Technical Data

Photocentric

Daylight Precision Mould

SPECS

FEATURES

Precision Mould has been designed for creating high definition jewellery parts especially for the Precision Printer. The printed parts will display a high tensile strength, high accuracy and detail for the use in the modern jewellery market. The parts printed with this resin withstand high temperatures (up to 180°C) and pressures required for vulcanizing. Parts printed with the Precision Mould resin are ideal for the use as pattern in high resolution silicon rubber moulds. The printed parts will display a smooth surface and a good surface finish.

Key benefits include high tensile strength, high accuracy, no shape deformation at elevated temperatures, smooth surface, easy to use and finish.

PROCESSING INSTRUCTIONS

Follow procedure laid out in your 3D Liquid Crystal's user manual. Liquid photopolymer should be poured into the tray away from direct sunlight. Polymer can be reused but should be poured through a filter to remove solid lumps. Keep hood on at all times. Liquid polymer is soluble in water and soap. In order to clean the printed objects, we recommend Photocentric's Resin Cleaner, or IPA, followed by water. The cleaned objects should be post exposed at 80°C under UV for a minimum of 1 hour to obtain the maximum tensile properties.

IDEAL APPLICATIONS

•Jewellery

DATA

Viscosity (At 25ºC Brookfield spindle 3)	700cPs
Hardness ASTM D2240 (After post exposure)	90 Shore D
Tensile strength ASTM D638 (After post exposure, 1h UV)	60 MPa
Elongation at break ASTM D638 (After post exposure, 1h UV)	2.3%
Young's modulus ASTM D638 (After post exposure, 1h UV)	2780 MPa
Impact strength notched Izod ASTM D256 (After post exposure)	1.9 kJ/m2
Flexural strength ASTM D792 (After post exposure)	101 MPa
Flexural modulus ASTM D792 (After post exposure)	2260 MPa
HDT	92°C
Water absorption (24 h)	<0.2 wt%
Storage	10<t>50°C
Density	1.1 g/cm3

AVAILABLE COLOURS

Blue

Available in 1 kg bottles.

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