

LNPTM STAT-KONTM COMPOUND CD0001

C-HI
REGION AMERICAS

DESCRIPTION

LNP STAT-KON CD0001 compound is based on Polystyrene (PS) resin containing conductive carbon powder. Added features of this grade include: Electrically Conductive, High Impact.

GENERAL INFORMATION	
Features	Electrically Conductive, Impact resistant, No PFAS intentionally added
Fillers	Carbon Powder
Polymer Types	Polystyrene (PS)
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	23	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	16	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	1.2	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	9.7	%	ASTM D638
Tensile Modulus, 5 mm/min	2280	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	42	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2280	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	23	MPa	ISO 527
Tensile Stress, break, 5 mm/min	17	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.2	%	ISO 527
Tensile Strain, break, 5 mm/min	7.1	%	ISO 527
Tensile Modulus, 1 mm/min	2120	MPa	ISO 527
Flexural Stress	40	MPa	ISO 178
Flexural Modulus, 2 mm/min	2100	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	744	J/m	ASTM D4812
Izod Impact, notched, 23°C	82	J/m	ASTM D256
Multiaxial Impact	15	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	18	J	ASTM D3763
Izod Impact, unnotched 80°10°4 +23°C	31	kJ/m ²	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	5	kJ/m ²	ISO 180/1A

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	87	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	75	°C	ASTM D648
CTE, -40°C to 40°C, flow	9.8E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	1.07E-04	1/°C	ASTM E831
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	87	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	78	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Specific Gravity	1.08	-	ASTM D792
Density	1.08	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.1	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.3 – 0.7	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.4 – 0.7	%	ASTM D955
Moisture Absorption (23°C / 50% RH)	0.13	%	ISO 62
ELECTRICAL ⁽¹⁾			
Surface Resistivity ⁽³⁾	1.E+02 – 1.E+06	Ω	ASTM D257
FLAME CHARACTERISTICS ⁽⁴⁾			
UL Yellow Card Link	E121562-101284104	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING ⁽⁵⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Melt Temperature	250	°C	
Front - Zone 3 Temperature	265 – 275	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	220 – 230	°C	
Mold Temperature	40 – 65	°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) 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.

(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.

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