

## PA12- SF 1800 Polyamide 12 powder for Laser Sintering

Experience exceptional surface finish with our Titanium dioxide-free PA12-SF1800 material. With excellent mechanical properties, high elongation at break, low water absorption, and good recyclability, it is a versatile material suitable for complex plastic parts in various industries including automotive, aerospace or consumers goods.

Designed for high expectations, it creates durable end-users parts that can withstand harsh environments and high stress conditions. Rely on the PA12-SF1800 to prototype new products or produce complex parts for your production line.

The PA12-SF1800 can be processed with ProMaker P1000X and P1000S 3D printers.

## KEY FEATURES

PRODW

MATERIALS

- Exceptional part surface finish
- Titanium dioxide-free composition
- Robust mechanical strength
- Suited for printing complex parts with intricate geometries and fine details
- Low moisture absorption

#### MATERIAL PROPERTIES

	TEST METHOD	VALUE
Base material		Polyamide 12
Appearance		lvory
Bulk density [g/cm <sup>3</sup> ]	ISO 1068-1975	0,55
Sintered part density [g/cm <sup>3</sup> ]	ISO 1068-1975	0.95
Average particle size (µm)	Laser diffraction	42
Melting interval [°C]	ISO 11357-3	179 - 187

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- Ideal for applications where aesthetics and visual appeal are important
- Functional prototypes and end-use parts with high mechanical properties and toughness
- Alternative for complex spare parts production
- Multi-purpose industrial applications

### MECHANICAL PROPERTIES\*

	TEST METHOD	VALUE
Tensile strength [MPa]	ISO 527	42 - 45
Young modulus [MPa]	ISO 527	1700-1800 (XY) 1400-1600 (XZ)
Tensile elongation at break [%]	ISO 527	20
Flexural modulus (MPa)	ISO 178	1500
HDT/A (1.8 MPa) [°C]	ISO 75	76

\* Performance characteristics may change according to product application, operating conditions or level of refresh.

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