LNP™ THERMOCOMP™ COMPOUND DF0081PI

DESCRIPTION

LNP THERMOCOMP DF0081PI is a compound based on Polycarbonate resin containing Glass Fiber, Flame Retardant. Added features of this material include: High Modulus, good flatness, Non-Brominated & Non-Chlorinated Flame Retardant.

TYPICAL PROPERTY VALUES

Revision 20191217

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	130	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	12700	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	170	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	10000	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	123	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.7	%	ISO 527
Tensile Modulus, 1 mm/min	12500	MPa	ISO 527
Flexural Strain, break, 2 mm/min	1.9	%	ISO 178
Flexural Modulus, 2 mm/min	10800	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	264	J/m	ASTM D 4812
Izod Impact, notched, 23°C	81	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	10	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	22	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	110	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	102	°C	ISO 75/Af
Relative Temp Index, Elec (1)	80	°C	UL 746B
Relative Temp Index, Mech w/impact (1)	80	°C	UL 746B
Relative Temp Index, Mech w/o impact (1)	80	°C	UL 746B
PHYSICAL			
Density	1.54	g/cm³	ASTM D 792
Mold Shrinkage, flow	0.4	%	SABIC method
Mold Shrinkage, xflow	0.41	%	SABIC method
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E207780-101343768	-	-
UL Recognized, 94V-0 Flame Class Rating	≥1.2	mm	UL 94
UL Recognized, 94V-1 Flame Class Rating	≥1	mm	UL 94
UL Recognized, 94V-2 Flame Class Rating	≥0.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	110	°C	
Drying Time	3 – 6	hrs	

© 2019 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Maximum Moisture Content	0.02	%	
Melt Temperature	285 – 310	°C	
Nozzle Temperature	285 – 305	°C	
Front - Zone 3 Temperature	280 – 300	°C	
Middle - Zone 2 Temperature	270 – 290	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.1 – 0.3	MPa	
Screw Speed	50 – 90	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.

© 2019 Copyright by SABIC. All rights reserved