

# LNP™ THERMOCOMP™ COMPOUND 2Z004

FP-EF-1004 M  
REGION AMERICAS

## DESCRIPTION

LNP THERMOCOMP 2Z004 is a compound based on ETFE resin containing 20% Milled Glass.

## TYPICAL PROPERTY VALUES

Revision 20170913

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 5 mm/min	29	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	21	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	23	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	53	%	ASTM D 638
Tensile Modulus, 50 mm/min	1700	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	1280	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	27	MPa	ISO 527
Tensile Stress, break, 5 mm/min	22	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	22	%	ISO 527
Tensile Strain, break, 5 mm/min	78	%	ISO 527
Tensile Modulus, 1 mm/min	1510	MPa	ISO 527
Flexural Stress	24	MPa	ISO 178
Flexural Modulus, 2 mm/min	1210	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, unnotched, 23°C	1340	J/m	ASTM D 4812
Izod Impact, notched, 23°C	615	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	26	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	119	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	37	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL</b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	88	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	52	°C	ASTM D 648
CTE, -30°C to 30°C, flow	8.E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	8.7E-05	1/°C	ASTM D 696

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	89	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	50	°C	ISO 75/Af
<b>PHYSICAL</b>			
Specific Gravity	1.84	-	ASTM D 792
Density	1.83	g/cm <sup>3</sup>	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.01	%	ASTM D 570
<b>INJECTION MOLDING</b>			
Drying Temperature	120 – 150	°C	
Drying Time	4	hrs	
Melt Temperature	315	°C	
Front - Zone 3 Temperature	325 – 340	°C	
Middle - Zone 2 Temperature	300 – 325	°C	
Rear - Zone 1 Temperature	280 – 300	°C	
Mold Temperature	90 – 120	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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