

Powder PA12 Smooth
product specification

GENERAL INFORMATION	
Status	Available
Category	Powder for SLS printing
Material type	Polyamide 12 powder
PACKAGING	
Type	Plastic container
Weight	2 [kg] (4,4 [lb])
Dimensions	135 x 135 x 280 [mm] (5.3 x 5.3 x 11 [in])
MATERIAL	
Granulation	20-100 [µm] (0,79 - 3,94 [mil]), average size 38 [µm] (1,5 [mil])
Colour	Navy Grey
Material refreshing ratio ¹	30 [%]
PARAMETERS	
Elongation at Break XY [%]	13 [%]
Tensile Strength (Sturdy under stress)	41 [MPa] (5.9 [ksi])
Softening point (Vicat method - A50 / B50)	172 [°C] (342 [°F]) / 155 [°C] (311 [°F])
Melting point	182 ±2 [°C] (359 ±36 [°F])
Softening point for a prestressed sample at 0.45 [MPa]	143 [°C] (289 [°F])
Shore Hardness (D scale)	74±1
Roughness for layer thickness 100 µm	6,470 [µm] (top surface)
Elastic / Young's modulus E	1020,4 [Mpa] (148 [ksi])
APPLICATIONS	
Functional prototypes	

Informations provided within this document are typical values for reference and comparison only. Parameters presented in this specification are subject to change. Final part properties may vary based on printed part design and print orientation.

End-use parts
Detailed objects
Temperature resistant objects
Chemical resistant objects

¹ Material refreshing ratio - percent of Fresh powder which has to be mixed with Used (unsintered) powder - to be reused to the next print.