

LNP* Stat-kon* Compound RE004MPC

Americas: COMMERCIAL

Also known as: STAT-KON RC-1004 EP M CCS
Product Reorder Name: RE004MPC

LNP* Stat-Kon* RE004MPC is a compound based on Nylon 6/6 resin containing carbon fiber. Characteristics of this grade are:
Exceptional Processing, Clean Compound System.

Property

TYPICAL PROPERTIES ⁽¹⁾			
	Value	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	130	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	3.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	21810	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	168	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	6660	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	127	MPa	ISO 527
Tensile Strain, break, 5 mm/min	5.5	%	ISO 527
Tensile Modulus, 1 mm/min	13860	MPa	ISO 527
Flexural Stress	207	MPa	ISO 178
Flexural Modulus, 2 mm/min	9850	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	947	J/m	ASTM D 4812
Multiaxial Impact	1	J	ISO 6603
Instrumented Impact Total Energy, 23°C	8	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	60	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	250	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	209	°C	ASTM D 648
CTE, -30°C to 30°C, flow	2.42E+01	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	8.97E+01	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	243	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	209	°C	ISO 75/Af
PHYSICAL			
Density	1.25	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.84	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.3 - 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1 - 3	%	ASTM D 955
Density	1.25	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.84	%	ISO 62
ELECTRICAL			
Surface Resistivity	3.E+00 - 5.E+00	Ohm	ASTM D 257

Source GMD, last updated:2009/06/09

Processing

Parameter

Injection Molding	Value	Unit
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

Source GMD, last updated:2009/06/09

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

(5) 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.

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