



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	$1.1 \pm 0.1 \text{ g/cm}^3$
Viscosity (25 °C)	ASTM D2393	$400 \pm 200 \text{ mPa}$

2.2 Mechanical properties

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

2.3 Special parameters

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

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