

LNP* Stat-kon* Compound REF42

Asia Pacific: COMMERCIAL

Also known as: RCF-1006
Product Reorder Name: REF42

LNP* Stat-kon* REF42 is a compound based on Nylon 66 resin containing Glass Fiber, Carbon Fiber.

Property

TYPICAL PROPERTIES ⁽¹⁾			
	Value	Unit	Standard
MECHANICAL			
Tensile Stress, yield	173	MPa	ASTM D 638
Tensile Stress, break	173	MPa	ASTM D 638
Tensile Strain, yield	1.8	%	ASTM D 638
Tensile Strain, break	1.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	15160	MPa	ASTM D 638
Flexural Stress	282	MPa	ASTM D 790
Flexural Modulus	11030	MPa	ASTM D 790
Tensile Stress, yield	207	MPa	ISO 527
Tensile Stress, break	207	MPa	ISO 527
Tensile Strain, yield	2.6	%	ISO 527
Tensile Strain, break	2.6	%	ISO 527
Tensile Modulus, 1 mm/min	14360	MPa	ISO 527
Flexural Stress	361	MPa	ISO 178
Flexural Modulus	17000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	854	J/m	ASTM D 4812
Izod Impact, notched, 23°C	80	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	5	J	ASTM D 3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	62	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	262	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	253	°C	ASTM D 648
CTE, -40°C to 40°C, flow	6.66E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	2.16E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	6.6E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	2.1E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	201	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	249	°C	ISO 75/Af
PHYSICAL			
Density	1.35	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.5	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.1	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.25	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.1	%	ISO 294

Density	1.35	g/cm ³	ISO 1183
ELECTRICAL	Value	Unit	Standard
Surface Resistivity	1.E+05 - 1.E+10	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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