

LNP* Stat-kon* Compound PE002Z

Americas: COMMERCIAL

Also known as: STAT-KON PC-1002 E
Product Reorder Name: PE002Z

LNP* Stat-Kon* PE002Z is a compound based on Nylon 6 with Carbon Fiber. Characteristics: Extrusion Grade.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, brk, Type I, 5 mm/min	58	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	32	%	ASTM D 638
Tensile Modulus, 50 mm/min	210	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	121	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	4070	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	59	MPa	ISO 527
Tensile Strain, break, 5 mm/min	10.8	%	ISO 527
Tensile Modulus, 1 mm/min	870	MPa	ISO 527
Flexural Stress	82	MPa	ISO 178
Flexural Modulus, 2 mm/min	2130	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	1305	J/m	ASTM D 4812
Izod Impact, notched, 23°C	85	J/m	ASTM D 256
Multiaxial Impact	1	J	ISO 6603
Instrumented Impact Total Energy, 23°C	11	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	65	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m ²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	194	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	131	°C	ASTM D 648
CTE, -30°C to 30°C, flow	5.3E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	9.4E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	195	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	134	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.18	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.93	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	1 - 2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.7 - 0.9	%	ASTM D 955
Density	1.18	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.93	%	ISO 62
ELECTRICAL	Value	Unit	Standard
Surface Resistivity	7.E+00 - 9.E+00	Ohm	ASTM D 257

Source GMD, last updated:2009/01/13

Processing

Parameter

Injection Molding	Value	Unit
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.15 - 0.25	%
Melt Temperature	255 - 265	°C
Front - Zone 3 Temperature	250 - 260	°C
Middle - Zone 2 Temperature	250 - 260	°C
Rear - Zone 1 Temperature	245 - 255	°C
Mold Temperature	55 - 95	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:2009/01/13

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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