LNP™ THERMOCOMP™ COMPOUND RC008

RC-1008

DESCRIPTION

LNP THERMOCOMP* RC008 is a compound based on Nylon 66 resin containing 40% Carbon Fiber. Added features of this material include: Electrically Conductive.

TYPICAL PROPERTY VALUES

Revision 20200110

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	267	MPa	ASTM D 638
Tensile Strain, break	1.9	%	ASTM D 638
Tensile Modulus, 50 mm/min	30700	MPa	ASTM D 638
Flexural Stress	439	MPa	ASTM D 790
Flexural Modulus	23160	MPa	ASTM D 790
Tensile Stress, break	293	MPa	ISO 527
Tensile Strain, break	1.7	%	ISO 527
Tensile Modulus, 1 mm/min	29500	MPa	ISO 527
Flexural Stress	457	MPa	ISO 178
Flexural Modulus	28400	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1110	J/m	ASTM D 4812
Izod Impact, notched, 23°C	101	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	9	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	74	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	11	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	253	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	>240	°C	ISO 75/Af
Relative Temp Index, Elec [1]	65	°C	UL 746B
Relative Temp Index, Mech w/impact [1]	65	°C	UL 746B
Relative Temp Index, Mech w/o impact [1]	65	°C	UL 746B
PHYSICAL			
Mold Shrinkage, flow, 24 hrs	0.2 – 0.4	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.4 – 0.6	%	ASTM D 955
Wear Factor Washer	14	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.41	-	ASTM D 3702 Modified: Manual
Static COF	0.3	-	ASTM D 3702 Modified: Manual
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E121562-101282584	-	-
UL Yellow Card Link 2	E45329-101282592	-	-
UL Yellow Card Link 3	E207780-103093589	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94

© 2020 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	280 – 305	°C	
Front - Zone 3 Temperature	295 – 305	°C	
Middle - Zone 2 Temperature	280 – 295	°C	
Rear - Zone 1 Temperature	265 – 275	°C	
Mold Temperature	95 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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.

© 2020 Copyright by SABIC. All rights reserved