



DIMENGEL 110

Dimengel 110 (DIM 110) is a photo polymer 3D printing gel that enables production of high-definition, large parts that cure under UV light while printing, delivering solid, parts straight off the printer.

This unique material facilitates complex geometries, including non-vertical parts and ceilings, with practically no need for support structures. The objects are hollow and translucent.

| Character | Method | Metric Units | | Imperial Units | |
|------------------------|---------------------|--------------|-------------|----------------|-------------|
| | | | | | |
| Tensile strength* | ISO 527 | MPa | 42 | psi | 6,100 |
| Elongation at break* | ISO 527 | % | 10 | % | 10 |
| Elasticity modulus | ISO 527 | GPa | 2.6 | psi | 376,400 |
| Flexural strength* | ISO 178 | MPa | 150 | psi | 21,800 |
| Flexural modulus* | ISO 178 | MPa | 4,715 | psi | 684,000 |
| Izod Impact* (Notched) | ISO 180 | J/m | 18.4 - 19.2 | ft.lbf/in | 0.35 - 0.36 |
| Glass transition, Tg | ASTM D3418 | °C | 66.3 | °F | 151.3 |
| HDT* @ 0.45 MPa | ISO 75 ASTM D648 | °C | 51 - 55 | °F | 124 - 131 |
| Density | | g/ml | 1.07 | lb/ft³ | 66.8 |
| Hardness (Shore D) | ASTM D2240 | Shore D | 80 - 85 | Shore D | 80 - 85 |
| Color | | White | | | |

* All measurements were done on lab specimens of cured material.

** Internal lab testing.

Coating and Finishing

DIM 110 supports a wide array of finishes:

- SAV -self-adhesive vinyl
- Car / body filler
- Polyester
- Epoxy
- Polyurethane
- Fiberglass

Regulation Compliancy

- Compliant with 1907/2006/EEC regulation 2006 ("REACH")
- Compliant with Regulation (EC) No 1272/2008 ("CLP")
- Does not contain any chemicals listed on California Prop.65
- Compliant with the US Toxic Substances Control Act (TSCA) regulations

Fire Resistance

Dim 110 prints are compliant with the following standards:

- Din 4102 - class B2
- ASTM D635²
- UL94 - HB²

Precautionary Statement

Massivit 3D printing technologies maintains up-to-date Material Safety Data Sheets (MSDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Users should review the latest MSDS to determine possible health hazards and appropriate precautions to implement prior to using this material.