

Forward AM Ultrasint PA11 Black 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: Forward AM

Source revision: Not stated in the catalog; check the original document.

Recorded system family: Open SLS platforms

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.

Mechanical

PROPERTY	VALUE	TEST / CONDITION
Tensile Strength (Ultimate)	82 MPa	per ISO 527-2; Dry: X 82 / Z 55
Elastic (Young's) Modulus	5.9 GPa	per ISO 527-2; Dry: X 5.9 / Z 2.5 GPa
Elongation at Break	7 %	per ISO 527-2; Dry: X 7 / Z 11
Flexural Modulus	5.8 GPa	per DIN EN ISO 178; Dry: X 5.8 / Z 2.5 GPa
Charpy Impact, Notched (ISO 179)	6.4 kJ/m2	per ISO 179-1; Dry: X 6.4 / Z 4.7
Charpy Impact, Unnotched (ISO 179)	54 kJ/m2	per ISO 179-1; Dry: X 54 / Z 33

Thermal

PROPERTY	VALUE	TEST / CONDITION
Heat Deflection Temp. @ 0.45 MPa	189 deg C	per Manufacturer product page; Dry

Selection and finishing

Carbon-fibre-filled PA11 for lightweight stiff components when black as-printed appearance is acceptable.

Design: Orient the main load path in-plane where possible, avoid sharp notches, and account for dry-versus-conditioned data. Verify electrical behaviour rather than inferring it from carbon fibre.

Finishing: The material is solid black as printed and not a dyeable colour base. Mechanical finishing can expose or change the fibre-rich surface appearance.

Source and document scope

Forward AM manufacturer source reference

https://forward-am.com/wp-content/uploads/2021/04/BASF_3DPS_TDS_Ultrasint_PA11-Black_CF.pdf

FabDigit product page: <https://www.fabdigit.com/materials/polymer-pa11/forward-am-ultrasint-pa11-black-cf/>

FabDigit is the publisher of this reference summary. The named manufacturer remains the source of the material data. This document is not a manufacturer-issued TDS, a certificate of conformity or a test report for an ordered part. Confirm the exact product, system, orientation, conditioning and final finish with the quote.