Selective Laser Sintering (SLS)

Nylon 12 / PA 12

Key Features

Strength • Stiffness • Thermal resistance

Applications

Prototyping • End-use parts • Electronics • Engineering • Consumer goods

Product Description

Nylon 12 powder strikes a balance between strength and detail, making it an ideal material for functional prototyping and end-use production of complex assemblies and durable parts. With high tensile strength, ductility, and environmental stability, Nylon 12 powder minimizes water absorption, ensuring longevity and reliability. This general-purpose material, also known as PA 12 (SLS), also offers excellent long-term stability and chemical resistance.

Properties

Tensile modulus	1,850 MPa
Tensile strength	50 MPa
Elongation at break (X/Y, Z)	11, 6%
Flexural strength	66 MPa
Flexural modulus	1,600 MPa
Heat deflection temperature (0.45 MPa)	171°C
Heat deflection temperature (1.80 MPa)	87°C
Softening temperature	175°C
Density	0.93 g/cm ³
Hardness	75D
Flame retardancy (thickness of the sample tested = 3.00 mm)	UL 94 HB

Reference

For more detailed source information, please consult the original document linked <u>here</u>. We encourage users to verify the data's relevance and suitability for their specific needs.



