

LNP™ THERMOCOMP™ WF004 compound

Polybutylene Terephthalate

SABIC Innovative Plastics

Message:

LNP THERMOCOMP WF004 is a compound based on PBT resin containing 20% Glass Fiber.

Also known as: LNP* THERMOCOMP* Compound WF-1004

Product reorder name: WF004

General Information			
UL YellowCard	E121562-101284452		
Filler / Reinforcement	Glass Fiber,20% Filler by Weight		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			ASTM D792
--	1.47	g/cm ³	
--	1.46	g/cm ³	
Molding Shrinkage			ASTM D955
Flow : 24 hr	0.30 to 0.50	%	
Across Flow : 24 hr	1.0 to 3.0	%	
Water Absorption			
24 hr, 50% RH	0.058	%	ASTM D570
Equilibrium, 23°C, 50% RH	0.073	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	7580	MPa	ASTM D638
--	7590	MPa	ISO 527-2/1
Tensile Strength			
Break ²	117	MPa	ASTM D638
Break	114	MPa	ISO 527-2/5
Tensile Strain			
Yield	2.5	%	ISO 527-2/5
Break ³	2.8	%	ASTM D638
Break	2.5	%	ISO 527-2/5
Flexural Modulus			
50.0 mm Span ⁴	7110	MPa	ASTM D790
-- ⁵	6660	MPa	ISO 178
Flexural Stress			
--	173	MPa	ISO 178
Yield, 50.0 mm Span ⁶	183	MPa	ASTM D790
Break, 50.0 mm Span ⁷	182	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method

Notched Izod Impact			
23°C	61	J/m	ASTM D256
23°C ⁸	6.1	kJ/m ²	ISO 180/1A
Unnotched Izod Impact			
23°C	600	J/m	ASTM D4812
23°C ⁹	35	kJ/m ²	ISO 180/1U
Instrumented Dart Impact			
23°C, Total Energy	7.10	J	ASTM D3763
--	1.90	J	ISO 6603-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed, 3.20 mm	222	°C	ASTM D648
0.45 MPa, Unannealed, 64.0 mm Span ¹⁰	218	°C	ISO 75-2/Bf
1.8 MPa, Unannealed, 3.20 mm	207	°C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ¹¹	198	°C	ISO 75-2/Af
CLTE			ASTM D696
Flow : -30 to 30°C	3.9E-5	cm/cm/°C	
Transverse : -30 to 30°C	1.0E-4	cm/cm/°C	
Injection	Nominal Value	Unit	
Drying Temperature	121	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.050	%	
Rear Temperature	221 to 232	°C	
Middle Temperature	243 to 254	°C	
Front Temperature	260 to 271	°C	
Processing (Melt) Temp	238 to 266	°C	
Mold Temperature	82.2 to 98.9	°C	
Back Pressure	0.172 to 0.344	MPa	
Screw Speed	30 to 60	rpm	
NOTE			
1.	50 mm/min		
2.	Type I, 5.0 mm/min		
3.	Type I, 5.0 mm/min		
4.	1.3 mm/min		
5.	2.0 mm/min		
6.	1.3 mm/min		
7.	1.3 mm/min		
8.	80*10*4		
9.	80*10*4		
10.	80*10*4 mm		
11.	80*10*4 mm		

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Recommended distributors for this material

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