

## BLUE CAST \_ BC CR3A - For all LCD 3d printers

### PRODUCT FEATURES

- Consistent casting quality as BlueCast standard
- Ash residual 0.00%
  - \_ proprietary TGA at 750°C / 4 hrs without contact to air, in closed vessel
- Low cost
- Negligible shrinkage
- No primer needed
- Monomer based resin (\*)
- High resolution
- Good strength
- Fast printing speed
- Very low odor
- Very low viscosity, no need to heat
- Chromacure® will tell you when postcure is done and pattern is ready to cast



### CONS

- Has to be managed with individual protections because of presence of monomer
- Postcuring treatment require
  - Differently from other monomer based resin that requires complex and tricky treatments our BC Crea just requires to be washed after print and cured in to BC CURING LIQUID we supply. No hot water wash required, no boiling, no overnight curing.

## PRINTING SETTINGS

### - **Phrozen Shuffle**

BURN IN LAYER  
NUMBERS OF LAYERS: 5  
LAYER THICKNESS: 50u  
CURE TIME: 50 SEC  
WAIT BEFORE PRINT: 4 SEC  
WAIT AFTER PRINT: 0.5 SEC  
LIFT AFTER PRINT: 5 mm  
WAIT AFRER LIFT: 0.1 SEC

NORMAL LAYER  
LAYER THICKNESS: 50u  
CURE TIME: 11 SEC  
WAIT BEFORE PRINT: 1 SEC  
WAIT AFTER PRINT: 0.1 SEC  
LIFT AFTER PRINT: 4 mm  
WAIT AFRER LIFT: 0.1 SEC

MOTOR SPEED 200 u/SEC  
Heigh of slow section 1mm  
Speed of slow section 30u/SEC

### - **Phrozen Shuffle 2019**

LAYER EIGHT – 0.05 mm  
BOTTOM LAYER COUNT – 5n  
EXPOSURE TIME – 8s  
BOTTOM EXPOSURE TIME – 50s  
LIGHT OFF DELAY – 7s  
BOTTOM LIGHT OFF DELAY – 11s  
BOTTOM LIFT DISTANCE – 5mm  
LIFTING DISTANCE -5mm  
BOTTOM LIFT SPEED – 50 mm/min  
LIFTING SPEED – 80 mm/min  
RETRACT SPEED -100 mm/min

### - **Phrozen Shuffle 4K**

BURN IN LAYER  
NUMBERS OF LAYERS: 5  
LAYER THICKNESS: 30u  
CURE TIME: 50 SEC  
WAIT BEFORE PRINT: 5 SEC  
WAIT AFTER PRINT: 0.5 SEC  
LIFT AFTER PRINT: 5 mm  
WAIT AFRER LIFT: 0.1 SEC

NORMAL LAYER  
LAYER THICKNESS: 30u  
CURE TIME: 9 SEC  
WAIT BEFORE PRINT: 1.5 SEC  
WAIT AFTER PRINT: 0.1 SEC  
LIFT AFTER PRINT: 5 mm  
WAIT AFRER LIFT: 0.1 SEC

BOTTOM LAYER MOTOR SPEED 50 u/SEC  
MOTOR SPEED 120 u/SEC

- **Phrozen Sonic – Sonic / Mini**

BURN IN LAYER  
NUMBERS OF LAYERS: 5  
LAYER THICKNESS: 50u  
CURE TIME: 40 SEC  
WAIT BEFORE PRINT: 5 SEC  
WAIT AFTER PRINT: 0.5 SEC  
LIFT AFTER PRINT: 5 mm  
WAIT AFRER LIFT: 0.1 SEC

NORMAL LAYER  
LAYER THICKNESS: 50u  
CURE TIME: 2.7 SEC  
WAIT BEFORE PRINT: 1 SEC  
WAIT AFTER PRINT: 0.1 SEC  
LIFT AFTER PRINT: 5 mm  
WAIT AFRER LIFT: 0.1 SEC

