

# LNPT<sup>TM</sup> THERMOCOMP<sup>TM</sup> COMPOUND KB006

KB-1006

## DESCRIPTION

LNPT THERMOCOMP KB006 compound is based on POM (Acetal) copolymer resin containing 30% glass bead.

GENERAL INFORMATION	
Features	Low Warpage, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Bead
Polymer Types	Acetal (POM) Copolymer
Processing Techniques	Injection Molding

  

INDUSTRY	SUB INDUSTRY
Building and Construction	Water Management
Consumer	Sport /Leisure, 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>			
Tensile Stress, brk, Type I, 5 mm/min	34	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	19.8	%	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	43	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	3990	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	37	MPa	ISO 527
Tensile Strain, break, 5 mm/min	20.4	%	ISO 527
Flexural Stress	65	MPa	ISO 178
Flexural Modulus, 2 mm/min	4320	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched, 23°C	374	J/m	ASTM D4812
Izod Impact, unnotched 80*10*4 +23°C	25	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	155	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	103	°C	ASTM D648
CTE, -30°C to 30°C, flow	8.3E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	8.3E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	152	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	107	°C	ISO 75/Af
<b>PHYSICAL <sup>(1)</sup></b>			
Specific Gravity	1.64	-	ASTM D792

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture Absorption, (23°C/50% RH/24 hrs)	0.2	%	ASTM D570
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	1 – 3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	1 – 3	%	ASTM D955
Density	1.64	g/cm <sup>3</sup>	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
<b>INJECTION MOLDING <sup>(3)</sup></b>			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Melt Temperature	200 – 215	°C	
Front - Zone 3 Temperature	210 – 220	°C	
Middle - Zone 2 Temperature	195 – 205	°C	
Rear - Zone 1 Temperature	175 – 190	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	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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