



# Nylon 11 EX

## LASER SINTERING MATERIAL SPECIFICATIONS

### Highlights

- Impact-resistant nylon 11
- Outstanding toughness
- Accurate and repeatable manufacturability
- Toughness similar to molded ABS and polypropylene

### Applications

- Complex ductwork
- Snap-fit designs
- Living hinges
- Thin-walled components

## TYPICAL PHYSICAL PROPERTIES

MECHANICAL PROPERTIES	TEST METHOD	ENGLISH		METRIC	
		XY AXIS	ZX AXIS	XY AXIS	ZX AXIS
Color/Appearance	Visual	White		White	
Specific Gravity	ATSM D792	0.0365 lb/in <sup>3</sup>		1.01 g/cm <sup>3</sup>	
Elongation at Break	ASTM D638	47%	–	47%	–
Flexural Strength	ASTM D790	6,672 psi	–	46 MPa	–
Flexural Modulus	ASTM D790	190 ksi	–	1310 MPa	–
Heat Deflection Temp @66 psi	ASTM D648	370°F	–	188°C	–
Heat Deflection Temp @264 psi	ASTM D648	118°F	–	48°C	–
Tensile Modulus	ASTM D638	220 ksi	–	1517 MPa	–
Tensile Strength	ASTM D638	6,961 psi	–	48 MPa	–
Izod Impact Strength (Notched)	ASTM D256	1.4 ft-lb in	–	74 J/m	–
Coefficient of Thermal Expansion: (0°C-50°C)	ASTM E831	66.7 µin/in°F		120 µm/m°C	
Coefficient of Thermal Expansion: (85°C-145°C)	ASTM E831	190 µin/in°F		342 µm/m°C	

The information presented represents typical values intended for reference and comparison purposes only. It should not be used for design specifications or quality control purposes. End-use material performance can be impacted (+/-) by, but not limited to, part design, end-use conditions, test conditions, color etc. Actual values will vary with build conditions. Product specifications are subject to change without notice.

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XZ = X or "on edge"

XY = Y or "flat"

ZX = or "upright"

