PA11 Carbon Fiber

Material's Technical Data Sheet

One of the strongest and most versatile materials available on the powder market dedicated to SLS printing technology.

Compatible with: LISA PRO, LISA X, NILS 480

FEATURES

- best tensile and flexural strength
- best thermal resistance
- good impact resistance
- high stiffness
- good elongation at break
- good surface quality
- good chemical resistance

APPLICATIONS

- automotive (high performance parts, metal replacement parts)
- universities/labs (mechanical, composites)
- extreme applications (motorsports, lightweight structures, temperature)
- maintenance and Repair
- medical - prosthesis
- aerospace models

Properties		Test method
Material refrshing ratio[1]	40%	
Nitrogen needed	Yes	
Flexural Strength	100 MPa	PN-EN ISO 178:2019
Tensile Strength	81 MPa	PN-EN ISO 527-1:2012
Tensile Modulus (Young)	2950 MPa	PN-EN ISO 527-1:2012
Impact strength (Charpy - unnotched)	113.65 kJ/m^2	PN-EN ISO 179-1:2010
Heat Deflection Temperature at 1.8 MPa / 0.45 MPa	170/191°C	PN-EN ISO 75-2:2013-06 / PN-EN ISO 75-2:1998

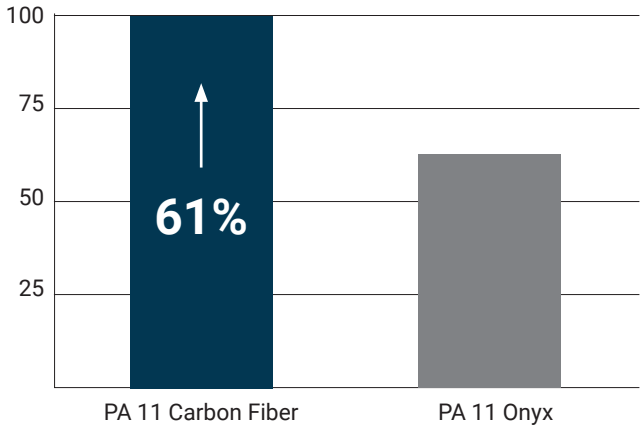
1. Refresh ratio is the amount of refreshing powder that is required to be mixed after the printing with unsintered material.

Information provided within this document are average values for reference and comparison only. All tests were performed with print samples from Lisa/Lisa Pro printers.
Parameters presented in this specification are subject to change. Final part properties may vary based on printed part design and print orientation. All mechanical tests were carried out on samples conditioned to ISO standards only, at (23±2)°C and (50±5)% r. h.

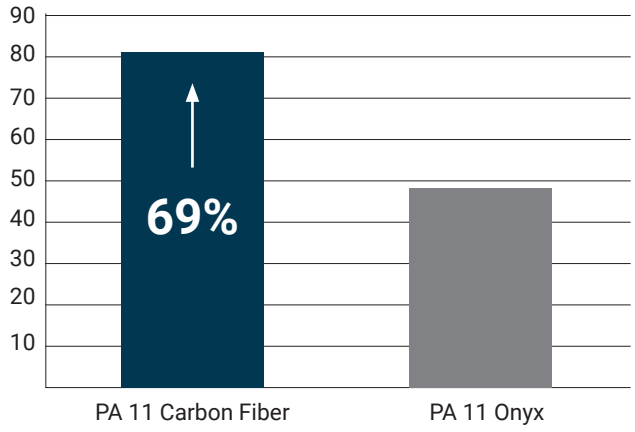
SINTERIT
www.sinterit.com

PA 11 Carbon Fiber vs PA 11 Onyx

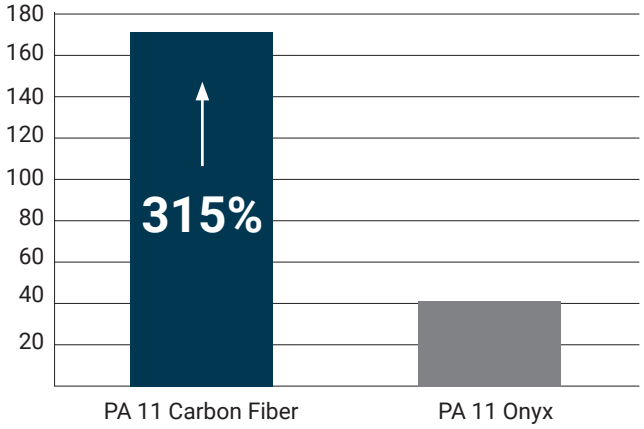
Flexural Strength [MPa]



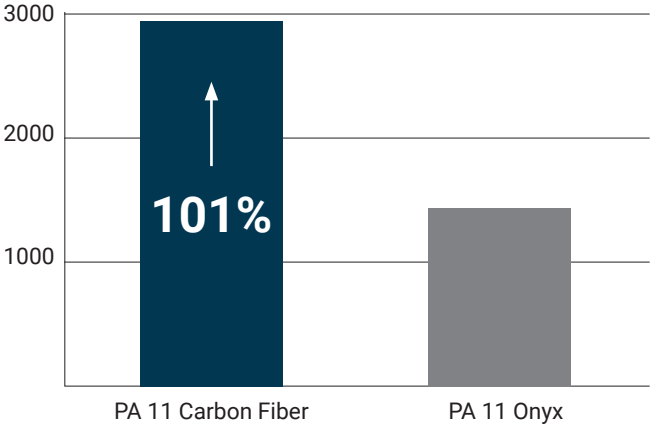
Tensile Strength [MPa]



Heat Defection Temperature at 1.8 MPa [°C]



Tensile Moduls [MPa]



Information provided within this document are average values for reference and comparison only. All tests were performed with print samples from Lisa/Lisa Pro printers.
Parameters presented in this specification are subject to change. Final part properties may vary based on printed part design and print orientation. All mechanical tests were carried out on samples conditioned to ISO standards only, at (23±2)°C and (50±5)% r. h.

Rev: 13-04-2022

SINTERIT
www.sinterit.com