LNP™ THERMOCOMP™ Compound DF004AXC

DESCRIPTION

LNP THERMOCOMP DF004AXC compound is based on Polycarbonate (PC) resin containing 20% glass fiber.

TYPICAL PROPERTY VALUES

Revision 20260204

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, break	91	MPa	ASTM D638
Tensile Strain, break	9.5	%	ASTM D638
Tensile Modulus, 50 mm/min	5510	MPa	ASTM D638
Flexural Stress	149	MPa	ASTM D790
Flexural Modulus	5510	MPa	ASTM D790
Tensile Stress, break	102	MPa	ISO 527
Tensile Strain, break	8	%	ISO 527
Tensile Modulus, 1 mm/min	6000	MPa	ISO 527
Flexural Stress	148	MPa	ISO 178
Flexural Modulus	6000	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	961	J/m	ASTM D4812
Izod Impact, notched, 23°C	133	J/m	ASTM D256
Izod Impact, unnotched 80*10*4 +23°C	61	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	144	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	139	°C	ASTM D648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	142	°C	ISO 75/Af
Relative Temp Index, Elec [2]	80	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	80	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	80	°C	UL 746B
PHYSICAL [1]			
Density	1.35	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.1	%	ASTM D570
Mold Shrinkage, flow, 24 hrs [3]	0.2	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [3]	0.5	%	ASTM D955
Mold Shrinkage, flow, 24 hrs [3]	0.2	%	ISO 294
Mold Shrinkage, xflow, 24 hrs [3]	0.45	%	ISO 294
Density	1.35	g/cm³	ISO 1183
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E207780-101343857	-	-
UL Recognized, 94V-1 Flame Class Rating	3	mm	UL 94
UL Recognized, 94V-2 Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING [4]			

© 2026 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 – 330	°C	
Middle - Zone 2 Temperature	310 – 320	°C	
Rear - Zone 1 Temperature	295 – 305	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) 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.

(3) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(4) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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.

© 2026 Copyright by SABIC. All rights reserved