



"League of Giants" 3D printed
by Composite Images for
Rugby League World Cup, Australia

DIMENGEL 100

Dimengel 100 (DIM 100) is a photo polymer 3D printing gel that enables models to cure under UV light while printing, delivering solid, large parts straight off the printer. This unique material facilitates production of complex geometries, including non-vertical parts and ceilings, with practically no need for support structures. The objects are hollow, translucent, and can be illuminated.

Character	Method	Metric Units		Imperial Units	
Tensile strength*	ISO 527	MPa	47	psi	6,820
Elongation at break*	ISO 527	%	17	%	17
Elasticity modulus	ISO 527	GPa	2.4	psi	345,200
Flexural strength*	ISO 178	MPa	196	psi	28,430
Flexural modulus*	ISO 178	MPa	6,410	psi	930,000
Izod Impact* (Notched)	ISO 180	J/m	18.4 - 20.8	ft-lbf/in	0.35 - 0.39
Glass transition, Tg	ASTM D3418	°C	65.8	°F	150.4
HDT* @ 0.45 MPa	ISO 75 ASTM D648	°C	51 - 55	°F	124 - 131
Density		g/ml	1.06	lb/ft ³	66.2
Hardness (Shore D)	ASTM D2240	Shore D	80 - 85	Shore D	80 - 85
Color		White			

** Internal lab testing.

Coating and Finishing

DIM 100 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 100 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.