

LNPTM THERMOCOMPTM COMPOUND AC004

AC-1004
REGION AMERICAS

DESCRIPTION

LNPTM THERMOCOMPTM AC004 is a compound based on ABS resin containing 20% Carbon Fiber. Added feature of this material is: Electrically Conductive.

TYPICAL PROPERTY VALUES

Revision 20181101

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	95	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	12960	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	131	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	10610	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	90	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.3	%	ISO 527
Flexural Stress	152	MPa	ISO 178
Flexural Modulus, 2 mm/min	12750	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	320	J/m	ASTM D 4812
Izod Impact, notched, 23°C	64	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	16	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	213	°C	ASTM D 648
CTE, -30°C to 30°C, flow	2.03E+01	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	7.15E+01	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	105	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	101	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.14	-	ASTM D 792
Density	1.14	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.25	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.1 – 0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.3 – 0.6	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.25	%	ISO 62
ELECTRICAL			
Surface Resistivity	1.E+02 – 1.E+04	Ohm	ASTM D 257
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.05 – 0.1	%	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Melt Temperature	260	°C	
Front - Zone 3 Temperature	265 – 275	°C	
Middle - Zone 2 Temperature	230 – 245	°C	
Rear - Zone 1 Temperature	205 – 215	°C	
Mold Temperature	70 – 80	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.