



**HARZ Labs**  
MATERIALS FOR 3D PRINTING

# HARZ Labs

# Basic Resin

Material Technical Data Sheet (TDS)

Version 1.2 / EN  
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## SECTION 1: DESCRIPTION AND APPLICATION

Designed for daily use in 3D printers for printing models. Resin has weak odor, models are rigid, low shrinkage and high accuracy.

## SECTION 2: MATERIAL PROPERTIES

### 2.1 Characteristics of liquid

Tested property	Standard/Method	Result (Metric)
Color	-	Red (semitransparent)
Odor	-	Weak
Density	ASTM D1298	$1.1 \pm 0.1 \text{ g/cm}^3$
Viscosity (25 °C)	ASTM D2393	$300 \pm 150 \text{ mPa}\cdot\text{s}$

### 2.2 Mechanical properties

Tested property	Standard/Method	Result (Metric)
Flexural Strength	ASTM D790	$70.0 \pm 4.1 \text{ MPa}$
Flexural Modulus	ASTM D790	$1560 \pm 150 \text{ MPa}$
Ultimate Tensile Strength	ASTM D638	$39.8 \pm 4.2 \text{ MPa}$
Elongation at Break	ASTM D638	$5.9 \pm 1.5 \%$
Hardness	ASTM D2240	$79 \pm 2$ , Shore D
IZOD Impact (Unnotched)	ASTM D4812	$4.0 \pm 1.1 \text{ kJ/m}^2$

### 2.3 Special parameters

Tested property	Standard/Method	Result
Solubility (24h)	ASTM D3132	$\leq 0.01\%$
Sorption (24h)	ASTM D570	$\leq 0.47 \%$

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