

# LNPTM THERMOCOMPTM COMPOUND ZX08309

## DESCRIPTION

LNP THERMOCOMP ZX08309 compound is based on Polyphenylene Ether / Polystyrene (PPE/PS) blend containing proprietary fillers. Added features of this grade include: High Dielectric Constant and Low Loss Tangent.

GENERAL INFORMATION	
Features	Dielectrics, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polyphenylene Ether + PS (PPE+PS)
Processing Techniques	Injection Molding

  

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Interiors
Consumer	Personal Accessory
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Flexural Stress, brk, 1.3 mm/min, 50 mm span	90 – 100	MPa	ASTM D790
Flexural Modulus, 2 mm/min	3200 – 3500	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, notched, 23°C	60	J/m	ASTM D256
<b>THERMAL <sup>(1)</sup></b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	134	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	122	°C	ASTM D648
<b>PHYSICAL <sup>(1)</sup></b>			
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.7	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.65	%	ASTM D955
Density	1.66	g/cm <sup>3</sup>	ISO 1183
Melt Volume Rate, MVR at 300°C/5.0 kg	11	cm <sup>3</sup> /10 min	ISO 1133
<b>ELECTRICAL <sup>(1)</sup></b>			
Dielectric Constant (Dk), 1.1 GHz	4.4 – 4.6	-	ASTM ES 7-83
Dissipation Factor (Df), 1.1 GHz	0.002 – 0.004	-	ASTM ES 7-83
<b>INJECTION MOLDING <sup>(3)</sup></b>			
Drying Temperature	105	°C	
Drying Time	3 – 5	Hrs	
Melt Temperature	295 – 305	°C	
Nozzle Temperature	290 – 295	°C	
Front - Zone 3 Temperature	300 – 305	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Middle - Zone 2 Temperature	290 – 295	°C	
Rear - Zone 1 Temperature	280 – 285	°C	
Mold Temperature	90	°C	
Back Pressure	9	MPa	
Screw Speed	100	rpm	

- (1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) 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.
- (3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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