

OLA Product Name: OLA 7100Pro

Color: Black

Process: SLS

MATERIAL SUMMARY

Tolerance: $\pm 300\mu\text{m}$ or $\pm 0.3\%$

Lead Time: 48 hours

Maximum Printing Size: 350mm × 350mm × 400mm

Notes:



EVALUATION

- **Advantages**
 - ✓ Excellent toughness and mechanical strength
 - ✓ Isotropic properties (consistent across all directions)
 - ✓ Good heat and chemical resistance
 - ✓ Lower cost compared to standard PA12 SLS materials
 - ✓ Suitable for both prototyping and functional production parts
- **Limitations**
 - ✗ Not recommended for use in electrical insulation testing environments

KEY FEATURES

OLA 7100Pro is a cost-effective nylon-like PA12 SLS material offering excellent mechanical properties and durability. It's engineered for long-term usage, with high dimensional stability and consistent strength across all directions. Compared to traditional PA12, 7100Pro provides similar performance at a significantly lower cost, making it one of the most economical and widely applicable SLS materials on the market.

MATERIAL PROPERTIES

- Heat Deflection Temperature (HDT @1.8MPa): 52°C
- Heat Deflection Temperature (HDT @0.45MPa): 145°C
- Melting Point (10°C/min): 185.5°C
- Elongation at Break (ISO527-1:2018): 40% (X/Y)
- Tensile Modulus (ISO527-1:2019): 1450MPa (X/Y)
- Tensile Strength (ISO527-1:2019): 42MPa (X/Y)
- Flexural Modulus (GB/T 9341-2008): 1400MPa (X/Y)
- Flexural Strength (GB/T 9341-2008): 48MPa (X/Y)
- Notched Impact Strength (GB/T 1843-2008): 10KJ/m² (X/Y)
- Unnotched Impact Strength (GB/T 1843-2008): 32KJ/m² (X/Y)

APPLICATION SCENARIOS

- Functional prototypes and end-use parts
- Automotive components and tooling
- Electronics housings and brackets
- Medical device parts and customized fixtures
- Spare parts and small-batch production

POST-PROCESSING OPTIONS

- Thread tapping