

LNP* Stat-kon* Compound PE002

Asia Pacific: COMMERCIAL

Also known as: PC-1002
Product Reorder Name: PE002

LNP* Stat-kon* PE002 is a compound based on Nylon 6 resin containing Carbon Fiber. Added features of this material include:
Electrically Conductive.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, break	114	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	115	MPa	ASTM D 638
Tensile Strain, break	6.8	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	6.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	11720	MPa	ASTM D 638
Flexural Stress	172	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	179	MPa	ASTM D 790
Flexural Modulus	5510	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	5520	MPa	ASTM D 790
Tensile Stress, break	124	MPa	ISO 527
Tensile Stress, break, 5 mm/min	124	MPa	ISO 527
Tensile Strain, break	8	%	ISO 527
Tensile Strain, break, 5 mm/min	8.1	%	ISO 527
Tensile Modulus, 1 mm/min	8670	MPa	ISO 527
Flexural Stress	185	MPa	ISO 178
Flexural Stress, yield, 2 mm/min	185	MPa	ISO 178
Flexural Modulus	7400	MPa	ISO 178
Flexural Modulus, 2 mm/min	7400	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	122	J/m	ASTM D 4812
Izod Impact, notched, 23°C	64	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	8	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	219	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	197	°C	ASTM D 648
CTE, -40°C to 40°C, flow	8.1E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	3.96E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	8.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	3.9E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, flow	8.E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	3.9E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	215	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	197	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.18	g/cm ³	ASTM D 792

Moisture Absorption, 50% RH, 24 hrs	1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.3 - 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.6 - 0.8	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.41	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.74	%	ISO 294
Density	1.18	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	265 - 275	°C
Front - Zone 3 Temperature	275 - 290	°C
Middle - Zone 2 Temperature	265 - 275	°C
Rear - Zone 1 Temperature	250 - 260	°C
Mold Temperature	80 - 95	°C
Back Pressure	0.3 - 0.7	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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