

LNPT[™] THERMOCOMP[™] COMPOUND DX06411H

DF-1004 EM MR HC
REGION AMERICAS

DESCRIPTION

LNP THERMOCOMP DX06411H is a compound based on Polycarbonate resin containing 20% Glass Fiber. Added features of this material include: Easy Molding, Mold Release, Healthcare.

TYPICAL PROPERTY VALUES

Revision 20180905

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	104	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	101	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	3.1	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	3.9	%	ASTM D 638
Tensile Modulus, 50 mm/min	6960	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	174	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	174	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	6090	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	104	MPa	ISO 527
Tensile Stress, break, 5 mm/min	102	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.9	%	ISO 527
Tensile Strain, break, 5 mm/min	3.8	%	ISO 527
Tensile Modulus, 1 mm/min	6990	MPa	ISO 527
Flexural Stress	175	MPa	ISO 178
Flexural Modulus, 2 mm/min	6000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	947	J/m	ASTM D 4812
Izod Impact, notched, 23°C	118	J/m	ASTM D 256
Multiaxial Impact	4	J	ISO 6603
Instrumented Impact Total Energy, 23°C	18	J	ASTM D 3763
Izod Impact, unnotched 80°10°4 +23°C	59	kJ/m ²	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	11	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	140	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	136	°C	ASTM D 648
CTE, -30°C to 30°C, flow	3.E-06	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	7.E-06	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80°10°4 sp=64mm	143	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80°10°4 sp=64mm	137	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.35	-	ASTM D 792
Density	1.35	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.01	%	ASTM D 570

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 24 hrs	0.3 – 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.5 – 0.7	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.01	%	ISO 62
INJECTION MOLDING			
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	

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