

# LNPTM STAT-KONTM COMPOUND DX05305C

PDX-D-05305 CCS

## DESCRIPTION

LNP STAT-KON DX05305C compound is based on Polycarbonate (PC) resin containing conductive carbon powder. Added features of this grade include: LNP Clean Compounding Technology, Low Ionic, Low Outgassing, Low LPC and Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Low ionics/Outgassing/Liquid particle count, No PFAS intentionally added
Fillers	Carbon Powder
Polymer Types	Polycarbonate (PC)
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
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, yield	22	MPa	ASTM D638
Tensile Stress, break	52	MPa	ASTM D638
Tensile Strain, yield	1.9	%	ASTM D638
Tensile Strain, break	5.9	%	ASTM D638
Tensile Modulus, 50 mm/min	2650	MPa	ASTM D638
Flexural Stress	96	MPa	ASTM D790
Flexural Modulus	2590	MPa	ASTM D790
Tensile Stress, break	54	MPa	ISO 527
Tensile Strain, break	5.9	%	ISO 527
Tensile Modulus, 1 mm/min	2620	MPa	ISO 527
Flexural Stress	101	MPa	ISO 178
Flexural Modulus	2730	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched, 23°C	1012	J/m	ASTM D4812
Izod Impact, notched, 23°C	48	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	2	J	ASTM D3763
Multiaxial Impact	5	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	80	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	142	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	135	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, flow	6.48E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	6.12E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	6.14E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.15E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	132	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	130	°C	ISO 75/Af
<b>PHYSICAL <sup>(1)</sup></b>			
Density	1.22	g/cm <sup>3</sup>	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.1	%	ASTM D570
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.5 – 0.7	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.5 – 0.7	%	ASTM D955
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.74	%	ISO 294
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.61	%	ISO 294
Density	1.22	g/cm <sup>3</sup>	ISO 1183
<b>ELECTRICAL <sup>(1)</sup></b>			
Volume Resistivity <sup>(3)</sup>	1.E+02 – 1.E+05	Ω.cm	ASTM D257
Surface Resistivity <sup>(3)</sup>	1.E+02 – 1.E+05	Ω	ASTM D257
<b>INJECTION MOLDING <sup>(4)</sup></b>			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 – 330	°C	
Middle - Zone 2 Temperature	310 – 320	°C	
Rear - Zone 1 Temperature	295 – 305	°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.

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