

EOS PA 1101

Selective Laser Sintering | PA11 | powder

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

Manufacturer: EOS

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

Recorded system family: EOS FORMIGA P 110 / P 396 / P 500 / P 770

As-printed colour: Natural. Whitish, slightly translucent

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
Elastic (Young's) Modulus	1.65 GPa	per ISO 527-1/-2; X 1.65 / Y 1.65 / Z 1.65 GPa
Tensile Strength (Ultimate)	50 MPa	per ISO 527-1/-2; X 50 / Y 50 / Z 48
Elongation at Break	30 %	per ISO 527-1/-2; X 30 / Y 30 / Z 15
Charpy Impact, Notched (ISO 179)	6.9 kJ/m2	per ISO 179/1eA; X 6.9 / Y 7.3 / Z 5.5
Hardness, Shore D	75 Shore D	per ISO 7619-1

Physical

PROPERTY	VALUE	TEST / CONDITION
Melting Temperature (Tm)	201 deg C	per ISO 11357-1/-3
Density	1.03 g/cm3	per ISO 1183-1

Thermal

PROPERTY	VALUE	TEST / CONDITION
Heat Deflection Temp. @ 1.8 MPa	46 deg C	per ISO 75-1/-2; X 46 / Y 46 / Z 47
Heat Deflection Temp. @ 0.45 MPa	180 deg C	per ISO 75-1/-2; X 180 / Y 180 / Z 181

Selection and finishing

A natural PA11 SLS powder to consider for ductile parts exposed to flexing or impact.

Design: For a living-hinge-like feature, prototype its radius, thickness and orientation rather than extrapolating from a tensile bar. Confirm conditioning and service humidity for critical fits.

Finishing: Natural, slightly translucent parts can be dyed. Dye changes appearance only after printing; sealing or coating still needs qualification where liquid exposure matters.

Source and document scope

EOS manufacturer source reference

<https://www.eos.info/polymer-solutions/polymer-materials/data-sheets/mds-pa-1101>

FabDigit product page: <https://www.fabdigit.com/materials/polymer-pa11/eos-pa-1101/>

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.