

LNPTM THERMOCOMPTM COMPOUND EC006PXQ

EC006PXQ

DESCRIPTION

LNP THERMOCOMP EC006PXQ compound is based on Polyetherimide (PEI) resin containing 30% carbon fiber. Added features of this grade include: Electrically Conductive, Exceptional Processing, FAR25.853 Compliant.

GENERAL INFORMATION

Features	Flame Retardant, Electrically Conductive, High Flow, 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

Automotive
Building and Construction
Consumer
Industrial

SUB INDUSTRY

Automotive Under the Hood, Aerospace
Building Component
Sport/Leisure
Electrical

TYPICAL PROPERTY VALUES

Revision 20240201

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Flexural Stress, break, 2 mm/min	334	MPa	ISO 178
Tensile Stress, brk, Type I, 5 mm/min	272	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	1.3 – 1.4	%	ASTM D638
Tensile Modulus, 5 mm/min	29520	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	341	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	23800	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	248	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.2	%	ISO 527
Tensile Modulus, 1 mm/min	27560	MPa	ISO 527
Flexural Modulus, 2 mm/min	23060	MPa	ISO 178
Compressive Strength	244	MPa	SABIC method
Shear Modulus	4726	MPa	ASTM D732
Shear Strength	128	MPa	ASTM D732
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	581	J/m	ASTM D4812
Izod Impact, notched, 23°C	81	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	12	J	ASTM D3763
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	195	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 150°C, flow	7.2E-06	1/°C	ASTM E831
CTE, -40°C to 150°C, xflow	5.8E-05	1/°C	ASTM E831
PHYSICAL ⁽¹⁾			
Specific Gravity	1.39	-	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.11	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.1 – 0.3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.1 – 0.6	%	ASTM D955
Melt Flow Rate, 380°C/6.7 kgf	22	g/10 min	ASTM D1238
Poisson's Ratio	0.44	-	ASTM E132
ELECTRICAL ⁽¹⁾			
Surface Resistivity	1.E+03	Ω	ASTM D257
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>

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

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 NON-INFRINGEMENT 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.