fasipol
POLYURETHANE MOULDING

NYLON PA11

Technical Polyamide for Strong and Flexible Parts

MJF 3D PRINTING

WWW.FASIPOL.IT

High-performance material, ideal for components requiring fatigue resistance, high resilience, and light weight. An excellent alternative to injection moulding for dynamic applications, even in chemically aggressive environments.

Main Features

- High ductility and impact resistance
- Excellent flexibility and dimensional stability
- Good resistance to hydrocarbons, oils, and cyclic stresses
- Ideal for moving parts or those subject to repeated deformations

Applications

- Functional prototypes and end-use parts
- Automotive parts and consumer electronics components
- Direct replacement for injection-moulded parts in short production runs
- Excellent choice for components subjected to repeated stress

Last revision 16/04/2024

Certified Company
UNI EN ISO
9001:2023

Technical Data

PROPERTY	VALUE	METHOD
Density	1.05 g/cm^3	ASTM D792
Water absorption (sat.)	1.07 %	ISO 62
Tensile strength	52 MPa	ASTM D638
Elongation at break	36 %	ASTM D638
Yield strength	42 MPa	ISO 527
Elastic modulus	1700 MPa	ASTM D638
Flexural strength	70 MPa	ASTM D790
Resilience	193 kJ/m^2	ISO 179
Hardness	80 D Shore	ASTM D2240
HDT at 0.45 MPa	185 °C	ASTM D648
HDT at 1.8 MPa	54°C	ASTM D648
Vicat softening temperature	175 °C	ISO 306
Melting temperature	202 °C	ASTM D3418
Flammability	HB	UL94
Electrical resistivity	10^{10} Ω·m	UL746A / ASTM D257

Printing Specifications

TECHNOLOGY:
HP Multi Jet Fusion

LAYER HEIGHT:
0.08 mm

MAX PART DIMENSIONS:
380 × 284 × 380 mm

TOLERANCES:
±0.50 mm < 100 mm / ±0.5% > 100 mm

Certifications

- RoHS
- REACH
- PAHs
- Suitable for toy applications
- Not suitable for food contact
- (EC 1935/2004 - 10/2011)

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