



Stern extension 3D printed  
by Velum Nautica

## DIMENGEL 90

**Dimengel 90 (DIM 90)** is a cost-effective, photo polymer 3D printing gel that enables parts to cure while printing, delivering solid objects 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.

Character	Method	Metric Units		Imperial Units	
Tensile strength*	ISO 527	MPa	46	psi	6,670
Elongation at break*	ISO 527	%	20	%	20
Elasticity modulus	ISO 527	GPa	2.3	psi	336,340
Flexural strength*	ISO 178	MPa	150	psi	21,760
Flexural modulus*	ISO 178	MPa	4,720	psi	684,000
Izod Impact* (Notched)	ISO 180	J/m	17.6 - 18.4	ft-lbf/in	0.33 - 0.35
Glass transition, Tg	ASTM D3418	°C	64.3	°F	147.7
HDT* @ 0.45 MPa	ISO 75 ASTM D648	°C	51 - 55	°F	124 - 131
Density		g/ml	1.06	lb/ft <sup>3</sup>	66.2
Hardness (Shore D)	ASTM D2240	Shore D	80 - 85	Shore D	80 - 85
Color		Gray			

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

\*\* Internal lab testing.

## Coating and Finishing

DIM 90 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 90 prints are compliant with the following standards:

- Din 4102 - class B2
- ASTM D635<sup>2</sup>
- UL94 - HB<sup>2</sup>

## 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.