LNP™ STAT-KON™ COMPOUND DX09301C

DESCRIPTION

LNP STAT-KON DX09301C compound is based on Polycarbonate (PC) resin containing conductive carbon powder. Added features of this grade include: LNP Clean Compounding Technology, Low LPC, Low Ionics, Low Outgassing, 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
MECHANICAL [1]			
Tensile Stress, yld, Type I, 5 mm/min	64	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	51	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	5.4	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	15	%	ASTM D638
Tensile Modulus, 50 mm/min	2670	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	101	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2600	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	66	MPa	ISO 527
Tensile Stress, break, 5 mm/min	54	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3.1	%	ISO 527
Tensile Strain, break, 5 mm/min	12	%	ISO 527
Tensile Modulus, 1 mm/min	2600	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	99	MPa	ISO 178
Flexural Modulus, 2 mm/min	2560	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	2160	J/m	ASTM D4812
Izod Impact, notched, 23°C	52	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	8	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	200	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
THERMAL [1]			
Relative Temp Index, Elec [2]	80	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	80	°C	UL 746B

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Relative Temp Index, Mech w/o impact [2]	80	°C	UL 746B
HDT, 1.82 MPa, 3.2mm, unannealed	126	°C	ASTM D648
PHYSICAL [1]			
Density	1.224	g/cm³	ASTM D792
Mold Shrinkage, flow, 24 hrs [3]	0.5 – 0.7	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [3]	0.5 – 0.7	%	ASTM D955
Density	1.22	g/cm³	ISO 1183
ELECTRICAL [1]			
Volume Resistivity [4]	1.E+03 – 1.E+07	Ω.cm	ASTM D257
Surface Resistivity [4]	1.E+03 – 1.E+07	Ω	ASTM D257
Static Decay, 5000V to <50V	<0.1	Seconds	FTMS101B
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E207780-101343769	-	-
UL Recognized, 94HB Flame Class Rating	≥1	mm	UL 94
INJECTION MOLDING [5]			
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) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.
(3) 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.
(4) Measurement meets requirements as specified in ASTM D4496.
(5) 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