

## LNP\* Stat-kon\* Compound WEF42I

Americas: COMMERCIAL

Also known as: STAT-KON WCF-1006 HI BK8-115  
Product Reorder Name: WEF42I

LNP\* WEF42I is a PBT base resin containing carbon and glass fibers. Characteristics of this grade are High Impact.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
	Value	Unit	Standard
<b>MECHANICAL</b>			
Tensile Stress, brk, Type I, 5 mm/min	1	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	94	%	ASTM D 638
Tensile Modulus, 50 mm/min	21840	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	125	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	9990	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	2	MPa	ISO 527
Tensile Strain, break, 5 mm/min	99	%	ISO 527
Tensile Modulus, 1 mm/min	15830	MPa	ISO 527
Flexural Stress	169	MPa	ISO 178
Flexural Modulus, 2 mm/min	10520	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, unnotched, 23°C	710	J/m	ASTM D 4812
Izod Impact, notched, 23°C	125	J/m	ASTM D 256
Multiaxial Impact	4	J	ISO 6603
Instrumented Impact Total Energy, 23°C	16	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	45	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	14	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL</b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	219	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	205	°C	ASTM D 648
CTE, -30°C to 30°C, flow	2.1E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	1.34E-04	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	203	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	220	°C	ISO 75/Af
<b>PHYSICAL</b>			
Density	1.44	g/cm <sup>3</sup>	ASTM D 792
Mold Shrinkage, flow, 24 hrs	0.3 - 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1 - 3	%	ASTM D 955
Density	1.44	g/cm <sup>3</sup>	ISO 1183
<b>ELECTRICAL</b>			
Volume Resistivity	4.E+00 - 6.E+00	Ohm-cm	ASTM D 257
Surface Resistivity	2.E+00 - 5.E+00	Ohm	ASTM D 257

Source GMD, last updated:11/25/2008

### Processing

Parameter	Value	Unit
Injection Molding		

Drying Temperature	120	°C
Drying Time	4	hrs
Maximum Moisture Content	0.05	%
Melt Temperature	240 - 265	°C
Front - Zone 3 Temperature	260 - 270	°C
Middle - Zone 2 Temperature	245 - 255	°C
Rear - Zone 1 Temperature	220 - 230	°C
Mold Temperature	80 - 100	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:11/25/2008

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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