOMP JF003XXZ is a compound based on Polyethersulfone resin containing 15% Glass Fiber.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	1110	kgf/cm ²	ASTM D 638
Tensile Stress, break	1110	kgf/cm ²	ASTM D 638
Tensile Strain, yield	3.2	%	ASTM D 638
Tensile Strain, break	3.2	%	ASTM D 638
Tensile Modulus, 50 mm/min	63200	kgf/cm ²	ASTM D 638
Flexural Stress	1750	kgf/cm ²	ASTM D 790
Flexural Modulus	56200	kgf/cm ²	ASTM D 790
Tensile Stress, yield	110	MPa	ISO 527
Tensile Stress, break	110	MPa	ISO 527
Tensile Strain, yield	3.1	%	ISO 527
Tensile Strain, break	3.1	%	ISO 527
Tensile Modulus, 1 mm/min	6410	MPa	ISO 527
Flexural Stress	176	MPa	ISO 178
Flexural Modulus	5500	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	68	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	4	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	109	cm-kgf	ASTM D 3763
Multiaxial Impact	30	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	47	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	212	°C	ASTM D 648



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	207	°C	ASTM D 648
CTE, -40°C to 40°C, flow	5.4E-06	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	3.6E-06	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	5.58E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	2.81E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	214	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	207	°C	ISO 75/Af
PHYSICAL			
Density	1.48	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.3	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.4 - 0.6	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.6 - 0.8	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.51	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.67	%	ISO 294
Density	1.48	g/cm ³	ISO 1183



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Maximum Moisture Content	0.05	%
Melt Temperature	355 - 370	°C
Front - Zone 3 Temperature	370 - 380	°C
Middle - Zone 2 Temperature	360 - 370	°C
Rear - Zone 1 Temperature	345 - 355	°C
Mold Temperature	140 - 150	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	60 - 100	rpm