LNP™ THERMOCOMP™ Compound WF006XXL

DESCRIPTION

LNP THERMOCOMP WF006XXL compound is based on Polybutylene Terephthalate (PBT) resin containing 30% glass fiber. Added features of this grade include: Good Mold Release, Heat Stabilized, Low Extractables.

GENERAL INFORMATION	
Features	Heat Stabilized, Low Extractable, Food contact, Enhanced mold release, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber (Total fluorine >50ppm only from inorganic fluorine)
Polymer Types	Polybutylene Terephthalate (PBT)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Water Management
Consumer	Home Appliances
Packaging	Industrial Packaging, Food & Beverage

TYPICAL PROPERTY VALUES

Revision 20231120

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Modulus, 1 mm/min	10449	MPa	ISO 527
Tensile Stress, break, 5 mm/min	131	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.4	%	ISO 527
Flexural Modulus, 2 mm/min	8900	MPa	ISO 178
Flexural Strength, 2 mm/min	184	MPa	ISO 178
Tensile Modulus, 5 mm/min	10330	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	128	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2.7	%	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	9130	MPa	ASTM D790
Flexural Strength, 1.3 mm/min, 50 mm span	185	MPa	ASTM D790
IMPACT [1]			
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	43	kJ/m²	ISO 180/1U
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	6.9	kJ/m²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	49	kJ/m²	ISO 179/1eU
Izod Impact, notched, 23°C	55	J/m	ASTM D256
Izod Impact, unnotched, 23°C	585	J/m	ASTM D4812
THERMAL [1]			
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	222	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	205	°C	ISO 75/Af
Vicat Softening Temp, Rate B/50	214	°C	ISO 306

© 2026 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Vicat Softening Temp, Rate B/120	213	°C	ISO 306
CTE, 23°C to 60°C, flow	3.1E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.1E-04	1/°C	ISO 11359-2
HDT, 0.45 MPa, 3.2 mm, unannealed	224	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	209	°C	ASTM D648
PHYSICAL [1]			
Density	1.57	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.06	%	ISO 62
Melt Volume Rate, MVR at 265°C/1.2 kg	12	cm³/10 min	ISO 1133
Melt Volume Rate, MVR at 265°C/2.16 kg	21	cm³/10 min	ISO 1133
Specific Gravity	1.57	-	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.01	%	ASTM D570
Mold Shrinkage, flow [2]	0.21	%	SABIC method
Mold Shrinkage, xflow [2]	1.21	%	SABIC method
INJECTION MOLDING [3]			
Drying Temperature	120	°C	
Drying Time	2 – 4	Hrs	
Drying Time (Cumulative)	12	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	240 – 265	°C	
Nozzle Temperature	250 – 260	°C	
Front - Zone 3 Temperature	260 – 270	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	220 – 230	°C	
Mold Temperature	65 – 90	°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) 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) 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