LNP™ THERMOCOMP™ COMPOUND QF006

QF-1006

DESCRIPTION

LNP THERMOCOMP* QF006 is a compound based on Nylon 6/10 resin containing 30% Glass Fiber.

TYPICAL PROPERTY VALUES

Revision 20200109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	150	MPa	ASTM D 638
Tensile Strain, break	3.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	8410	MPa	ASTM D 638
Flexural Stress	250	MPa	ASTM D 790
Flexural Modulus	7860	MPa	ASTM D 790
Tensile Stress, break	153	MPa	ISO 527
Tensile Strain, break	3.5	%	ISO 527
Tensile Modulus, 1 mm/min	8800	MPa	ISO 527
Flexural Stress	219	MPa	ISO 178
Flexural Modulus	7800	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1116	J/m	ASTM D 4812
Izod Impact, notched, 23°C	122	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	9	J	ASTM D 3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	71	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	9	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	220	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	207	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.05E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.27E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	3.06E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.27E-05	1/°C	ISO 11359-2
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			
Density	1.309	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.2	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.17 – 0.18	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.98 – 0.99	%	ISO 294

© 2020 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Density	1.3	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.33	%	ISO 62
ELECTRICAL			
Hot-Wire Ignition (HWI), PLC 4	≥1.5	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 0	≥1.5	mm	UL 746A
High Voltage Arc Track Rate {PLC}	0	PLC Code	UL 746A
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E121562-101281585	-	-
UL Recognized, 94HB Flame Class Rating	≥1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.12 – 0.2	%	
Melt Temperature	270 – 275	°C	
Front - Zone 3 Temperature	270 – 280	°C	
Middle - Zone 2 Temperature	260 – 270	°C	
Rear - Zone 1 Temperature	250 – 260	°C	
Mold Temperature	80 – 95	°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