

LNPTM STAT-KONTM COMPOUND REO04

RC-1004 REGION AMERICAS

DESCRIPTION

LNP STAT-KON RE004 compound is based on Nylon 6/6 resin containing 20% carbon fiber. Added features of this grade include: Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Carbon fiber filled, High stiffness/Strength, No PFAS intentionally added
Fillers	Carbon Fiber
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

PROPERTIES TYPICAL VALUES UNITS **TEST METHODS** MECHANICAL⁽¹⁾ Tensile Stress, break 219 MPa ASTM D638 4.3 % ASTM D638 Tensile Strain, break Flexural Stress 312 MPa ASTM D790 Flexural Modulus 12340 ASTM D790 MPa Tensile Stress, break 233 MPa ISO 527 Tensile Strain, break 2.9 % ISO 527 Flexural Stress 337 MPa ISO 178 Flexural Modulus 14600 MPa ISO 178 IMPACT (1) Izod Impact, unnotched, 23°C 523 ASTM D4812 J/m Izod Impact, notched, 23°C 64 J/m ASTM D256 Izod Impact, unnotched 80*10*4 +23°C 52 kJ/m² ISO 180/1U Izod Impact, notched 80*10*4 +23°C 10 kJ/m² ISO 180/1A THERMAL (1) Relative Temp Index, Elec (2) 65 °C UL 746B Relative Temp Index, Mech w/impact $^{\rm (2)}$ °C 65 UL 746B Relative Temp Index, Mech w/o impact $^{(2)}$ 65 °C UL 746B PHYSICAL (1) Density 1.25 ASTM D792 g/cm³ Mold Shrinkage, flow, 24 hrs (3) 0.2 - 0.3 % ASTM D955 Mold Shrinkage, xflow, 24 hrs (3) 0.7 - 0.8 % ASTM D955

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CHEMISTRY THAT MATTERS

Revision 20231109



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 24 hrs ⁽³⁾	0.17 – 0.26	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	0.68 – 0.78	%	ISO 294
ELECTRICAL ⁽¹⁾			
Surface Resistivity ⁽⁴⁾	1.E+02 – 1.E+06	Ω	ASTM D257
FLAME CHARACTERISTICS (2)			
UL Yellow Card Link	E121562-101281617	-	
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING ⁽⁵⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	280 – 305	°C	
Front - Zone 3 Temperature	295 – 305	°C	
Middle - Zone 2 Temperature	280 – 295	°C	
Rear - Zone 1 Temperature	265 – 275	°C	
Mold Temperature	95 – 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.

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