



LNP™ THERMOCOMP™ Compound JF003E

Americas: COMMERCIAL

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

Product reorder name: JF003E

LNP THERMOCOMP JF003E is a compound based on Polyethersulfone resin containing 15% Glass Fiber. Added features of this material include: Easy Molding.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	1090	kgf/cm ²	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.8	%	ASTM D 638
Tensile Modulus, 5 mm/min	57700	kgf/cm ²	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	1770	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	57900	kgf/cm ²	ASTM D 790
Tensile Stress, break, 5 mm/min	101	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.3	%	ISO 527
Tensile Modulus, 1 mm/min	5660	MPa	ISO 527
Flexural Stress	174	MPa	ISO 178
Flexural Modulus, 2 mm/min	5330	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	54	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	4	cm-kgf/cm	ASTM D 256
Multiaxial Impact	16	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	80	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	33	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	218	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	212	°C	ASTM D 648
CTE, -30°C to 30°C, flow	4.2E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	4.7E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	218	°C	ISO 75/Bf





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THERMAL			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	211	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.49	-	ASTM D 792
Density	1.48	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.45	%	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
Moisture Absorption (23°C / 50% RH)	0.9	%	ISO 62





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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

