

## LNP\* Stat-kon\* Compound SX90398

Americas: COMMERCIAL

Also known as: PDX-S-90398  
Product Reorder Name: SX90398

LNP STAT-KON\* SX90398 is a compound based on Nylon 12 resin containing Stainless Steel. Added features of this material include:  
Electrically Conductive.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
	Value	Unit	Standard
<b>MECHANICAL</b>			
Tensile Stress, yield	43	MPa	ASTM D 638
Tensile Stress, break	36	MPa	ASTM D 638
Tensile Strain, yield	5.3	%	ASTM D 638
Tensile Strain, break	117.2	%	ASTM D 638
Tensile Modulus, 50 mm/min	1900	MPa	ASTM D 638
Flexural Stress	62	MPa	ASTM D 790
Flexural Modulus	1770	MPa	ASTM D 790
Tensile Stress, yield	38	MPa	ISO 527
Tensile Stress, break	35	MPa	ISO 527
Tensile Modulus, 1 mm/min	1440	MPa	ISO 527
Flexural Stress	50	MPa	ISO 178
Flexural Modulus	1760	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D 4812
Izod Impact, notched, 23°C	74	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	9	J	ASTM D 3763
Multiaxial Impact	20	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	85	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL</b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	113	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	67	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.03E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	9.93E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.04E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	9.94E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	104	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	73	°C	ISO 75/Af
<b>PHYSICAL</b>			
Density	1.102	g/cm <sup>3</sup>	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.2	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	1.1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.7	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	1.12	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.7	%	ISO 294
Density	1.09	g/cm <sup>3</sup>	ISO 1183

Moisture Absorption (23°C / 50% RH)	0.3	%	ISO 62
ELECTRICAL	Value	Unit	Standard
Surface Resistivity	1.E+02 - 1.E+06	Ohm	ASTM D 257

Source GMD, last updated:10/01/2004

## Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4 - 6	hrs
Maximum Moisture Content	0.12 - 0.2	%
Melt Temperature	205	°C
Front - Zone 3 Temperature	230 - 245	°C
Middle - Zone 2 Temperature	205 - 215	°C
Rear - Zone 1 Temperature	180 - 195	°C
Mold Temperature	80 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:10/01/2004

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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