LNP™ THERMOCOMP™ COMPOUND EC004XXC

EC-1004
REGION ASIA

DESCRIPTION

LNP THERMOCOMP EC004XXC is a compound based on Polyetherimide resin containing 20% Carbon Fiber. Added features of this material include: Electrically Conductive.

TYPICAL PROPERTY VALUES

Revision 20190610

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	170	MPa	ASTM D 638
Tensile Strain, break	2	%	ASTM D 638
Flexural Stress	259	MPa	ASTM D 790
Flexural Modulus	12330	MPa	ASTM D 790
Tensile Stress, break	175	MPa	ISO 527
Tensile Strain, break	2	%	ISO 527
Tensile Modulus, 1 mm/min	14500	MPa	ISO 527
Flexural Stress	250	MPa	ISO 178
Flexural Modulus	12000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	534	J/m	ASTM D 4812
Izod Impact, notched, 23°C	53	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	30	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	212	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	210	°C	ISO 75/Af
PHYSICAL			
Density	1.34	g/cm³	ASTM D 792
Mold Shrinkage, flow, 24 hrs	0.1 – 0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.3 – 0.5	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.1 – 0.3	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.3 – 0.5	%	ISO 294
Density	1.34	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
ELECTRICAL			
Surface Resistivity	1.E+02 – 1.E+06	Ohm	ASTM D 257
FLAME CHARACTERISTICS			
UL Compliant, 94V-0 Flame Class Rating	0.5	mm	UL 94 by SABIC-IP
INJECTION MOLDING			

© 2019 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Temperature	120 – 150	°C	
Drying Time	4 – 6	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	360 – 365	°C	
Front - Zone 3 Temperature	365 – 375	°C	
Middle - Zone 2 Temperature	355 – 365	°C	
Rear - Zone 1 Temperature	345 – 355	°C	
Mold Temperature	120 – 150	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	60 – 100	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.

© 2019 Copyright by SABIC. All rights reserved