

# Perfactory® Material

## PIC100/PIC100 G

EnvisionTEC PIC100 and PIC100G resins have been developed for direct investment casting of products for the jewelry market. They offer excellent burn out properties and build with the highest quality and crisp detail. The materials may be processed on all Perfactory® systems.

Parts made using EnvisionTEC PIC100 resins evaporate at moderate burn out temperatures without reacting with your investment and offer an extremely low thermal expansion. It is optimally suitable for producing precious metal castings.

EnvisionTEC PIC100 builds extremely smooth surfaces. The burn out process is ash free, allowing for a casting which is free from porosity, a problem which is a result of the ash residue when burning a polymer-based material.

EnvisionTEC PIC100 is a photo-cured resin that produces the highest quality details without sacrificing toughness, ease of handling, and finishing.

Highest quality details, standard burn out procedure, and high speed building qualify EnvisionTEC PIC100 resins for producing high quality parts in the jewelry market for production capacity direct investment casting.

### Mechanical Properties\*

ASTM Method	Description	Value
DIN 1342-2	Viscosity	361.7 mPa*s
DIN EN ISO 527-1	Tensile Strength	16.8 MPa
DIN EN ISO 527-1	Elongation at Break	7.46 %
DIN EN ISO 178	Flexural Strength	23.0 MPa
DIN EN ISO 178	Flexural Modulus	404.0 MPa
DIN EN ISO 178	Bending Strain	10.2 %
DIN EN ISO 180	Izod Impact-Notched	11.03 kJ/m <sup>2</sup>
DIN ISO 1183-1	Density	1.178 g/cm <sup>3</sup>
DIN EN ISO 868	Hardness (Shore D)	69 Shore
DIN 53765	Ignition Temperature	350 °C

Cleaning, drying and post curing is to be carried out as described in EnvisionTEC's postprocessing instructions for this material. Recommendation: use incubator. Post curing of parts in Otofash.

\*All data provided is preliminary data and must be verified by the individual user.

### Recommended Machines

Aureus, Apollo, Perfactory® 4 Mini XL, Perfactory® 4 Mini, Perfactory® 4 Standard XL, Perfactory® 4 Standard, Perfactory® 3 Mini Multi Lens,

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