

LNPTM STAT-KONTM COMPOUND RX05488

RCFL-4036 FR

DESCRIPTION

LNP STAT-KON RX05488 compound is based on Nylon 6/6 resin containing carbon fiber, glass fiber, PTFE. Added features of this grade include: Electrically Conductive, Flame Retardant, Wear Resistant.

GENERAL INFORMATION

Features	Flame Retardant, Electrically Conductive, Wear resistant, Carbon fiber filled, High stiffness/Strength
Fillers	Carbon Fiber, Glass Fiber, PTFE
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding

INDUSTRY

Electrical and Electronics
Industrial

SUB INDUSTRY

Electronic Components
Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break	169	MPa	ASTM D638
Tensile Strain, break	1.6	%	ASTM D638
Tensile Modulus, 50 mm/min	24610	MPa	ASTM D638
Flexural Stress	255	MPa	ASTM D790
Flexural Modulus	14470	MPa	ASTM D790
Tensile Stress, break	175	MPa	ISO 527
Tensile Strain, break	1.8	%	ISO 527
Tensile Modulus, 1 mm/min	18700	MPa	ISO 527
Flexural Stress	271	MPa	ISO 178
Flexural Modulus	17600	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	646	J/m	ASTM D4812
Izod Impact, notched, 23°C	90	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	6	J	ASTM D3763
Multiaxial Impact	3	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	44	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	11	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	242	°C	ASTM D648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	>240	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Density	1.7	g/cm ³	ASTM D792

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CHEMISTRY THAT MATTERS™

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture Absorption, (23°C/50% RH/24 hrs)	0.32	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.2	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.7	%	ASTM D955
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.24	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.67	%	ISO 294
Moisture Absorption (23°C / 50% RH)	0.47	%	ISO 62
ELECTRICAL ⁽¹⁾			
Surface Resistivity ⁽³⁾	1.E+02 – 1.E+06	Ω	ASTM D257
FLAME CHARACTERISTICS ⁽⁴⁾			
UL Yellow Card Link	E121562-101282847	-	-
UL Recognized, 94V-0 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) 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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