

LNP* Stat-kon* Compound REF42I

Americas: COMMERCIAL

Also known as: STAT-KON PDX-R-86624
Product Reorder Name: REF42I

LNP* Stat-Kon* REF42I is a compound based on Nylon 6/6 containing Proprietary Fillers. Characteristics of this grade are Electrically Conductive.

Property

TYPICAL PROPERTIES ⁽¹⁾			
	Value	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	197	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	14660	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	277	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	274	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	11500	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	195	MPa	ISO 527
Tensile Stress, break, 5 mm/min	176	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.6	%	ISO 527
Tensile Strain, break, 5 mm/min	2.7	%	ISO 527
Tensile Modulus, 1 mm/min	13870	MPa	ISO 527
Flexural Stress	264	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	998	J/m	ASTM D 4812
Izod Impact, notched, 23°C	143	J/m	ASTM D 256
Multiaxial Impact	4	J	ISO 6603
Instrumented Impact Total Energy, 23°C	22	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	62	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	12	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	261	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	253	°C	ASTM D 648
CTE, -30°C to 30°C, flow	1.6E+01	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	9.4E+01	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	260	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	247	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.3	-	ASTM D 792
Density	1.3	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.69	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.2 - 0.4	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.8 - 1	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.96	%	ISO 62
ELECTRICAL			
Surface Resistivity	1.E+00 - 4.E+00	Ohm	ASTM D 257

Parameter	Value	Unit
Injection Molding		
Drying Temperature	120	°C
Drying Time	4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	305 - 325	°C
Front - Zone 3 Temperature	320 - 330	°C
Middle - Zone 2 Temperature	310 - 320	°C
Rear - Zone 1 Temperature	295 - 305	°C
Mold Temperature	80 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:2009/08/11

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.

(5) 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.

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