

## LNP Stat-Kon® PDX-S-90398 Polyamide 12, Stainless Steel Fiber (discontinued \*\*)

Category : Polymer , Thermoplastic , Nylon , Nylon 12

### Material Notes:

Features: Electrically Conductive Forms: Pellets Processing Method: Injection Molding Information provided by LNP, a GE Plastics Company. This data sheet is labeled Discontinued; however many LNP grades are still active under new names instituted after the SABIC purchase.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_LNP-Stat-Kon-PDX-S-90398-Polyamide-12-Stainless-Steel-Fiber-nbspdiscontinued-.php](http://www.lookpolymers.com/polymer_LNP-Stat-Kon-PDX-S-90398-Polyamide-12-Stainless-Steel-Fiber-nbspdiscontinued-.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.10 g/cc	1.10 g/cc	Method A; ASTM D792
Water Absorption	0.20 %	0.20 %	at 24 hrs; ASTM D570
Linear Mold Shrinkage	0.011 cm/cm	0.011 in/in	ASTM D955
Linear Mold Shrinkage, Transverse	0.017 cm/cm	0.017 in/in	ASTM D955

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	35.9 MPa	5210 psi	ASTM D638
Tensile Strength, Yield	43.4 MPa	6290 psi	ASTM D638
Elongation at Break	120 %	120 %	ASTM D638
Elongation at Yield	5.3 %	5.3 %	ASTM D638
Tensile Modulus	1.91 GPa	277 ksi	ASTM D638
Flexural Strength	62.1 MPa	9010 psi	ASTM D790
Flexural Modulus	1.78 GPa	258 ksi	ASTM D790
Izod Impact, Notched	0.747 J/cm @Thickness 3.18 mm	1.40 ft-lb/in @Thickness 0.125 in	ASTM D256
Izod Impact, Unnotched	NB @Thickness 3.18 mm	NB @Thickness 0.125 in	ASTM D256
Izod Impact, Notched (ISO)	7.60 kJ/m <sup>2</sup>	3.62 ft-lb/in <sup>2</sup>	ISO 180
Izod Impact, Unnotched (ISO)	85.0 kJ/m <sup>2</sup>	40.4 ft-lb/in <sup>2</sup>	ISO 180
Falling Dart Impact	9.73 J	7.18 ft-lb	ASTM D3763
	20.8 J	15.3 ft-lb	Multi-Axial Instrumented Impact

<b>Mechanical Properties</b>	<b>Metric</b>	<b>English</b>	<b>Comments</b>
CTE, linear	100 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$ @Temperature 20.0 $^{\circ}\text{C}$	55.6 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$ @Temperature 68.0 $^{\circ}\text{F}$	TMA; ASTM E831
CTE, linear, Transverse to Flow	99.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$ @Temperature 20.0 $^{\circ}\text{C}$	55.0 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$ @Temperature 68.0 $^{\circ}\text{F}$	TMA; ASTM E831
Deflection Temperature at 0.46 MPa (66 psi)	114 $^{\circ}\text{C}$	237 $^{\circ}\text{F}$	Unannealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	67.7 $^{\circ}\text{C}$	154 $^{\circ}\text{F}$	Unannealed; ASTM D648

  

<b>Electrical Properties</b>	<b>Metric</b>	<b>English</b>	<b>Comments</b>
Surface Resistance	100 - 1.00e+6 ohm	100 - 1.00e+6 ohm	ASTM D4496

  

<b>Processing Properties</b>	<b>Metric</b>	<b>English</b>	<b>Comments</b>
Melt Temperature	204 $^{\circ}\text{C}$	399 $^{\circ}\text{F}$	
Mold Temperature	82.2 - 107 $^{\circ}\text{C}$	180 - 225 $^{\circ}\text{F}$	
Drying Temperature	82.2 $^{\circ}\text{C}$	180 $^{\circ}\text{F}$	
Dry Time	4 hour	4 hour	
Moisture Content	0.20 %	0.20 %	Suggested
Back Pressure	0.172 - 0.345 MPa	24.9 - 50.0 psi	

## Contact Songhan Plastic Technology Co.,Ltd.

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