

## LNPTM STAT-KONTM COMPOUND TX06488

TX06488

## **DESCRIPTION**

LNP STAT-KON TX06488 compound is based on Polyurethane (TPU) resin containing conductive carbon powder. Added features of this grade include: Excellent Ductility, Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Impact resistant, No PFAS intentionally added
Fillers	Carbon Powder
Polymer Types	Polyurethane, Unspecified (PUR, Unspecified)
Processing Techniques	Injection Molding
INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

## **TYPICAL PROPERTY VALUES**

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL (1)			
Tensile Stress, yld, Type I, 5 mm/min	19	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	18	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	388	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	392	%	ASTM D638
Tensile Modulus, 5 mm/min	60	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	60	MPa	ASTM D790
Hardness, Shore A	90	-	ASTM D2240
IMPACT (1)			
Multiaxial Impact	41	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	39	J	ASTM D3763
THERMAL (1)			
HDT, 0.45 MPa, 3.2 mm, unannealed	23	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	23	°C	ASTM D648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	23	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	23	°C	ISO 75/Af
PHYSICAL (1)			
Specific Gravity	1.28	-	ASTM D792
Density	1.28	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.67	%	ASTM D570
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.8 – 1	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.4 - 0.6	%	ASTM D955
Moisture Absorption (23°C / 50% RH)	0.89	%	ISO 62



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
ELECTRICAL (1)			
Surface Resistivity (3)	1.E+02 – 1.E+05	Ω	ASTM D257
INJECTION MOLDING (4)			
Drying Temperature	95 – 105	°C	
Drying Time	2	Hrs	
Maximum Moisture Content	0.03	%	
Melt Temperature	210	°C	
Nozzle Temperature	205 – 225	°C	
Front - Zone 3 Temperature	200 – 220	°C	
Middle - Zone 2 Temperature	195 – 215	°C	
Rear - Zone 1 Temperature	195 – 210	°C	
Mold Temperature	15 – 45	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	
Shot to Cylinder Size	40 – 80	%	

- (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 qas-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 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.