fasipol
POLYURETHANE MOULDING

NYLON PA12

Technical Polyamide for Prototypes and Functional Parts

MJF 3D PRINTING

WWW.FASIPOL.IT

High-performance material, ideal for rapid production of strong, lightweight, and dimensionally stable components. An excellent alternative to injection moulding, it offers excellent precision and mechanical strength.

Main Features

- Excellent resistance to heat and industrial fluids
- High precision and dimensional stability
- Real alternative to injection moulding
- Good base for subsequent surface treatments and finishing
- Excellent mechanical and chemical resistance

Applications

- Functional prototypes and end-use parts
- Rapid production of small to medium series
- Lightweight, strong, and dimensionally stable technical parts
- Components subjected to mechanical and thermal stresses

Last revision 30/01/2025

Certified Company
UNI EN ISO
9001:2023

Technical Data

PROPERTY	VALUE	METHOD
Density	1.01 g/cm^3	ASTM D792
Water absorption (sat.)	1,50 %	ISO 62
Hygroscopicity	0.70 %	ISO 62
Tensile strength	48 MPa	ASTM D638
Elongation at break	20 %	ASTM D638
Yield strength	40 MPa	ISO 527
Elastic modulus	1700 MPa	ASTM D638
Flexural strength	70 MPa	ASTM D790
Resilience	45 kJ/m^2	ISO 179
Hardness	80 D Shore	ASTM D2240
HDT at 0.45 MPa	175 °C	ASTM D648
HDT at 1.8 MPa	95 °C	ASTM D648
Vicat softening temperature	175 °C	ISO 306
Melting temperature	187 °C	ASTM D3418
Flammability	HB	UL94
Thermal conductivity (20°C)	0,23 W/mK	ISO 22007
Electrical resistivity	10^{12} Ω·m	UL746A / ASTM D257

Printing Specifications

TECHNOLOGY:
HP Multi Jet Fusion

LAYER HEIGHT:
0.09 mm

MAX PART DIMENSIONS:
380 × 284 × 380 mm

TOLERANCES:
±0.30 mm < 100 mm / ±0.3% > 100 mm

Certifications

- RoHS
- PAHs
- UL746A
- REACH
- UL94
- USP Class VI
- Suitable for toy applications
- Not suitable for food contact (CE 1935/2004 – 10/2011)

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