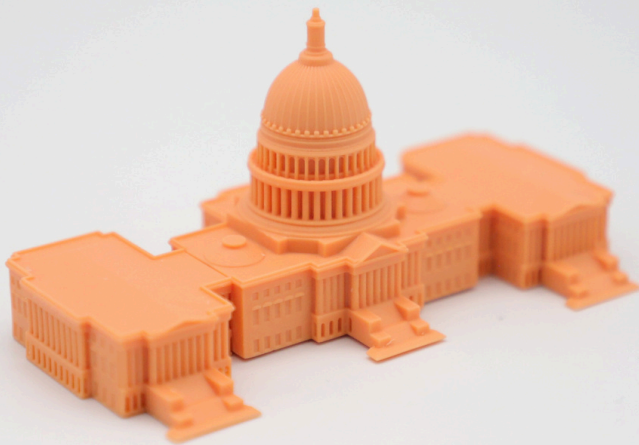


Ultra Detail Resin

INDUSTRIAL GRADE MATERIALS FOR DLP 3D PRINTING



MATERIAL NAME

Ultra Detail Resin

COLOR

Orange-red

PROCESS

DLP

PRODUCT DESCRIPTION

Ultra Detail Resin is a high-temperature resistant resin for building rigid and stiff parts. It is a nanoparticle-filled material used to build hard-wearing, stiff and high temperature-resistant parts. They have an opaque peach colour appearance. It is ideal for applications requiring superior stiffness and high heat deflection temperature, such as automotive components, pump housings and impellers, wind tunnel test parts, light reflectors, injection molds, hard chrome plating, etc.

TYPICAL APPLICATIONS

- Toy model
- Anime toy figurine

PRODUCT SAFETY

After fully cured, the product is harmless to general skin contact. Very few people may have skin allergies to the resin. It cannot be used for food or medical purposes. If there is uncured resin in the product, you need to use gloves when touching it and avoid contact with the eyes.

PRODUCT DELIVERY & WAREHOUSING

- **STORAGE**

Store in a dry, cool, and dark environment, avoiding direct sunlight, high humidity, and extreme temperatures (ideal: 5°C–25°C).

Protect from prolonged UV exposure and seal properly to prevent environmental degradation.

- **TRANSPORTATION**

Ensure shockproof, pressure-resistant, and moisture-proof packaging to avoid cracking or deformation. Keep separated from strong acids, alkalis, and solvents during transportation.

- **USAGE**

Avoid exposure to strong UV light, high temperatures, or highly corrosive environments.

For outdoor applications, consider applying a UV-resistant coating to reduce aging or discoloration.

- **CHEMICAL COMPATIBILITY**

Preferred exposure: Weak acids, weak alkalis, and low-concentration alcohols (for short-term contact).

Avoid exposure: Strong acids, strong alkalis, oxidizing agents, and strong polar solvents (e.g., acetone, toluene).

PROPERTIES OF PRINTED MATERIAL

Properties	Test Method	Value
Hardness	ASTM D2240	Shore D 70
Flexural modulus (Mpa)	ASTM D790	442 MPa
Flexural strength (Mpa)	ASTM D790	12.6 MPa
Tensile modulus (Mpa)	/	/
Tensile strength (Mpa)	/	/
Elongation at break	/	/
Poisson's Ratio	/	/
Impact strength notched Izod (J/m)	ASTM D256	15.6 J/m
Heat deflection temperature (°C)	/	/
Glass transition, T _g (°C)	/	/
Coefficient of thermal expansion(/°C)	/	/
Density (g/cm ³)	/	~1.11 g/cm ³ @25°C

Tips: Want to explore a wider range of materials? Check out <https://www.unionfab.com/materials>



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