

# Crysta-8QEF1

## Product Description

Crysta-8QEF1 is a clear SL resin which has accurate and durable features. It is designed for solid state SLA platforms. Crysta-8QEF1 can be applied in master patterns, concept models, general parts and functional prototypes in the field of automotive, medical and consumer electronics industries.

## Typical Features

- Liquid resin's medium viscosity, so easy recoating, easy clean parts and machines
- Improved strength retention, improved dimensions retention of parts in humid condition
- Need minimal part finishing
- Easy to burn completely

## Typical Benefits

- Superior clear. Builds parts with outstanding clarity and excellent accuracy
- Need less part finishing time, easier post-curing
- Suitable for casting

## Physical Properties – Liquid Material

Appearance	Clear
Density	1.12 g/cm <sup>3</sup> at 25°C
Viscosity	312 - 420 cps at 28°C
DP	0.18mm
EC	9.8 - 12 mJ/cm <sup>3</sup>
Building Layer Thickness	0.1mm

SLA Materials

# Crysta-8QEF1

## Mechanical Properties of Post-Cured Material

Measurement	Test Method	Value
		90-minute UV post-cure
Hardness (Shore D)	ASTM D2240	76 - 82
Flexural Modulus	ASTM D790	2570 - 2860
Flexural Strength	ASTM D790	75 - 81
Tensile Modulus	ASTM D638	2490 - 2660
Tensile Strength	ASTM D638	44 - 62
Elongation at Break	ASTM D638	7 - 11%
Impact Strength, notched Izod, J/m	ASTM D256	27 - 35
Heat Deflection Temperature, °C	ASTM D648@66PSI	40 - 51
Glass Transition, Tg	DMA, E"peak	42 - 58

# Godart®8001

## Product Description

Godart8001 is a clear SL resin which has good dimensional stability. It is used in the manufacturing of mother models, conceptual models, general components and functional components that require high transparency in automotive, medical, consumer electronics and other industrial fields.

## Typical Features

- SLA photosensitive resin with high transparency and low viscosity.
- Excellent strength and toughness

## Physical Properties – Liquid Material

Appearance	Clear
Viscosity	200Pa ·s at 25 °C
Density	~1.12 g/cm <sup>3</sup> at 25 °C

## Optical Properties

Critical Exposure	7.9mJ/cm <sup>2</sup>
Penetration Depth	0.08 mm
Recommended Layer Thickness of Construction	0.10 mm

## Mechanical Properties

Tensile Strength	ASTM D638M	48MPa
Elongation at Break	ASTM D638M	12%
Flexural Strength	ASTM D790M	86MPa
Flexural Modulus	ASTM D790M	2100MPa
Izod Impact - Notched	ASTM D256A	28 J/m
Hardness (Shore D)	ASTM D2240	86
Water Absorption	ASTM D570-98	0.48%