

Ultrasint® PA6 MF is the material of choice for advanced technical applications where properties of mechanically reinforced thermoplastics are needed. Besides reinforced PA6 being a very popular engineering material for highly loaded parts, Ultrasint® PA6 MF boasts extremely high rigidity, media tightness and enhanced thermal distortion performance – properties where other Power Bed Fusion (PBF) materials often show limitations. Ultrasint® PA6 MF is thus a huge step towards additive-based serial production.

Benefits at a Glance

- Exceptionally high strength & rigidity
- Media tightness as-printed
- Very high HDTs
- In-particle reinforcement technology
- Color: Black

Mechanical Properties

Young's Modulus	3300 MPa
Tensile strength	62 MPa
Elongation at break	7 %
HDT B (0.45 MPa, dry)	209 °C
Charpy Impact unnotched	28 kJ/m²

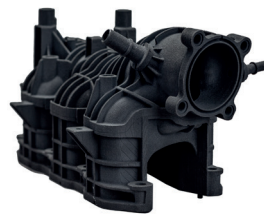
Applications

Thanks to its exceptionally high strength and rigidity, PA6 MF is perfectly suited for production as well as for functional prototypes.



Engine Bay parts

This material is perfect to create functional parts for engine bay parts. PA6 MF is strong enough to hold the whole engine assembly and handle all heat, vibration and static loads. The melting point of PA6 MF is 220°C, making it a material particularly interesting for projects where heat resistant parts are required.



Media flow and storage parts

PA6 MF is also well-suited to media flow and storage parts (i.e. oil), housings and covers. For tooling equipment, molds or any multi-purpose industrial goods, this PA6 MF 3D printing material can fit the needs of your project.



Multi-purpose industrial goods

With the adapted and optimized design, parts printed using PA6 MF can have the same parameters as traditionally injection molded parts, and go even further in terms of performance. The stiffness of Ultrasint® PA6 MF is much more isotropic compared to injection molded PA6 GF30, for example.