

LNPTM STAT-KONTM COMPOUND EX02598C

PDX-E-02598 CCS

DESCRIPTION

LNP STAT-KON EX02598C compound is based on Polyetherimide (PEI) resin containing carbon nanotube. Added features of this grade include: LNP Clean Compounding Technology, Electrically Conductive.

GENERAL INFORMATION

Features	Electrically Conductive, Low ionics/Outgassing/Liquid particle count, High temperature resistance, No PFAS intentionally added
Fillers	Carbon nanotube
Polymer Types	Polyetherimide (PEI)
Processing Techniques	Injection Molding

INDUSTRY

Electrical and Electronics
Industrial

SUB INDUSTRY

Electronic Components, Mobile Phone - Computer - Tablets
Electrical, Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, brk, Type I, 5 mm/min	52	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	1.7	%	ASTM D638
Tensile Modulus, 5 mm/min	3410	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	98	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	3310	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	60	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.1	%	ISO 527
Tensile Modulus, 1 mm/min	3240	MPa	ISO 527
Flexural Stress	72	MPa	ISO 178
Flexural Modulus, 2 mm/min	3110	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	266	J/m	ASTM D4812
Izod Impact, notched, 23°C	19	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	2	J	ASTM D3763
Izod Impact, unnotched 80°10°4 +23°C	18	kJ/m ²	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	2	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	172	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	163	°C	ASTM D648
CTE, -30°C to 30°C, flow	5.E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	5.4E-05	1/°C	ASTM D696

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	171	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	160	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Specific Gravity	1.27	-	ASTM D792
Density	1.26	g/cm ³	ASTM D792
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.6 – 0.8	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.7 – 0.9	%	ASTM D955
ELECTRICAL ⁽¹⁾			
Surface Resistivity	1.E+03 – 1.E+06	Ω	ASTM D257
INJECTION MOLDING ⁽³⁾			
Extended 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.

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.