LNP™ THERMOCOMP™ COMPOUND JF002

JF-1002
REGION AMERICAS

DESCRIPTION

LNP THERMOCOMP JF002 compound is based on Polyethersulfone (PES) resin containing 10% glass fiber.

GENERAL INFORMATION	
Features	High stiffness/Strength, High temperature resistance
Fillers	Glass Fiber
Polymer Types	Polyethersulfone (PESU)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20260204

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yld, Type I, 5 mm/min	105	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	102	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	4.4	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	5.4	%	ASTM D638
Tensile Modulus, 5 mm/min	4680	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	176	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	4370	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	103	MPa	ISO 527
Tensile Stress, break, 5 mm/min	104	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4.3	%	ISO 527
Tensile Strain, break, 5 mm/min	5	%	ISO 527
Tensile Modulus, 1 mm/min	4460	MPa	ISO 527
Flexural Modulus, 2 mm/min	4080	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	839	J/m	ASTM D4812
Izod Impact, notched, 23°C	53	J/m	ASTM D256
Izod Impact, unnotched 80*10*4 +23°C	52	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	220	°C	ASTM D648

© 2026 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 1.82 MPa, 3.2mm, unannealed	214	°C	ASTM D648
CTE, -30°C to 30°C, flow	3.7E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	4.4E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	221	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	212	°C	ISO 75/Af
PHYSICAL (1)			
Density	1.45	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.51	%	ASTM D570
Mold Shrinkage, flow, 24 hrs (2)	0.4 – 0.6	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs (2)	0.5 – 0.7	%	ASTM D955
Density	1.45	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.85	%	ISO 62
FLAME CHARACTERISTICS (3)			
UL Yellow Card Link	E121562-101282575	-	-
UL Recognized, 94V-0 Flame Class Rating	0.5	mm	UL 94
INJECTION MOLDING (4)			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	355 – 370	°C	
Front - Zone 3 Temperature	370 – 380	°C	
Middle - Zone 2 Temperature	360 – 370	°C	
Rear - Zone 1 Temperature	345 – 355	°C	
Mold Temperature	140 – 150	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	60 – 100	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) 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.

(3) 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.

(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