



HARZ Labs
MATERIALS FOR 3D PRINTING

HARZ Labs Model Black

Material Technical Data Sheet (TDS)

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SECTION 1: DESCRIPTION AND APPLICATION

Model Black is a durable non-shrinking material designed for printing models that have high requirements in mechanical properties.

SECTION 2: MATERIAL PROPERTIES

2.1 Characteristics of liquid

Tested property	Standard/Method	Result
Color	-	Black
Odor	-	Weak
Density	ASTM D1298	$1.0 \pm 0.1 \text{ g/cm}^3$
Viscosity (25 °C)	ASTM D2393	$300 \pm 150 \text{ mPa}\cdot\text{s}$

2.2 Mechanical properties

Tested property	Standard/Method	Result
Flexural Strength	ASTM D790	$75.2 \pm 5.1 \text{ MPa}$
Flexural Modulus	ASTM D790	$1607 \pm 164 \text{ MPa}$
Ultimate Tensile Strength	ASTM D638	$40.8 \pm 4.3 \text{ MPa}$
Elongation at Break	ASTM D638	$5.9 \pm 1.5 \%$
Hardness	ASTM D2240	75 ± 3 , Shore D
IZOD Impact (Unnotched)	ASTM D4812	$4.1 \pm 1.1 \text{ kJ/m}^2$

2.3 Special parameters

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

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