

Forward AM Ultrasint PA6 MF

Selective Laser Sintering | PA6 | 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)	91 MPa	per ISO 527-2; Dry: X 91 / Z 50
Elastic (Young's) Modulus	6.25 GPa	per ISO 527-2; Dry: X 6.25 / Z 5.90 GPa
Elongation at Break	2.1 %	per ISO 527-2; Dry: X 2.1 / Z 0.9
Flexural Modulus	6 GPa	per DIN EN ISO 178; Dry: X 6.0 / Z 5.4 GPa
Charpy Impact, Notched (ISO 179)	2.7 kJ/m2	per ISO 179-1; Dry: X 2.7 / Z 1.9
Charpy Impact, Unnotched (ISO 179)	13.2 kJ/m2	per ISO 179-1; Dry: X 13.2 / Z 4.6

Thermal

PROPERTY	VALUE	TEST / CONDITION
Heat Deflection Temp. @ 0.45 MPa	209 deg C	per Manufacturer product page; Dry

Selection and finishing

Mineral-filled PA6 SLS powder for stiff, heat-resistant housings, flow parts and tooling where ductility is secondary.

Design: Use generous radii, orient the highest load in-plane, and design with the moisture state specified. Do not use a dry tensile value as the sole basis for service design.

Finishing: Black is inherent to the powder. The manufacturer notes simple surface reprocessing, but qualify cleanup and coating against fit, thermal cycling and media exposure.

Source and document scope

Forward AM manufacturer source reference

https://move.forward-am.com/hubfs/PBF%20Documentation/PA6%20Line/PA6%20MF/BASF_3DPS_TDS_Ultrasint_PA6_MF_black.pdf

FabDigit product page: <https://www.fabdigit.com/materials/polymer-pa6/forward-am-ultrasint-pa6-mf/>

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