

LNPTTM THERMOCOMPTM COMPOUND DF006ERH

DF-1006 EM MR HC

DESCRIPTION

LNP THERMOCOMP DF006ERH is a compound based on Polycarbonate resin containing 30% Glass Fiber. Added features of this material include: Healthcare, Easy Molding, Mold Release.

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, brk, Type I, 5 mm/min	132	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2.7	%	ASTM D638
Tensile Modulus, 5 mm/min	9500	MPa	ASTM D638
Flexural Strength, 1.3 mm/min, 50 mm span	190	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	8400	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	125	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.2	%	ISO 527
Tensile Modulus, 1 mm/min	9000	MPa	ISO 527
Flexural Strength, 2 mm/min	185	MPa	ISO 178
Flexural Modulus, 2 mm/min	7800	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	865	J/m	ASTM D4812
Izod Impact, notched, 23°C	133	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	8	J	ASTM D3763
Multiaxial Impact	4	J	ISO 6603
Izod Impact, unnotched 80°10°4 +23°C	60	kJ/m ²	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	13	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	136	°C	ASTM D648
HDT/Af, 1.8 MPa Flatw 80°10°4 sp=64mm	140	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Density	1.42	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.1	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.1	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.5	%	ASTM D955
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.11	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.48	%	ISO 294
Density	1.42	g/cm ³	ISO 1183
INJECTION MOLDING ⁽³⁾			
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	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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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