



HARZ Labs
MATERIALS FOR 3D PRINTING

HARZ Labs

ABS 355 nm

Material Technical Data Sheet (TDS)

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SECTION 1: DESCRIPTION AND APPLICATION

Designed for printing models for industrial SLA printers based on 355 nm wavelength laser that have high requirements in mechanical properties. Durable, non-shrinking and odorless.

SECTION 2: MATERIAL PROPERTIES

2.1 Characteristics of resin

Tested property	Standard/Method	Result
Color	-	White
Odor	-	Weak
Density	ASTM D1298	1.1 ± 0.1 g/cm ³
Viscosity (25 °C)	ASTM D2393	150 ± 100 mPa·s
Penetration Depth (Dp)	-	6.3 mils -160 mkm
Critical Exposure (Ec)	-	7.6 mJ/cm ²

2.1 Mechanical properties

Tested property	Standard/Method	Result
Flexural Strength	ASTM D790	82.0 ± 15.0 MPa
Flexural Modulus	ASTM D790	1678 ± 157 MPa
Ultimate Tensile Strength	ASTM D638	62.0 ± 8.0 MPa
Hardness	ASTM D2240	80 ± 3, Shore D
Elongation at Break	ASTM D638	9.0 ± 3.2 %
IZOD Impact (Unnotched)	ASTM D4812	9.5 ± 2.7 kJ/m ²

2.2 Special parameters

Tested property	Standard/Method	Result
Solubility (24h)	ASTM D3132	≤ 0.01 %
Sorption (24h)	ASTM D570	≤ 0.47 %

The information above is believed to be accurate and represents the best information currently available to us. The Imperial values are converted from Metric measurements and are for reference only. 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.