



HARZ Labs
MATERIALS FOR 3D PRINTING

HARZ Labs Dental Sand

Material Technical Data Sheet (TDS)

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SECTION 1: DESCRIPTION AND APPLICATION

Dental Sand is a composite resin designed for the printing of temporary crowns and bridges, as well as master models, available in A1-A2/A3 according to the Vita scale. It has high hardness, strength, abrasion resistance and good polishability. The color depends on the exposure time.

SECTION 2: MATERIAL PROPERTIES

2.1 Characteristics of liquid

Tested property	Standard/Method	Result (Metric)
Color	-	A1-A2/A3
Odor	-	Weak
Density	ASTM D1298	1.1 ± 0.1 g/sm ³
Viscosity (25 °C)	ASTM D2393	1050 ± 250 mPa*s

2.2 Mechanical properties

Tested property	Standard/Method	Result (Metric)
Flexural Strength	ASTM D790	95.0 ± 10.0 MPa
Flexural Modulus	ASTM D790	2050 ± 198 MPa
Ultimate Tensile Strength	ASTM D638	50.0 ± 5.0 MPa
Elongation at Break	ASTM D638	7.1 ± 3.1 %
Hardness	ASTM D2240	82 ± 3, Shore D
IZOD Impact (Unnotched)	ASTM D4812	6.4 ± 0.2 kJ/m ²

2.3 Special properties

Tested property	Standard/Method	Result (Metric)
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

The information above is believed to be accurate and represents the best information currently available to us. 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.