



DIMENGEL 400

Dimengel 400 (DIM 400) is the strongest and toughest of Massivit's family of high-performance Gels. Its impact resistance makes it ideal for the most demanding functional prototyping and end-use applications. It offers a high Heat Deflection Temperature (HDT) enabling production of large parts that can withstand elevated temperatures. As with other Dimengel materials, DIM 400 enables models to cure instantly under UV light while printing, delivering solid, large parts straight off the printer. It enables production of complex geometries, including non-vertical parts and ceilings, with practically no need for support structures.

Key Benefits

- High toughness
- Superior strength and thermal durability
- A wide range of applications

Applications

- Customized end-use parts
- Tough, functional prototypes
- Jigs and fixtures
- Internal cores for layups

Character	Method	Metric Units		Imperial Units	
Tensile strength*	IISO 527 ASTM D 638	MPa	45	psi	6,530
Elongation at break*	ISO 527 ASTM D 638	%	46	%	46
Elasticity modulus	ISO 527 ASTM D 638	GPa	1.7	psi	246,560
Flexural strength*	ISO 178 ASTM D 790	MPa	80	psi	11,600
Flexural modulus*	ISO 178 ASTM D 790	GPa	1.2	psi	174,045
IZOD Impact* (Notched)	ASTM D256	J/m	40-50	ft-lb/in	0.75-0.94
Heat Deflection Temperature @0.45 MPa	ASTM D 648	°C	67-70	°F	153-158
Glass transition, Tg	ASTM D 3418	°C	72	°F	162
Density		g/cm ³	1.17	lb/ft ³	73
Hardness (Shore D)	ASTM D 2240	Shore D	81-86	Shore D	81-86
Color		DARK GRAY			

* All measurements were done on lab specimens of cured material

** The specifications stated above refer to the Beta version and results were derived from internal lab tests. The material above is under R&D development"

Coating and Finishing

DIM 400 supports a wide array of finishes:

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

Regulation Compliancy

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

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.