

Somos®Imagine 8000

Product Description

DSM Somos 8000 is an ABS-like Stereolithography (SLA) resin with low viscosity. It is durable, translucent and waterproof. It can be made firm and hard and is ideal for many applications in the automotive, medical, consumer product, water flower system and RTV model sectors.

Typical Features

- Waterproof resin.
- SLA photosensitive resin with low viscosity.
- Rigid and durable, ideal for enclosures and housings.
- Suitable for vacuum casting mast models.

Physical Properties (Liquid)

Appearance	White (opaque, translucent)
Density	~1.3 g/cm ³ @25 °C
Viscosity	~260cps@30 °C

Optical Properties

Critical Exposure (Ec)	~11 mJ/cm ²
Penetration Depth (Dp)	0.1 mm
Exposure for 0.010-inch thickness (E10)	~54 mJ/cm ²

Mechanical Properties

Property Description	Somos®8000	ABS (in-comparison)
Heat Deflection Temperature (0.46MPa)	46 - 60 °C	94 - 207 °C
Heat Deflection Temperature (1.81MPa)	49 - 55 °C	86.4 - 194 °C
Glass Transition (Tg)	39 - 50 °C	N/A
Tensile Modulus	2500 - 3000 MPa	2000 MPa
Flexural Modulus	1900 - 2500 MPa	2300 MPa
Tensile Strength	45 - 54 MPa	45.7 MPa
Flexural Strength	60 - 75 MPa	73.5 MPa
Izod Impact (Notched)	0.2 - 0.3 J/cm	1.6 J/cm
Elongation at Break	11 - 20%	41.6%
Yield Elongation	3 - 5%	N/A
Water Absorption	0.35%	0.20 - 0.45%