

# High Detail Resin(Brown)

INDUSTRIAL GRADE MATERIALS FOR SLA 3D PRINTING



## MATERIAL NAME

High Detail Resin(Brown)

## COLOR

Brown

## PROCESS

SLA

## PRODUCT DESCRIPTION

High-detail resin is a rigid opaque photo-polymeric liquid. Using extremely thin layers (32  $\mu\text{m}$ ), the material can print accurate and detailed parts without post-processing. Brown opaque liquid resin, good detail performance is suitable for printing art sculpture products.

## TYPICAL APPLICATIONS

- Art sculpture products

## 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 80
Flexural modulus (Mpa)	ASTM D790	2556 MPa
Flexural strength (Mpa)	ASTM D790	70.2 MPa
Tensile modulus (Mpa)	ASTM D638	2964 MPa
Tensile strength (Mpa)	ASTM D638	45.1 MPa
Elongation at break	ASTM D638	5.8%
Poisson's Ratio	/	/
Impact strength notched Izod (J/m)	/	/
Heat deflection temperature (°C)	ASTM D648	HDT @0.455 MPa: 50.2°C (UV Curing) HDT @1.82 MPa: 46.1°C (UV Curing)
Glass transition, Tg (°C)	/	/
Coefficient of thermal expansion (/°C)	/	/
Density (g/cm <sup>3</sup> )	/	1.10 g/cm <sup>3</sup> @25°C

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

