



LNP™ THERMOCOMP™ Compound JF004L

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound JF-1004 LE

Product reorder name: JF004L

LNP THERMOCOMP JF004L is a compound is based on Polyethersulfone containing 20% Glass Fiber. Characteristics of this grade is: Low Extractible

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	1000	kgf/cm²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	1000	kgf/cm²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.7	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.9	%	ASTM D 638
Tensile Modulus, 50 mm/min	64800	kgf/cm²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	1540	kgf/cm²	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	1540	kgf/cm²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	64200	kgf/cm²	ASTM D 790
Tensile Stress, yield, 5 mm/min	94	MPa	ISO 527
Tensile Stress, break, 5 mm/min	93	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.1	%	ISO 527
Tensile Strain, break, 5 mm/min	2.1	%	ISO 527
Tensile Modulus, 1 mm/min	6640	MPa	ISO 527
Flexural Stress	149	MPa	ISO 178
Flexural Stress, break, 2 mm/min	148	MPa	ISO 178
Flexural Modulus, 2 mm/min	6300	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	57	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	5	cm-kgf/cm	ASTM D 256
Multiaxial Impact	26	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	112	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	32	kJ/m²	ISO 180/1U

(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.

Source GMD, last updated:
PLEASE CONTACT YOUR LOCAL SALES OFFICE FOR AVAILABILITY IN YOUR AREA.

(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.
(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
(6) Needs hard coat to consistently pass 60 sec Vertical Burn.

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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
IMPACT			
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	216	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	211	°C	ASTM D 648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	216	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	210	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.54	-	ASTM D 792
Density	1.53	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.37	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.3 - 0.6	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.5 - 0.7	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.55	%	ISO 62

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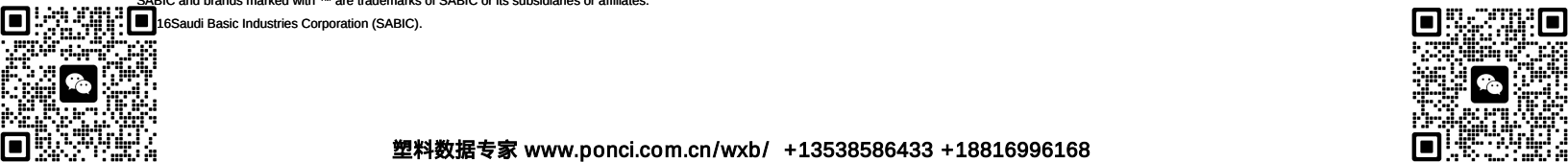
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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Maximum Moisture Content	0.05	%
Melt Temperature	355 - 370	°C
Front - Zone 3 Temperature	370 - 380	°C
Middle - Zone 2 Temperature	360 - 370	°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

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