



**Crestaform<sup>®</sup>**

High performance 3D resins

Technical data sheet

**Crestaform Rapid Blue**



# Crestaform<sup>®</sup>

High performance 3D resins

Crestaform Rapid Blue is a high performance 3D printing resin with superior mechanical performance and excellent reactivity.



Crestaform Rapid Blue comes with the following benefits:

- Excellent mechanical performance
- High reactivity and printing speed
- Rigorous test regime and best in industry quality assurance
- Technical service support
- Produced by Scott Bader, a global manufacturer of resins established 100 years ago

## Typical printing parameters\*

Layer height: 50µm

Printing Temperature: 23°C

LCD type	RGB UV LCD	Monochromatic UV LCD
Base layer exposure time	50-80 sec	20-50 sec
Normal layer exposure time	4-6 sec	1.5-2.5 sec

\*For printer specific printing parameters please check our website

## Recommended cleaning

- Soak the print in a clean IPA bath for 1-5 minutes. Alternatively, rinse the print 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

- Postcure every print for a minimum of 5 minutes under a dedicated curing UV light operating at 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.

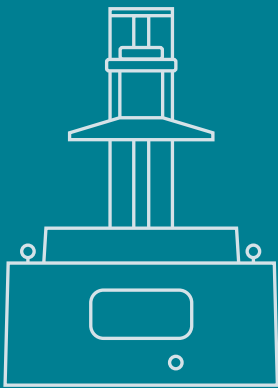
## Physical properties

	Values	Description
Viscosity (Poise)	3.9 - 4.5	ICI Viscosity at 25°C
Liquid Density (g/cm <sup>3</sup> )	1.08	

## Mechanical properties

All specimens were post-cured at 405nm UV light for 15 minutes at 23°C.

	Values	Description
Tensile strength (MPa)	44 - 56	ISO 527-2 Type 1A
Tensile modulus (GPa)	1.8 - 2.3	
Elongation at break (%)	3.5 - 7.7	
Flexural strength (MPa)	74 - 86	ISO 178
Flexural modulus (MPa)	2.1 - 2.5	
Hardness (Shore)	88D	ISO 868
Heat deflection temperature (°C)	47°C	ISO 75-2, method A using flexural stress of 1.8MPa



### Compatibility

Crestaform Rapid Blue has been designed to work with monochromatic and polychromatic LCD DLP printers. The resin has been tested on the following machines (the list is not exhaustive):

- Anycubic Photon S
- Anucubic Photon Mono SE
- Anycubic Photon Mono X
- Elegoo Mars
- Phrozen Sonic Mini

### Instructions for using Crestaform Rapid Blue:

- Always shake the resin for a few seconds before use
- Open the resin bottle 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





## DO'S

- Always wear Personal Protection Equipment (PPE), protective eyewear and chemical nitrile gloves when handling Crestaform 3D printing resins
- Shake the resin well before you use it or decant it from the container. Do this every time.
- If spilled, please clean the spill immediately with paper towels 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 Crestaform 3D printing resins in well ventilated rooms
- Use every sensible preventative precaution to avoid skin contact, spillage of resin, eye contact or swallowing. Make note of Local Poison Centres availability



## DON'TS

- Do not handle or store Crestaform 3D printing resins near direct or indirect sunlight, heat sources, sparks and open flames
- 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, seek immediate 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 Safety Data Sheet
- Do not inhale resin fumes. Use only in well ventilated rooms or areas
- Do not pour the resin or used IPA in the draining system

## Storage

Crestaform Rapid Blue should be stored in the dark in suitable, closed containers. It is recommended that the storage temperature should be less than 20°C where practical, but should not exceed 30°C. Ideally, containers should be opened only immediately prior to use. Extended storage at low temperatures may decrease shelflife. Ideally, store resin above 5°C.

## Packaging

Crestaform Rapid Blue is supplied in 1000 gr and 500 gr containers.

## Health and Safety

Please see separate Safety Data Sheet.



© 2021 ScottBader Co Ltd, June 2021

### Scott Bader UK

Wollaston  
Wellingborough  
Northants  
NN29 7RL  
UK

Tel: +44 (0) 1933 666738

Email: [enquiries@scottbader.com](mailto:enquiries@scottbader.com)

### Scott Bader North America

4280 Hudson Drive  
Stow  
OH 44224  
USA

Tel: +1 (330) 920 4410

Email: [info@scottbader-na.com](mailto:info@scottbader-na.com)

Disclaimer: All information on this presentation is based on laboratory testing and is not intended for design purposes. Scott Bader makes no representations or warranties of any kind concerning this data. Due to variance of storage, handling and application of these materials, Scott Bader cannot accept liability for results obtained. The manufacture of materials is the subject of granted patents and patent applications; freedom to operate patented processes is not implied by this publication.