

LNP* Stat-kon* Compound REL42

Asia Pacific: COMMERCIAL

Also known as: RCL-4042
Product Reorder Name: REL42

LNP* Stat-kon* REL42 is a compound based on Nylon 66 resin containing PTFE, Carbon Fiber. Added features of this material include: Electrically Conductive, Internally Lubricated.

Property

TYPICAL PROPERTIES ⁽¹⁾			
	Value	Unit	Standard
MECHANICAL			
Tensile Stress, yield	132	MPa	ASTM D 638
Tensile Stress, break	132	MPa	ASTM D 638
Tensile Strain, yield	2.5	%	ASTM D 638
Tensile Strain, break	2.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	8270	MPa	ASTM D 638
Flexural Stress	186	MPa	ASTM D 790
Flexural Modulus	14470	MPa	ASTM D 790
Tensile Stress, yield	133	MPa	ISO 527
Tensile Stress, break	133	MPa	ISO 527
Tensile Strain, yield	2.2	%	ISO 527
Tensile Strain, break	2.2	%	ISO 527
Tensile Modulus, 1 mm/min	8690	MPa	ISO 527
Flexural Stress	186	MPa	ISO 178
Flexural Modulus	7400	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	443	J/m	ASTM D 4812
Izod Impact, notched, 23°C	42	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	8	J	ASTM D 3763
Multiaxial Impact	1	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	29	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	260	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	247	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.92E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	3.6E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	7.9E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	3.6E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	258	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	242	°C	ISO 75/Af
PHYSICAL			
Density	1.32	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.6	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.3 - 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.1 - 1.3	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.36	%	ISO 294

Mold Shrinkage, xflow, 24 hrs	1.2	%	ISO 294
Density	1.32	g/cm ³	ISO 1183
ELECTRICAL	Value	Unit	Standard
Surface Resistivity	1.E+02 - 1.E+06	Ohm	ASTM D 257

Source GMD, last updated:09/24/2008

Processing

Parameter	Value	Unit
Injection Molding		
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:09/24/2008

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.

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