



**In'Tech Industries, Inc.**  
**7180 Sunwood Drive, NW**  
**Ramsey, MN 55303**  
**763•576•8100**

# Nylon 12 GF

[www.InTechRP.com](http://www.InTechRP.com)

## LS MATERIAL SPECIFICATIONS

### Highlights

- Glass filled Nylon 12 material
- Excellent mechanical stiffness
- Elevated temperature resistance
- Dimensionally stable

### Applications

- Housings and enclosures
- Consumer sporting goods
- Complex prototype plastic parts
- Form, fit, or functional prototypes
- Parts requiring stiffness

## TYPICAL PHYSICAL PROPERTIES

Color/Appearance	Visual	Light Grey	Light Grey
Density	DIN 53466	0.045 lb/in <sup>3</sup>	1.25 g/cm <sup>3</sup>
Elongation at Break	ASTM D638	1.5 - 3%	1.5 - 3%
Flexural Strength	ASTM D790	8,800 psi	61 MPa
Flexural Modulus	ASTM D790	325,000 psi	2,241 MPa
Heat Deflection Temp @66 psi	ASTM D648	354°F	179°C
Heat Deflection Temp @264 psi	ASTM D648	273°F	134°C
Izod Impact Strength (notched)	ASTM D256	0.8 ft-lb/in	40 J/m
Izod Impact Strength (unnotched)	ASTM D256	2.3 ft-lb/in	120 J/m
Tensile Modulus	ASTM D638	420,000 psi	2,896 MPa
Tensile Strength	ASTM D638	5,200 psi	36 MPa
Surface Finish	Up-facing surfaces	6.5 µm RA	6.5 µm RA
Coefficient of Thermal Expansion: 77°F-212°F (25-100°C)	ASTM E831	61.4 10 <sup>-6</sup> µin/in°F	110.5 10 <sup>-6</sup> µm/m°C
Coefficient of Thermal Expansion: 212°F-338°F (100-170°C)	ASTM E831	87.7 10 <sup>-6</sup> µin/in°F	157.8 10 <sup>-6</sup> µm/m°C
Volume Resistivity (22°C, 50%RH, 500V)	ASTM D257-93	—	2.0 x 10 <sup>14</sup> ohm x cm

The material properties provided herein are for reference purposes only. Actual values may vary significantly as they are dramatically affected by part geometry and process parameters. Material specifications are subject to change without notice.