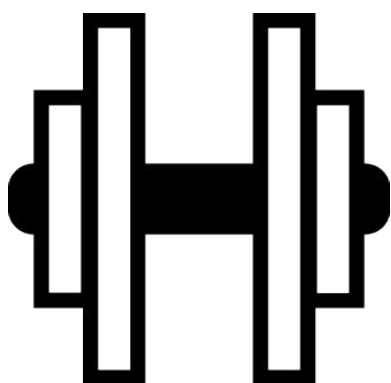


STRONG Rigid Resin

STRONG is a reactive urethane photopolymer resin for rigid Applications. Medium-viscous, highly reactive photopolymer for stereolithography applications resulting in rigid multipurpose parts.

STRONG Resin



Typical features :

- High accuracy
- No water uptake
- Low shrinkage

Applications examples :

- Demo parts
- Performance prototypes
- Fluid flow models
- Electrical casings
- Functional end- use parts
- Snappers

AM systems :

(waves length from 355 to 410 nm)

- Stereolithography (SLA)
- Digital light processing (DLP)
- Liquid Crystal Display (LCD)

Key Points :

Used for dental sector applications

Delivery form & warehousing

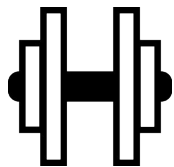
Material developed for UV curing using laser or other suitable UV light sources like UV LEDs. It is also sensitive to sunlight or intense daylight and should be handled accordingly, i.e. with light exclusion before application in the printing system. Store the photopolymer in an opaque container at room temperature. If stored under the mentioned conditions, the photopolymer should be used within 12 months. For further instructions, please refer to the safety data sheet

Product safety

Mandatory and recommended industrial hygiene procedures and the relevant industrial safety precautions must be followed whenever this product is being handled and processed. Product is sensitive to humid environment conditions. For additional information please consult the corresponding Material Safety Data Sheets (MSDS).

For your information

Currently available in transparent. Material is not FDA conform.



General Properties :

Viscosity at 30°C :	Cone / Plate Rheometer ¹	613 mPas
Viscosity at 50°C :	Cone / Plate Rheometer ¹	164 mPas

¹ Determined with TA-Instrument DHR rheometer, cone/plate, diameter 60 mm, shear rate 100 s⁻²

Tensiles Properties :

E Modulus	ASTM D638	2539 MPa
Tensile Strength	ASTM D638	67,7 MPa
Elongation at break	ASTM D638	3,8 %

Flexural Properties :

Flexural Modulus	ASTM D790	2546 MPa
Flexural Strength at 5 % Strain	ASTM D790	89 MPa

Impact Properties :

Charpy notched at 23 ° C	ISO 179-1	0,97 Kj/m ²
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Thermal Properties :

HDT at 0,45 MPa	ASTM D638	84°C
HDT at 1,82 MPa	ASTM D638	64°C
Glow-wire Test	DIN EN 60695-2-11	GWFI : 650 / 2,0

Hardness :

Shore D	ASTM DD240	79 ShD
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Data Sheet_STRONG_resin_ Sept 2020.