LNP™ STAT-KON™ COMPOUND DX96573C

PDX-D-96573 CCS

DESCRIPTION

LNP STAT-KON DX96573C compound is based on Polycarbonate (PC) resin containing conductive carbon powder. Added features of this grade include: Electrically Conductive, LNP Clean Compounding Technology.

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 Modulus, 5 mm/min	3008	MPa	ASTM D638
Tensile Stress, yld, Type I, 5 mm/min	64	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	54	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	4.9	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	20	%	ASTM D638
Tensile Modulus, 1 mm/min	2913	MPa	ISO 527
Tensile Stress, yield, 5 mm/min	63	MPa	ISO 527
Tensile Stress, break, 5 mm/min	54	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4.9	%	ISO 527
Tensile Strain, break, 5 mm/min	20	%	ISO 527
Flexural modulus	2890	MPa	ASTM D790
Flexural Modulus	2771	MPa	ISO 178
Flexural Stress	100	MPa	ISO 178
IMPACT [1]			
Izod Impact, notched, 23°C	65.8	J/m	ASTM D256
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D4812
Instrumented Dart Impact Total Energy, 23°C	41	J	ASTM D3763
Izod Impact, notched 80*10*4 +23°C	7.5	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m²	ISO 180/1U
Multiaxial Impact	38	J	ISO 6603
THERMAL [1]			
HDT, 1.8 MPa, 3.2mm, unannealed	133	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 0.45 MPa, 3.2 mm, unannealed	142	°C	ASTM D648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	131	°C	ISO 75/Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	142	°C	ISO 75/Bf
CTE, -30°C to 30°C, flow	0.000062	1/°C	ASTM E831
CTE, -30°C to 30°C, xflow	0.000063	1/°C	ASTM E831
PHYSICAL (1)			
Specific Gravity	1.25	-	ASTM D792
Density	1.25	g/cm³	ASTM D792
Mold Shrinkage, flow, 24 hrs (2)	0.74	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs (2)	0.85	%	ASTM D955
Moisture Absorption, (23°C/50% RH/24 hrs)	0.15	%	ASTM D570
Moisture Absorption (23°C / 50% RH)	0.23	%	ISO 62
ELECTRICAL (1)			
Surface Resistivity (3)	1.0E+02 – 1.0E+05	Ω	ASTM D257
INJECTION MOLDING (4)			
Drying Temperature	121	°C	
Drying Time	4	Hrs	
Melt Temperature	304 – 326	°C	
Front - Zone 3 Temperature	321 – 332	°C	
Middle - Zone 2 Temperature	310 – 321	°C	
Rear - Zone 1 Temperature	293 – 304	°C	
Mold Temperature	82 – 110	°C	
Back Pressure	0.17 – 0.34	MPa	
Screw Speed	30 – 60	rpm	
Maximum Moisture Content	0.02	%	

(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