



**HARZ Labs**  
MATERIALS FOR 3D PRINTING

# HARZ Labs

# Dental Cast Pro

Material Technical Data Sheet (TDS)

Version 1.0 / EN  
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## SECTION 1: DESCRIPTION AND APPLICATION

Dental Cast Pro is intended for direct casting of dental implants such as metal crowns, bridges, clasp dentures.

## SECTION 2: MATERIAL PROPERTIES

### 2.1 Characteristics of liquid

Tested property	Standard/Method	Result
Color	-	Cherry (semitransparent)
Odor	-	Weak
Density	ASTM D1298	1.1 ± 0.1 g/cm <sup>3</sup>
Viscosity (25 °C)	ASTM D2393	400 ± 200 mPa

### 2.2 Mechanical properties

Tested property	Standard/Method	Result
Flexural Strength	ASTM D790	85.0 ± 10.0 MPa
Flexural Modulus	ASTM D790	1500 ± 300 MPa
Ultimate Tensile Strength	ASTM D638	50.0 ± 5.0 MPa
Elongation at Break	ASTM D638	12.0 ± 3.0 %
Hardness	ASTM D2240	86.0 ± 2.0 Shore D
IZOD Impact (Unnotched)	ASTM D4812	19.0 ± 5.0 kJ/m <sup>2</sup>
CHARPY Impact (Unnotched)	ASTM D6110	30.0 ± 5.0 kJ/m <sup>2</sup>

### 2.3 Special parameters

Tested property	Standard/Method	Result
Solubility (24h)	ASTM D3132	≤ 0.01 %
Ash content	ASTM D5630	< 0.1 %

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