

Introduction

The Crestaform[®] Dental Orthomodel resin 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 Orthomodel comes with the following benefits:

- Excellent mechanical performance
- High reactivity and printing speed
- Rigorous test regime and best in industry quality assurance
- Globally available technical service support available
- Reputable manufacturer, 100 years of resin manufacturing

Mechanical properties

Mechanical and printing			
	Green	Post-cured (60 mins UV only Form Cure)	Method
Tensile properties			
Tensile strength (MPa)	34	72	ISO 527-2
Tensile modulus (GPa)	1.6	3	ISO 527-2
Elongation at break (%)	25	6	ISO 527-2
Other properties			
Flexural modulus (GPa)	-	2.8	ISO 178
Shore D hardness	-	86	ISO 868
HDT @ 0.45 MPa (°C)	-	63	ISO 75-2
Printers			
Printable on all open-source 385 nm and 405 nm LCD and DLP 3DP machines. Currently undergoing validation on Rapid Shape and Straumann printers.			

*For printer specific printing parameters please check our website.

Recommended cleaning

- Soak the print in a clean IPA bath for 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 of 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 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

Compatibility

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

- Asiga
- Rapidshape

Instructions to use the Crestaform[®] Dental Orthomodel resin:

✓ Do's

- 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 Isopropyl alcohol
- 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

✗ Don'ts

- Keep resin away from direct or indirect sunlight, UV light – while handling and storing the resin heat sources, sparks and open flame
- Do not 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.
- Make sure you don't swallow the resin or printed objects
- Keep away from children and pets
- Keep away from untrained persons
- Keep away from persons sensitive to any of the resin components – please see Material Safety Datasheet
- Do not inhale the fumes of the resin, Use only in well ventilated rooms or areas
- Do not pour the resin or used IPA in the draining system

Storage

Crestaform[®] Dental Orthomodel 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 Orthomodel is supplied in 500 gr and 1000 gr containers.

Health and safety

Please see separate Material Safety Data Sheet.

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