LNP™ THERMOCOMP™ COMPOUND MC002

MC-1002

DESCRIPTION

LNP THERMOCOMP MC002 is a compound based on Polypropylene resin containing 10% Carbon Fiber. Added feature of this material is: Electrically Conductive.

TYPICAL PROPERTY VALUES

Revision 20191219

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	35	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	36	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	11170	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	55	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	4700	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	24	MPa	ISO 527
Tensile Stress, break, 5 mm/min	35	MPa	ISO 527
Tensile Strain, break, 50 mm/min	3.7	%	ISO 527
Tensile Modulus, 1 mm/min	6290	MPa	ISO 527
Flexural Stress	77	MPa	ISO 178
Flexural Modulus, 2 mm/min	9590	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	299	J/m	ASTM D 4812
Izod Impact, notched, 23°C	48	J/m	ASTM D 256
Multiaxial Impact	5	J	ISO 6603
Instrumented Impact Total Energy, 23°C	11	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	25	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	145	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	120	°C	ASTM D 648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	139	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	116	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	0.95	-	ASTM D 792
Density	0.95	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.04	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.7 – 1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.7 – 1	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.04	%	ISO 62
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Melt Temperature	225 – 250	°C	
Front - Zone 3 Temperature	240 – 250	°C	
Middle - Zone 2 Temperature	215 – 225	°C	
Rear - Zone 1 Temperature	195 – 205	°C	
Mold Temperature	30 – 50	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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