



**HARZ Labs**  
MATERIALS FOR 3D PRINTING

# HARZ Labs Basic Resin

Material Technical Data Sheet (TDS)

Version 1.1 / EN  
16 April 2020

## SECTION 1: DESCRIPTION AND APPLICATION

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

## SECTION 2: MATERIAL PROPERTIES

### 2.1 Characteristics of liquid

Tested property	Standard/Method	Result (Metric)	Result (Imperial)
Color	-	Red (semitransparent)	
Odor	-	Odorless	
Density	ASTM D1298	1.1 g/cm <sup>3</sup>	0.0397 lb/in <sup>3</sup>
Viscosity (20 °C)	ASTM D2393	0.6 Pa·s	0.403 lb/ft·s

### 2.2 Mechanical properties

Tested property	Standard/Method	Result (Metric)	Result (Imperial)
Flexural Strength	ASTM D790	68.2 ± 4.1 MPa	9.9 ± 0.6 ksi
Flexural Modulus	ASTM D790	1560 ± 150 MPa	226 ± 22 ksi
Ultimate Tensile Strength	ASTM D638	39.8 ± 4.2 MPa	5.8 ± 0.6 ksi
Elongation at Break	ASTM D638	5.9 ± 1.5 %	
Hardness	ASTM D2240	79 ± 2, Shore D	
IZOD Impact (Unnotched)	ASTM D4812	4.0 ± 1.1 kJ/m <sup>2</sup>	1.9 ± 0.5 ft-lb/in <sup>2</sup>

### 2.3 Special parameters

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

The information above is believed to be accurate and represents the best information currently available to us. The Imperial values are converted from Metric measurements and are for reference only. All test specimens were printed, cleaned, and post-processed per instructions provided by HARZ Labs company. Results provided here are representative of these processes and may vary if these established protocols are not followed. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall HARZ Labs LLC (ООО «ХАРЦ Лабс») be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if HARZ Labs LLC (ООО «ХАРЦ Лабс») has been advised of the possibility of such damages.