

# LNPT<sup>TM</sup> THERMOCOMP<sup>TM</sup> COMPOUND DX05477

DFA-113 EM MR

## DESCRIPTION

LNP THERMOCOMP DX05477 compound is based on Polycarbonate (PC) resin containing 10% glass fiber. Added features of this grade include: Easy Molding, Mold Release, Flame Retardant.

GENERAL INFORMATION	
Features	Flame Retardant, Good Processability, Enhanced mold release, High stiffness/Strength
Fillers	Glass Fiber
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

  

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
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>			
Tensile Stress, yield	62	MPa	ASTM D638
Tensile Stress, break	57	MPa	ASTM D638
Tensile Strain, yield	4.2	%	ASTM D638
Tensile Strain, break	7.4	%	ASTM D638
Tensile Modulus, 50 mm/min	2820	MPa	ASTM D638
Flexural Stress	119	MPa	ASTM D790
Flexural Modulus	3440	MPa	ASTM D790
Tensile Stress, yield	70	MPa	ISO 527
Tensile Stress, break	69	MPa	ISO 527
Tensile Strain, yield	3.8	%	ISO 527
Tensile Strain, break	4.4	%	ISO 527
Tensile Modulus, 1 mm/min	3600	MPa	ISO 527
Flexural Stress	120	MPa	ISO 178
Flexural Modulus	3700	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, notched, 23°C	96	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	5	J	ASTM D3763
Izod Impact, notched 80*10*4 +23°C	7	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	145	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 1.82 MPa, 3.2mm, unannealed	138	°C	ASTM D648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	136	°C	ISO 75 /Af
<b>PHYSICAL <sup>(1)</sup></b>			
Density	1.271	g/cm <sup>3</sup>	ASTM D792
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.5	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.6	%	ASTM D955
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.5	%	ISO 294
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.59	%	ISO 294
Density	1.26	g/cm <sup>3</sup>	ISO 1183
<b>INJECTION MOLDING <sup>(3)</sup></b>			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 – 330	°C	
Middle - Zone 2 Temperature	310 – 320	°C	
Rear - Zone 1 Temperature	295 – 305	°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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