LNP™ THERMOCOMP™ COMPOUND RC003

RC-1003

DESCRIPTION

15% carbon fibre reinforced Polyamide 66 injection moulding resin.

TYPICAL PROPERTY VALUES

Revision 20191213

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break, 5 mm/min	170	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2	%	ISO 527
Tensile Modulus, 1 mm/min	13000	MPa	ISO 527
Flexural Stress, break, 2 mm/min	230	MPa	ISO 178
Flexural Modulus, 2 mm/min	10000	MPa	ISO 178
Hardness, Rockwell L	105	-	ISO 2039-2
IMPACT			
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -20°C	4	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	3	kJ/m²	ISO 180/1A
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	45	kJ/m²	ISO 179/1eU
THERMAL			
CTE, 23°C to 60°C, flow	2.E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.1E-04	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/120	255	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	252	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	250	°C	ISO 75/Ae
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow	0.1 – 0.2	%	SABIC method
Density	1.19	g/cm³	ISO 1183
Water Absorption, (23°C/sat)	5.5	%	ISO 62
ELECTRICAL			
Volume Resistivity	1.78E+05	Ohm-cm	IEC 60093
Surface Resistivity, ROA	1.78E+05	Ohm	IEC 60093
FLAME CHARACTERISTICS			
UL Compliant, 94HB Flame Class Rating	1.6	mm	UL 94 by SABIC-IP
Oxygen Index (LOI)	28	%	ISO 4589
INJECTION MOLDING			
Drying Temperature	75 – 85	°C	
Drying Time	4 – 6	hrs	
Maximum Moisture Content	0.2	%	
Melt Temperature	260 – 290	°C	
Nozzle Temperature	250 – 270	°C	
Front - Zone 3 Temperature	260 – 280	°C	

© 2019 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Middle - Zone 2 Temperature	260 – 280	°C	
Rear - Zone 1 Temperature	270 – 290	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	70 – 120	°C	

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