LNP™ THERMOCOMP™ COMPOUND WC003

WC-1003

DESCRIPTION

LNP THERMOCOMP WC003 is a compound based on Polybutylene Terephalate resin containing Carbon Fiber. Added features of this material include: Electrically Conductive.

TYPICAL PROPERTY VALUES

Revision 20191213

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break, 5 mm/min	136	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.9	%	ISO 527
Tensile Modulus, 1 mm/min	11400	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	193	MPa	ISO 178
Flexural Modulus, 2 mm/min	9600	MPa	ISO 178
IMPACT			
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			
CTE, 23°C to 60°C, flow	1.6E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.16E-04	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	224	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	206	°C	ISO 75/Af
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow	0.2 – 0.4	%	SABIC method
Density	1.36	g/cm³	ISO 1183
ELECTRICAL			
Surface Resistivity	1.E+02 – 1.E+04	Ohm	ASTM D 257
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	240 – 265	°C	
Front - Zone 3 Temperature	260 – 270	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	220 – 230	°C	
Mold Temperature	80 – 100	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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