

# Technical Data

Photocentric  
RESINS



BR3DRD01-CAST-PRCN-RED  
Daylight **Precision Cast**  
3D polymers



## SPECS

### FEATURES

Precision Cast has been designed for creating high definition castable parts especially for the Precision Printer. The printed parts will display a high accuracy and detail for the use in the modern jewellery market. This product has been formulated to burn evenly to reduce gas pressure in the cast and leave virtually no ash or residues (Please refer to our casting guidelines). The parts printed with this resin will have virtually no expansion. The cast parts will display a smooth surface and a good surface finish.

Key benefits include a reduced ash and residue content in burnout, no expansion when heated, highly accurate printed parts with a good smooth surface finish, highly accurate metal cast parts with a good surface finish.

### PROCESSING INSTRUCTIONS

Follow the procedures laid out in your 3D Precision's user manual. Polymer should be poured into the tray away from direct sunlight and after being shaken for two minutes. It is important to mix well the resin in the tray with the card provided before starting the print. Polymer can be reused but should be poured through a filter to remove solid lumps. Keep hood on at all times. First rinse with warm water, then spray spray with Photocentric Resin Cleaner (recommended), alternatively IPA or acetone can be used. Then rinse with warm water again. Drying your parts with an air gun will help ensure all holes and slots are open, if present. Place the parts in an oven at 120°C for 4 hours: surfaces should be tack free. If still tacky, return items to the oven.

### IDEAL APPLICATIONS

- Jewellery

### DATA

<b>Viscosity</b> (At 25°C Brookfield spindle 3)	510cPs
<b>Hardness</b> ASTM D2240 (After post exposure)	75 Shore D
<b>Tensile strength</b> ASTM D638 (After post exposure, 1h UV)	19.5 MPa
<b>Tensile modulus</b> ASTM D638 (After post exposure, 1h UV)	1380 MPa
<b>Elongation at break</b> ASTM D638 (After post exposure, 1h UV)	2-3%
<b>Storage</b>	10<math>t>50^{\circ}\text{C}
<b>Density</b>	1.2 g/cm <sup>3</sup>

### AVAILABLE COLOURS

**Red**

Available in 1kg bottles.