



Introduction

The Crestaform® Dental Modelling High Precision is ideal for quick fabrication of highly accurate fixed and removable dental prosthetic models. It is pairing exceptional scan-to-model dimensional stability with rapid print speeds. Careful consideration has been taken in ensuring the surface finish and aesthetics of finished parts present outstanding definition of margin lines and anatomical details.

Crestaform® Dental Modelling HP comes with the following benefits:

- Excellent mechanical performance
- High reactivity and printing speed
- Rigorously tested to ensure optimal performance
- Globally available technical support
- Reputable manufacturer with over 100 years of experience and expertise

Typical printing parameters*

Printer Type	DLP
Printer Wavelength (nm)	385
Layer Height (µm)	<25 - 50
Printing Temperature (°C)	18 - 30
Base Layer Exposure Time (sec)	10 – 20 ¹
Normal Layer Exposure Time (sec)	2.0 - 4.0 ¹

¹ Printed using a light power of 5.0 mW/cm²

* It is recommended that 3D resin exposure finder test prints are undertaken to find optimum cure settings

Recommended cleaning

- Soak the print in a clean isopropanol (IPA) (or similar solvent) bath for a minimum of 5 minutes. Alternatively, rinse the part with IPA until all the visible uncured resin has been removed. Reusing IPA in multiple cleans can reduce the cleanliness and clarity of a print
- Leave the print to dry off any residual solvent prior to post-curing

Recommended post-curing

- Post-cure as soon as possible after completion of printing
- Post-cure every print for a minimum of 10 minutes under a dedicated curing UV light operating at 385-405nm wavelength. Alternatively, leave the print to cure for a minimum of 2 hours under direct sunlight
- Temperature-assisted UV curing will increase the rigidity of the print. It can also be used to initiate shrinkage to improve the quality of negative features

Instructions to use the Crestaform® Dental Modelling HP resin:

- Always shake or mix the resin thoroughly before use. This is especially true for Crestaform DM HP as pigment heterogeneity will affect print quality
- Open the container and pour the appropriate amount of resin into the tank according to the size of the printer model
- Make sure to not spill the resin onto the printer, LCD screen or anywhere outside of the resin tank
- If not used for a long time, please filter the resin and pour the resin into the storage container



Physical properties

	Values	Description
Viscosity (Poise)	5.0 – 7.0	ICI Viscosity @ 25°C
Liquid Density (g/cm³)	1.08 – 1.10	-
Colour Options	-	Pink/Peach

Mechanical properties

Typical properties below: Mechanical Testing Specimen Print Orientation - 50°

	Values	Description
Tensile strength (MPa)*	69	ISO 527-2 Type 5A
Tensile modulus (GPa)*	3.3	ISO 527-2 Type 5A
Elongation at break (%)*	5.0	ISO 527-2 Type 5A
Flexural strength (MPa)*	113	ISO 178
Flexural modulus (GPa)*	2.8	ISO 178
Hardness (Shore)*	85D	ISO 868
Heat deflection temperature (°C)*	52	ISO 75-2, Method A (1.8 MPa)

* 16 mins at 60°C + 405nm UV Post Cure for cured properties

Compatibility

Crestaform® Dental Modelling HP has been designed to work with any DLP 3D printer that is open to 3rd party resins, including, but not limited to:

- Asiga
- Rapidshape



Crestaform®

High performance 3D printing resins



Do

- Always wear Personal Protection Equipment (PPE), protective eyewear and chemical nitrile gloves when handling resin
- Shake the resin well every time before you use it or decant from the container
- If spilled, please clean the spill immediately with paper towel, and Isopropanol (IPA)
- Store it in its original container at room temperature, away from children, untrained personnel, direct or indirect sunlight, heat sources, sparks and open flames
- Use it in well ventilated rooms
- Use every sensible preventive precaution to avoid skin contact, spillage of resin, eye contact or swallowing. Make note of Local Poison Centres availability



Do not

- Expose resin to direct or indirect sunlight, UV light, heat sources, sparks and open flame while handling and storing the resin
- Touch the resin with bare hands. Always wear appropriate gloves. If skin contact occurs, wash it with soapy water. If you feel unwell, please consult immediately medical assistance
- Swallow the resin or printed objects
- Expose to children or pets
- Handle before completing training
- Expose persons sensitive to the resin components – please see Material Safety Datasheet
- Inhale the resin fumes. Use only in well ventilated rooms or areas
- Pour the resin or used IPA into the draining system

Storage

Crestaform® Dental Modelling HP should be stored in the dark, in suitable, closed containers. It is recommended that the storage temperature should be between 15°C and 35°C. Ideally, containers should be opened only immediately prior to use. Keep out direct light/sunlight.

Packaging

Crestaform® Dental Modelling HP is supplied in 500 g and 1000 g bottles. Bulk supply available.

Health and safety

Please see separate Safety Data Sheet.

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