



HARZ Labs Dental Model Light Grey

Material Technical Data Sheet (TDS)

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SECTION 1: DESCRIPTION AND APPLICATION

Dental Model Light Grey is matte light grey colored resin. Designed for dental demonstration models and master-models. Tough, hard, stable to high temperatures during thermoforming aligners and has low shrinkage.

SECTION 2: MATERIAL PROPERTIES

2.1 Characteristics of liquid

| Tested property | Standard/Method | Result (Metric) |
|-------------------|-----------------|-----------------------|
| Color | - | Light grey (opaque) |
| Odor | - | Weak |
| Density | ASTM D1298 | 1.1 g/cm ³ |
| Viscosity (25 °C) | ASTM D2393 | 900 ± 200 mPa·s |

2.2 Mechanical properties

| Tacted property | Standard/Method | Result (Metric) |
|---------------------------|-----------------|-----------------------------|
| Tested property | Stanuaru/Methou | Result (Methic) |
| Flexural Strength | ASTM D790 | 100 ± 10 MPa |
| Flexural Modulus | ASTM D790 | 2300 ± 200 MPa |
| Ultimate Tensile Strength | ASTM D638 | 75 ± 7.0 MPa |
| Elongation at Break | ASTM D638 | 8.0 ± 1.0 % |
| Tensile Modulus | ASTM D638 | 1200±120 MPa |
| Hardness | ASTM D2240 | 86 ± 2, Shore D |
| IZOD Impact (Unnotched) | ASTM D4812 | 4.8 ± 1.2 kJ/m ² |

2.3 Special parameters

| Tested property | Standard/Method | Result |
|-------------------------|-----------------|----------|
| Solubility (24h) | ASTM D3132 | ≤ 0.01 % |
| Sorption (24h) | ASTM D570 | ≤ 0.47 % |
| Free Monomer Extraction | ISO 10993 | Passed |
| Cytotoxicity | ISO 10993 | Passed |
| Irritation | ISO 10993 | Passed |
| Sensitization | ISO 10993 | Passed |

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