

## Materials for Plastic 3D Printing

### SLA (Stereolithography) Materials

- **Clear PC (Polycarbonate):** High clarity and impact strength, ideal for lenses, light covers, and prototypes.
- **ABS (Acrylonitrile Butadiene Styrene):** Durable and strong, used for functional parts and prototypes.
- **Standard Resin:** Excellent detail and smooth finishes for prototypes and concept models.
- **Tough Resin:** Durable for functional parts and assemblies.
- **Flexible Resin:** Ideal for parts needing flexibility, such as seals and gaskets.
- **Castable Resin:** For investment casting, suitable for jewelry and dental applications.
- **High-Temperature Resin:** Used for high-heat parts, ideal for aerospace or automotive.
- **Biocompatible Resin:** Certified for medical applications, used for implants and medical devices.
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### SLS (Selective Laser Sintering) Materials

- **PA (Polyamide):** Strong, durable, and versatile, perfect for functional prototypes and end-use parts.
- **PA+GF (Glass-Filled Nylon):** Higher strength and stiffness, used for gears, brackets, and tools.

### SLM (Selective Laser Melting) Materials

- **Stainless Steel:** High strength and corrosion resistance, ideal for aerospace and automotive components.
- **Titanium:** Lightweight and strong, perfect for aerospace and medical applications.
- **Aluminum:** Lightweight, used for parts requiring strength and heat resistance.
- **Nickel Alloys:** Used in high-temperature and harsh environments, ideal for turbine blades and aerospace parts.

### Other 3D Printing Materials

- **PLA (Polylactic Acid):** Biodegradable, ideal for prototyping and educational purposes.
- **TPU (Thermoplastic Polyurethane):** Flexible and durable, used for parts that need to bend and stretch.
- **Metal Filament:** Mixture of metal powders and plastic, used for creating metal-like prototypes.