



HARZ Labs
MATERIALS FOR 3D PRINTING

HARZ Labs

Dental Splint Soft

Material Technical Data Sheet (TDS)

Version 1.1 / EN
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SECTION 1: DESCRIPTION AND APPLICATION

Resin Dental Splint Soft designed for printing orthodontic models, splints that have high requirements in hardness, elongation and flexibility.

SECTION 2: POST PROCESSING

Printed parts should be cleaned in isopropyl alcohol. Washing cycles should be conducted until the parts will be free of liquid resin. Manual brush cleaning will facilitate the process. It is highly recommended to blow the parts with compressed air and heat for 10 min at 80°C and postcure for 60 min (405 nm, 110W) in UV chamber or in Otofash G171 for 3000 flashes in inert atmosphere (nitrogen).

SECTION 3: MATERIAL PROPERTIES

2.1 Characteristics of liquid

Tested property	Standard/Method	Result (Metric)
Color	-	Bluish(transparent)
Odor	-	Weak
Density	ASTM D1298	1.1 ± 0.1 g/cm ³
Viscosity (25 °C)	ASTM D2393	1250 ± 750 mPa·s

2.2 Mechanical properties

Tested property	Standard/Method	Result (Metric)
Ultimate Tensile Strength	ASTM D638	23.0 ± 5.0 MPa
Elongation at Break	ASTM D638	120.0 ± 15.5 %
Hardness	ASTM D2240	85 ± 3 Shore D

2.3 Special parameters

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

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