LNP™ THERMOCOMP™ COMPOUND RF002

RF-1002

DESCRIPTION

LNP THERMOCOMP* RF002 is a compound based on Nylon 66 resin containing 10% Glass Fiber.

TYPICAL PROPERTY VALUES

Revision 20191213

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	112	MPa	ASTM D 638
Tensile Strain, break	2.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	5970	MPa	ASTM D 638
Flexural Stress	188	MPa	ASTM D 790
Flexural Modulus	5370	MPa	ASTM D 790
Tensile Stress, break	90	MPa	ISO 527
Tensile Strain, break	2	%	ISO 527
Tensile Modulus, 1 mm/min	5240	MPa	ISO 527
Flexural Stress	139	MPa	ISO 178
Flexural Modulus	4580	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	496	J/m	ASTM D 4812
Izod Impact, notched, 23°C	42	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	5	J	ASTM D 3763
Multiaxial Impact	1	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	35	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	265	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	250	°C	ASTM D 648
CTE, -40°C to 40°C, flow	4.86E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.92E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	4.93E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	8.06E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	235	°C	ISO 75/Af
PHYSICAL			
Density	1.215	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.8	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.8	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.2	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.76	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.2	%	ISO 294
Density	1.21	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	1.7	%	ISO 62

© 2019 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	

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