

OLA Product Name: OLA 5100 PEEK

Color: Light Yellow

Process: SLS

MATERIAL SUMMARY

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

Lead Time: 8 days

Maximum Printing Size: 180mm x 180mm x 200mm

Notes:



EVALUATION

- **Advantages**
 - ① **High resistance to chemicals and oils.**
 - ② **Excellent thermal stability with HDT up to 280°C.**
 - ③ **Biocompatible and suitable for sterilization.**
- **Disadvantages**
 - ① **High material cost.**

KEY FEATURES

PEEK 3D printing material is highly sought after in the medical industry due to its excellent biocompatibility and ability to be sterilized, making it ideal for custom medical implants. Additionally, its outstanding wear resistance and high-temperature stability make it a preferred material for producing aerospace parts and automotive components that require superior durability and thermal performance.

APPLICATION SCENARIOS

- **Aerospace and automotive components**
- **Medical implants (customized, biocompatible)**
- **High-wear and high-temperature-resistant parts**

MATERIAL PROPERTIES

Excellent chemical, oil, and heat resistance ●

High heat deflection temperature (HDT):
ISO 75-1-2020: 280°C (0.45 MPa), 155°C (1.82 MPa) ●

Melting Point: 343°C ●

Tensile Modulus (ISO 527-1-2019): 3.5 GPa ●

Tensile Strength (ISO 527-1-2019): 78 MPa ●

Elongation at Break (ISO 527-2018): 2.5% ●

POST-PROCESSING OPTIONS

- **None**