

HP 3D High Reusability PA 12 W

Multi Jet Fusion | PA12 | powder

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

Manufacturer: HP

Source revision: 4AA8-2745ENW

Recorded system family: HP Jet Fusion 5600 and 5400W series

As-printed colour: White

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	1.01 g/cm3	per ASTM D792; XY 1.01 / Z 1.01
Melting Temperature (Tm)	188 deg C	per DIN EN ISO 11357; Powder melting point (DSC)

Mechanical

PROPERTY	VALUE	TEST / CONDITION
Tensile Strength (Ultimate)	49 MPa	per ASTM D638; XY 49 / Z 45
Elastic (Young's) Modulus	1.9 GPa	per ASTM D638; XY 1.9 / Z 1.85 GPa
Elongation at Break	17 %	per ASTM D638; XY 17 / Z 9
Charpy Impact, Notched (ISO 179)	4.8 kJ/m2	per ASTM D256; Izod notched, kJ/m2; XY 4.8 / Z 4.1

Manufacturability

PROPERTY	VALUE	TEST / CONDITION
Powder Particle Size (D50)	57 um	per DIN EN ISO 8130-13; D50
Powder Bulk Density	0.435 g/cm3	per ISO 60

Selection and finishing

White HP MJF PA12 for functional parts that must remain white or start from a light base for a vivid colour finish.

Design: Keep the selected printer and orientation in the validation plan. Approve colour, surface texture and dimensional fit after the full post-process rather than from an untreated coupon.

Finishing: White is the as-printed colour. Dyeing or painting is a separate post-process; define colour tolerance, UV exposure and surface-contact requirements before choosing it.

Source and document scope

HP manufacturer source reference - 4AA8-2745ENW

<https://h3d.sk/wp-content/uploads/2023/06/4AA8-2745ENW.pdf>

FabDigit product page: <https://www.fabdigit.com/materials/polymer-pa12/hp-pa-12-w/>

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