



HARZ Labs
MATERIALS FOR 3D PRINTING

HARZ Labs Industrial PP-like

Material Technical Data Sheet (TDS)

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SECTION 1: DESCRIPTION AND APPLICATION

Material with properties of polypropylene, adapted for LCD / DLP printers with wavelength of 385-405 nm.

SECTION 2: POSTPROCESSING

Printed parts should be rinsed with isopropyl alcohol or immersed in an ultrasonic bath filled with isopropyl alcohol for 30 seconds. Flush cycles should be carried out until the parts are free of liquid material. Manual cleaning with a soft brush dipped in isopropyl alcohol will help speed up the rinsing process. After that, it is recommended to blow the printed parts with compressed air. Postcure the printed parts in a UV chamber for 30 minutes at a power of 200 watts @405 nm.

SECTION 3: MATERIAL PROPERTIES

2.1 Characteristics of liquid

Tested property	Standard/Method	Result (Metric)
Color	-	Custom
Odor	-	Weak
Density	ASTM D1298	$1.1 \pm 0.1 \text{ g/cm}^3$
Viscosity (25 °C)	ASTM D2393	$500 \pm 100 \text{ mPa}\cdot\text{s}$

2.2 Mechanical properties

Tested property	Standard/Method	Result (Metric)
Ultimate Tensile Strength	ASTM D638	$40.0 \pm 5.0 \text{ MPa}$
Elongation at Break	ASTM D638	$40 \pm 15.5 \%$
Hardness	ASTM D2240	$73 \pm 5 \text{ Shore D}$
IZOD Impact (Unnotched)	ASTM D4812	$40 \pm 10 \text{ kJ/m}^2$

2.3 Special parameters

Tested property	Standard/Method	Result
Solubility (24h)	ASTM D3132	$\leq 0.01 \%$
Sorption (24h)	ASTM D570	$\leq 0.5 \%$

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.