# **Material Information**

# **High-Detail Resin Gray**



#### Introduction

High-Detail Resin Gray is a photosensitive SLA resin engineered for ultra-fine details. After precise post-curing and fine polishing, parts printed with this material exhibit silky-smooth surfaces, dependable toughness, and a uniform gray shade that simplifies prototype review and downstream finishing.

# Advantages

Balances fine detail capture with dependable toughness. Presentation-ready models with minimal post-processing. Consistent, reliable part-to-part tolerances.

# Disadvantages

UV and yellowing sensitivity.

#### Tolerance

±200µm or 0.2%

#### Recommendation

High-Detail Resin Gray is ideal for regular applications such as functional prototypes, proof-of-concept models, art designs and figurines, dental and medical study models, and precision engineering parts. Designers and hobbyists love its neutral gray base for highlighting fine details, simplifying paint workflows, and achieving a beautiful, smooth surface finish.

Material Specifications		
Heat Deformation (0.46 MPa)	ASTM D648M	53°C
Tensile Strength	ASTM D638M	47.2MPa
Tensile Modulus	ASTM D638M	2587MPa
Elongation at Break	ASTM D638M	6.4%
Flexural Modulus	ASTM D790M	2562MPa

#### Attention

Due to the characteristics of resin materials, products printed with resin materials will gradually turn yellow and become brittle after long-term exposure to direct sunlight. If you want to avoid this from happening, you

may need to move it out of direct sunlight or add 3D Plus™ services (such as spray painting) to block out the sunlight.

# **Applications**

3DSPRO finds people using High-Detail Resin Gray to make functional parts and prototypes in the following industries and applications.

### Artwork and toys:

Sculptures, theater and film props, high-fidelity miniatures, tabletop gaming figurines, jewelry casting patterns, designer toys.

### Consumer electronics appliances:

Smartphone and tablet housings, smartwatch and wearable prototypes, camera lens mounts, headphone and speaker enclosures.

### Electromechanical equipment:

Sensor and switch brackets, snap-fit connectors, control panel overlays, precision gears, custom jigs and fixtures.

### Home supplies:

Appliance knobs and handles, faucet and valve prototypes, decorative hardware, light switch and outlet covers.