

LNPTM STAT-KONTM COMPOUND RE004

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

Revision 20231109

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

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	<u>E121562-101281617</u>	-	-
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.

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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