LNP™ THERMOCOMP™ COMPOUND EC006AQW

DESCRIPTION

LNP THERMOCOMP EC006AQW compound is based on Polyetherimide (PEI) resin containing 30% carbon fiber. Added features of this grade include: Electrically Conductive. This grade has been pre-assessed and passed the material related tests from the ISO 10993 “Biological Evaluation of Medical Devices”.

GENERAL INFORMATION	
Features	Electrically Conductive, Biocompatability-ISO10993, Healthcare/Formula lock, Carbon fiber filled, High stiffness/Strength, High temperature resistance, No PFAS intentionally added
Fillers	Carbon Fiber
Polymer Types	Polyetherimide (PEI)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Hygiene and Healthcare	Pharmaceutical Packaging and Drug Delivery, Surgical devices, General Healthcare, Patient Testing
Packaging	Industrial Packaging

TYPICAL PROPERTY VALUES

Revision 20260424

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, brk, Type I, 5 mm/min	255	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	1.4	%	ASTM D638
Tensile Modulus, 5 mm/min	29220	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	351	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	22200	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	257	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.4	%	ISO 527
Tensile Modulus, 1 mm/min	27540	MPa	ISO 527
Flexural Strength, 2 mm/min	350	MPa	ISO 178
Flexural Modulus, 2 mm/min	23280	MPa	ISO 178
Compressive Strength	234	MPa	SABIC method
IMPACT [1]			
Izod Impact, unnotched, 23°C	580	J/m	ASTM D4812
Izod Impact, notched, 23°C	80	J/m	ASTM D256
Izod Impact, unnotched 80*10*4 +23°C	32	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	198	°C	ASTM D648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	198	°C	ISO 75/Af
PHYSICAL [1]			
Specific Gravity	1.39	-	ASTM D792
Mold Shrinkage, flow, 24 hrs [2]	0.1 – 0.3	%	ASTM D955

© 2026 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, xflow, 24 hrs [2]	0.1 – 0.6	%	ASTM D955
Melt Flow Rate			
380°C/6.7 kgf	10	g/10 min	ASTM D1238
INJECTION MOLDING [3]			
Drying Temperature	150	°C	
Drying Time	4 – 6	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	360 – 400	°C	
Rear - Zone 1 Temperature	360 – 380	°C	
Middle - Zone 2 Temperature	370 – 390	°C	
Front - Zone 3 Temperature	380 – 400	°C	
Nozzle Temperature	390 – 400	°C	
Mold Temperature	140 – 180	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw speed (Circumferential speed)	0.2 – 0.3	m/s	
Vent Depth	0.025 – 0.076	mm	

(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.

MORE INFORMATION

For curve data and CAE cards, please visit and register at https://materialfinder.sabic-specialties.com

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