

LNPTM STAT-KONTM COMPOUND DX99873C

PDX-D-99873 CCS

DESCRIPTION

LNP STAT-KON DX99873C compound is based on Polycarbonate (PC) resin containing 25% carbon fiber. Added features of this grade include: LNP Clean Compounding Technology, Electrically Conductive, High Flow, Dimensional Stability.

GENERAL INFORMATION

Features	Electrically Conductive, High Flow, Low ionics /Outgassing/Liquid particle count, Carbon fiber filled, Dimensional stability, High stiffness/Strength, No PFAS intentionally added
Fillers	Carbon Fiber
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY

Electrical and Electronics
Industrial

SUB INDUSTRY

Electronic Components, Mobile Phone - Computer - Tablets
Electrical, Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break	104	MPa	ASTM D638
Tensile Strain, break	1.7	%	ASTM D638
Tensile Modulus, 50 mm/min	10750	MPa	ASTM D638
Flexural Stress	171	MPa	ASTM D790
Flexural Modulus	9680	MPa	ASTM D790
Tensile Stress, break	99	MPa	ISO 527
Tensile Strain, break	1.6	%	ISO 527
Tensile Modulus, 1 mm/min	10800	MPa	ISO 527
Flexural Stress	163	MPa	ISO 178
Flexural Modulus	9250	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	485	J/m	ASTM D4812
Izod Impact, notched, 23°C	53	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	13	J	ASTM D3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	30	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	138	°C	ASTM D648
CTE, -40°C to 40°C, flow	2.59E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	3.74E-05	1/°C	ASTM E831

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, flow	2.58E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	3.79E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	139	°C	ISO 75/Af
Relative Temp Index, Elec ⁽²⁾	80	°C	UL 746B
Relative Temp Index, Mech w/impact ⁽²⁾	80	°C	UL 746B
Relative Temp Index, Mech w/o impact ⁽²⁾	80	°C	UL 746B
PHYSICAL ⁽¹⁾			
Density	1.29	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.15	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽³⁾	0.1	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	0.4	%	ASTM D955
Mold Shrinkage, flow, 24 hrs ⁽³⁾	0.05	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	0.4	%	ISO 294
ELECTRICAL ⁽¹⁾			
Surface Resistivity ⁽⁴⁾	1.E+02 – 1.E+06	Ω	ASTM D257
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	E121562-101284691	-	-
UL Recognized, 94V-0 Flame Class Rating	≥3	mm	UL 94
UL Recognized, 94V-2 Flame Class Rating	≥1.5	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.



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