

Sinterit PA11 CF

Selective Laser Sintering | PA11 | powder

Compiled by FabDigit from manufacturer technical data. Values below belong to this named product; unreported properties are omitted.

Manufacturer: Sinterit

Source revision: 2025-04

Recorded system family: Sinterit Lisa X / NILS 480

As-printed colour: Black

Test values are typical reported results, not guaranteed design allowables or finished-part certification. Review the complete source for specimen preparation, orientation and conditioning.

Physical

PROPERTY	VALUE	TEST / CONDITION
Density	1.09 g/cm3	per PN-EN ISO 845:2010
Water Absorption (24 h)	0.86 %	per PN-EN ISO 62:2008

Mechanical

PROPERTY	VALUE	TEST / CONDITION
Tensile Strength (Ultimate)	81 MPa	per PN-EN ISO 527-1:2012; X 81 / Z 47.3
Elastic (Young's) Modulus	2.95 GPa	per PN-EN ISO 527-1:2012; X 2.95 / Z 1.49 GPa
Elongation at Break	24.5 %	per PN-EN ISO 527-1:2012; X 24.5 / Z 17.9
Flexural Strength	100 MPa	per PN-EN ISO 178:2019; X 100 / Z 66.1
Flexural Modulus	3.05 GPa	per PN-EN ISO 178:2019; X 3.05 / Z 1.42 GPa

Mechanical - continued

PROPERTY	VALUE	TEST / CONDITION
Charpy Impact, Unnotched (ISO 179)	113.65 kJ/m2	per PN-EN ISO 179-1:2010
Hardness, Shore D	81 Shore D	per PN-EN ISO 868:2005

Manufacturability

PROPERTY	VALUE	TEST / CONDITION
Powder Bulk Density	0.54 g/cm3	per PN-EN ISO 60:2010

Selection and finishing

A carbon-fibre PA11 powder for a small-platform SLS workflow needing a large stiffness increase while retaining more elongation than many rigid filled grades.

Design: Align the main load path with the stronger orientation and validate any threaded or thin-wall feature. Make moisture conditioning and target printer settings part of the acceptance plan.

Finishing: Black is as printed and the catalog does not describe it as dyeable. Abrasive finishing can alter the fibre-rich surface; inspect cosmetic samples before release.

Source and document scope

Sinterit manufacturer source reference - 2025-04

<https://sinterit.com/wp-content/uploads/2025/04/PA11-Carbon-Fiber-extended-specification-EN.pdf>

FabDigit product page: <https://www.fabdigit.com/materials/polymer-pa11/sinterit-pa11-cf/>

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