# Technical Data





Daylight Precision Cast Violet





Precision Cast has been precisely formulated to work with our Precision Printer range for creating castable jewellery parts displaying the highest level of detail. Printed parts are exceptionally accurate, displaying the highest level of detail and are suitable for use in direct investment casting, making them perfect for the modern jewellery market. During the casting process, parts will burn evenly, with virtually no ash, expansion or residues leaving you with an ideal mould for casting metals. Final cast parts are extremely accurate, displaying a smooth surface finish. Please refer to our casting guidelines for optimal casting results.

#### **Key Benefits:**

- Virtually no ash, expansion or residue during burnout
- Highly accurate printed and cast parts with a good, smooth surface finish.

Applications: Jewellery, Dental Casts, Models

### 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 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. Daylight Precision Cast contains a concentration of wax. In colder climates, there is a chance that the wax within the resin may separate. To solve this issue, we recommend heating the resin to around 50 °C and shaking thoroughly to re-incorporate the solid layer.



630 cPs

#### **DATA**

Viscosity

(At 25°C Brookfield spindle 3)	000 0. 0
Hardness (ASTM D2240 After post exposure)	75 Shore D
Tensile strength (ASTM D638 After Post Exposure)	19.5 MPa
Tensile Modulus (ASTM D638 After post exposure,1h UV)	1380 MPa
Impact strength notched Izod ASTM D256 (After post exposure)	1.2 kJ/m2
Flexural strength ASTM D792 (After post exposure)	22 MPa
Flexural modulus ASTM D792 (After post exposure)	632 MPa
Water absorption (24 h)	0.6 wt%
Elongation at break (ASTM D638 After post exposure,1h UV)	2-3%
Storage	10 <t>50°C</t>
Density	1.20 g/cm3

## AVAILABLE COLOURS Violet

Available in 1 kg bottles.

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Winner of Queen's Award: Innovation 2016 & International Trade 2018