

HP 3D High Reusability PP (enabled by Forward AM / BASF)

Multi Jet Fusion | PP | powder

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

Manufacturer: HP

Source revision: HP materials page, 2026

Recorded system family: HP Jet Fusion 5200 and 5000 series

As-printed colour: Gray

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	0.89 g/cm3	per ASTM D792
Melting Temperature (Tm)	138 deg C	per ASTM D3418; Powder melting point (DSC)

Mechanical

PROPERTY	VALUE	TEST / CONDITION
Tensile Strength (Ultimate)	30 MPa	per ASTM D638; XY 30 / Z 30
Elastic (Young's) Modulus	1.6 GPa	per ASTM D638; XY 1.6 / Z 1.6 GPa
Elongation at Break	20 %	per ASTM D638; XY 20 / Z 18
Charpy Impact, Notched (ISO 179)	3.5 kJ/m2	per ASTM D256; Izod notched, kJ/m2; XY 3.5 / Z 3.0

Thermal

PROPERTY	VALUE	TEST / CONDITION
Heat Deflection Temp. @ 0.45 MPa	100 deg C	per ASTM D648; XY 100 / Z 100
Heat Deflection Temp. @ 1.8 MPa	60 deg C	per ASTM D648; XY 60 / Z 60

Manufacturability

PROPERTY	VALUE	TEST / CONDITION
Powder Particle Size (D50)	62 um	per ASTM D3451
Powder Bulk Density	0.34 g/cm3	per ASTM D1895

Selection and finishing

Genuine polypropylene for HP MJF parts that need low moisture uptake, weldability or resistance to a defined chemical environment.

Design: Specify the fluid or chemical exposure and validate weight, dimensions and mechanical retention after the real soak. Trial weld geometry and sealing on the finished MJF surface.

Finishing: Gray is the as-printed colour and the catalog does not present this row as dyeable. Low-surface-energy PP can make coating or bonding difficult, so qualify adhesion before committing to either.

Source and document scope

HP manufacturer source reference - HP materials page, 2026

<https://www.hp.com/us-en/printers/3d-printers/materials.html>

FabDigit product page: <https://www.fabdigit.com/materials/polymer-pp-h/hp-pp/>

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