



**HARZ Labs**  
MATERIALS FOR 3D PRINTING

# HARZ Labs Dental Tray

Material Technical Data Sheet (TDS)

Version 1.2 / EN  
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## SECTION 1: DESCRIPTION AND APPLICATION

Dental Tray is a material developed for printing customized dental trays used in impression taking.

## SECTION 2: MATERIAL PROPERTIES

### 2.1 Characteristics of liquid

Tested property	Standard/Method	Result
Color	-	Blue (semitransparent)
Odor	-	Weak
Density	ASTM D1298	$1.1 \pm 0.1 \text{ g/sm}^3$
Viscosity (25 °C)	ASTM D2393	$600 \pm 200 \text{ mPa*s}$

### 2.2 Mechanical properties

Tested property	Standard/Method	Result
Flexural Strength	ASTM D790	$100 \pm 20 \text{ MPa}$
Flexural Modulus	ASTM D790	$1600 \pm 200 \text{ MPa}$
Ultimate Tensile Strength	ASTM D638	$60 \pm 10 \text{ MPa}$
Elongation at Break	ASTM D638	$6.0 \pm 3.0 \%$
Hardness	ASTM D2240	$85 \pm 5 \text{ Shore D}$
IZOD Impact (Unnotched)	ASTM D4812	$4.0 \pm 1.0 \text{ kJ/m}^2$

### 2.3 Special parameters

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

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