



HARZ Labs
MATERIALS FOR 3D PRINTING

HARZ Industrial High Temp Resin

Material Technical Data Sheet (TDS)

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SECTION 1: DESCRIPTION AND APPLICATION

Industrial High Temp Resin is a photopolymer material with a high thermal deformation temperature. It is intended for printing products with high heat resistance requirements, such as industrial prototyping (molds), printing of machinery enclosures in various industries (aerospace, etc.). Designed for LCD, DLP printing at 405nm wavelength.

SECTION 2: MATERIAL PROPERTIES

2.1 Characteristics of liquid

Tested property	Standard/Method	Result (Metric)
Color	-	Yellow
Odor	-	Weak
Density	ASTM D1298	1.17 g/cm ³
Viscosity (25 °C)	ASTM D2393	1700 ± 300 mPa·s

2.2 Mechanical properties

Parameter	Standard/method	Result (metric system) before heat treatment	Result (metric system) after heat treatment
Flexural Strength	ASTM D790	130 ± 10 MPa	115 ± 10 MPa
Flexural Modulus	ASTM D790	2600 ± 100 MPa	2600 ± 100 MPa
Heat Deflection Temperature @ 1.82 MPa	ASTM D648	83 ± 3 °C	135 ± 3 °C
Heat Deflection Temperature @ 0.455 MPa	ASTM D648	> 220 °C	> 220 °C
Charpy impact	ASTM D4812	22 ± 2 KJ/m ²	20 ± 2 KJ/m ²

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.