



**HARZ Labs**  
MATERIALS FOR 3D PRINTING

# HARZ Labs

# Dental Model Bone

Material Technical Data Sheet (TDS)

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## SECTION 1: DESCRIPTION AND APPLICATION

Dental Model Bone resin is matte bone like colored resin made of biocompatible raw materials. Designed for dental models. Tough, hard, stable to high temperatures during thermoforming aligners and it has low shrinkage.

## SECTION 2: MATERIAL PROPERTIES

### 2.1 Characteristics of liquid

Tested property	Standard/Method	Result (Metric)
Color	-	White greyish (opaque)
Odor	-	Weak
Density	ASTM D1298	1.2 g/cm <sup>3</sup>
Viscosity (20 °C)	ASTM D2393	850 mPa·s

### 2.2 Mechanical properties

Tested property	Standard/Method	Result (Metric)
Flexural Strength	ASTM D790	90 ± 10 MPa
Flexural Modulus	ASTM D790	2015 ± 207 MPa
Ultimate Tensile Strength	ASTM D638	60 ± 2.0 MPa
Elongation at Break	ASTM D638	11.0 ± 1.0 %
Tensile Modulus	ASTM D638	719±20 MPa
Hardness	ASTM D2240	84 ± 2, Shore D
IZOD Impact (Unnotched)	ASTM D4812	5.4 ± 1.2 kJ/m <sup>2</sup>

### 2.3 Special parameters

Tested property	Standard/Method	Result
Solubility (24h)	ASTM D3132	≤ 0.01 %
Sorption (24h)	ASTM D570	≤ 0.47 %
Free Monomer Extraction	ISO 10993	Passed
Cytotoxicity	ISO 10993	Passed
Irritation	ISO 10993	Passed
Sensitization	ISO 10993	Passed

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