

LNPTM STAT-KONTM COMPOUND 9X08403C

9X08403C

DESCRIPTION

LNP STAT-KON 9X08403C compound is based on Liquid Crystal Polymer (LCP) resin containing carbon fiber. Added features of this grade include: LNP Clean Compounding Technology, High Temperature, Flame Retardant, Electrically Conductive, Good Barrier against water and oxygen.

GENERAL INFORMATION	
Features	Flame Retardant, Electrically Conductive, Low ionics/Outgassing/Liquid particle count, Carbon fiber filled, Dimensional stability, High stiffness/Strength, High temperature resistance, No PFAS intentionally added
Fillers	Carbon Fiber
Polymer Types	Liquid Crystal Polymer (LCP)
Processing Techniques	Injection Molding
INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components, Mobile Phone - Computer - Tablets
Industrial	Electrical, Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yld, Type I, 5 mm/min	153	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	2.7	%	ASTM D638
Tensile Modulus, 5 mm/min	14800	MPa	ASTM D638
Flexural Stress	53	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	14400	MPa	ASTM D790
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	826	J/m	ASTM D4812
Izod Impact, notched, 23°C	87	J/m	ASTM D256
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	280	°C	ASTM D648
PHYSICAL ⁽¹⁾			
Specific Gravity	1.46	-	ASTM D792
Density	1.46	g/cm ³	ASTM D792
Mold Shrinkage, flow ⁽²⁾	0.2	%	SABIC method
Mold Shrinkage, xflow ⁽²⁾	0.52	%	SABIC method
ELECTRICAL ⁽¹⁾			
Volume Resistivity ⁽³⁾	1.E+05 – 1.E+09	Ω.cm	ASTM D257
Surface Resistivity ⁽³⁾	1.E+05 – 1.E+09	Ω	ASTM D257
INJECTION MOLDING ⁽⁴⁾			
Drying Temperature	120 – 150	°C	
Drying Time	1 – 3	Hrs	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Maximum Moisture Content	0.01	%	
Melt Temperature	330 – 360	°C	
Nozzle Temperature	330 – 360	°C	
Front - Zone 3 Temperature	330 – 360	°C	
Middle - Zone 2 Temperature	330 – 360	°C	
Rear - Zone 1 Temperature	325 – 360	°C	
Mold Temperature	65 – 110	°C	

- (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) Measurement meets requirements as specified in ASTM D4496.
- (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.

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 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.