

# LNPTM STAT-KONTM COMPOUND KE002

KC-1002

## DESCRIPTION

LNP STAT-KON KE002 compound is based on POM (Acetal) copolymer resin containing 10% Carbon Fiber. Added feature of this material is: Electrically Conductive.

GENERAL INFORMATION	
Applications	Fuel Handling, Weaving Machine
Features	Electrically Conductive, Carbon fiber filled, High stiffness/Strength, No PFAS intentionally added
Fillers	Carbon Fiber
Polymer Types	Acetal (POM) Copolymer
Processing Techniques	Injection Molding
Regional Availability	Europe, Asia, Americas

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, break, 5 mm/min	104	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2	%	ISO 527
Tensile Modulus, 1 mm/min	7900	MPa	ISO 527
Flexural Stress	154	MPa	ISO 178
Flexural Modulus, 2 mm/min	7000	MPa	ISO 178
Tensile Stress, brk, Type I, 5 mm/min	106	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2.4	%	ASTM D638
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, notched 80*10*4 +23°C	5	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	20	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, unnotched, 23°C	374	J/m	ASTM D4812
Izod Impact, notched, 23°C	42	J/m	ASTM D256
<b>THERMAL <sup>(1)</sup></b>			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	158	°C	ISO 75/Af
CTE, 23°C to 60°C, flow	3.10E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.15E-04	1/°C	ISO 11359-2
<b>PHYSICAL <sup>(1)</sup></b>			
Density	1.42	g/cm <sup>3</sup>	ISO 1183
Specific Gravity	1.43	-	ASTM D792
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.5 – 0.7	%	ASTM D955

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	1 – 3	%	ASTM D955
<b>ELECTRICAL <sup>(1)</sup></b>			
Surface Resistivity <sup>(3)</sup>	1.E+02 – 1.E+05	Ω	ASTM D257
<b>INJECTION MOLDING <sup>(4)</sup></b>			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Melt Temperature	200 – 215	°C	
Front - Zone 3 Temperature	210 – 220	°C	
Middle - Zone 2 Temperature	195 – 205	°C	
Rear - Zone 1 Temperature	175 – 190	°C	
Mold Temperature	80 – 110	°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) 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.

## 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.