BOTTOM LAYER MOTOR SPEED 50 u/SEC  
MOTOR SPEED 120 u/SEC

- **Phrozen XL**

BURN IN LAYER  
NUMBERS OF LAYERS: 7  
LAYER THICKNESS: 100u  
CURE TIME: 70 SEC  
WAIT BEFORE PRINT: 6 SEC  
WAIT AFTER PRINT: 0.5 SEC  
LIFT AFTER PRINT: 5 mm  
WAIT AFRER LIFT: 0.1 SEC

NORMAL LAYER  
LAYER THICKNESS: 50u  
CURE TIME: 9 SEC  
WAIT BEFORE PRINT: 1.5 SEC  
WAIT AFTER PRINT: 0.1 SEC  
LIFT AFTER PRINT: 5 mm  
WAIT AFRER LIFT: 0.1 SEC

MOTOR SPEED 120 u/SEC  
Heigh of slow section 1mm  
Speed of slow section 30u/SEC

- **Phrozen Sonic XL 4k**

LAYER EIGHT – 0.03 mm  
BOTTOM LAYER COUNT – 9n  
EXPOSURE TIME – 3.7s  
BOTTOM EXPOSURE TIME – 45s  
LIGHT OFF DELAY – 8s  
BOTTOM LIGHT OFF DELAY – 11s  
BOTTOM LIFT DISTANCE – 9mm  
LIFTING DISTANCE -5mm  
BOTTOM LIFT SPEED – 50 mm/min  
LIFTING SPEED – 80 mm/min  
RETRACT SPEED -80 mm/min

- **Phrozen Sonic Mini 4k / Phrozen Sonic 4k**

BURN IN LAYER  
NUMBERS OF LAYERS: 8  
LAYER THICKNESS: 30u  
CURE TIME: 50 SEC  
WAIT BEFORE PRINT: 5 SEC  
WAIT AFTER PRINT: 0.5 SEC

LIFT AFTER PRINT: 5 mm  
WAIT AFTER LIFT: 0.1 SEC

NORMAL LAYER  
LAYER THICKNESS: 30u  
CURE TIME: 3.2 SEC  
WAIT BEFORE PRINT: 1.5 SEC  
WAIT AFTER PRINT: 0.1 SEC  
LIFT AFTER PRINT: 5 mm  
WAIT AFTER LIFT: 0.1 SEC

BOTTOM LAYER MOTOR SPEED 50 u/SEC  
MOTOR SPEED 80 u/SEC

On Chitubox (light off delay 5 – Bottom light off delay 11)

- **ANYCUBIC PHOTON (start the Chitubox settings using a standard printer profile)**

LAYER EIGHT – 0.05 mm  
BOTTOM LAYER COUNT – 7n  
EXPOSURE TIME – 14s  
BOTTOM EXPOSURE TIME – 90s  
LIGHT OFF DELAY – 8s  
BOTTOM LIGHT OFF DELAY – 11s  
BOTTOM LIFT DISTANCE – 5mm  
LIFTING DISTANCE -5mm  
BOTTOM LIFT SPEED – 50 mm/min  
LIFTING SPEED – 50 mm/min  
RETRACT SPEED -100 mm/min

Primer needed

- **ANYCUBIC PHOTON S**

LAYER EIGHT – 0.05 mm  
BOTTOM LAYER COUNT – 7n  
EXPOSURE TIME – 7s  
BOTTOM EXPOSURE TIME – 60s  
LIGHT OFF DELAY – 8s  
BOTTOM LIGHT OFF DELAY – 11s  
BOTTOM LIFT DISTANCE – 5mm  
LIFTING DISTANCE -5mm  
BOTTOM LIFT SPEED – 50 mm/min  
LIFTING SPEED – 100 mm/min  
RETRACT SPEED -100 mm/min

Primer needed

- **ANYCUBIC PHOTON MONO X**

LAYER EIGHT – 0.03 mm  
BOTTOM LAYER COUNT – 10n  
EXPOSURE TIME – 2s  
BOTTOM EXPOSURE TIME – 50s  
LIGHT OFF DELAY – 7s  
BOTTOM LIGHT OFF DELAY – 14s  
BOTTOM LIFT DISTANCE – 5mm  
LIFTING DISTANCE -5mm  
BOTTOM LIFT SPEED – 50 mm/min  
LIFTING SPEED – 100 mm/min  
RETRACT SPEED -100 mm/min

Primer suggested

- **ANYCUBIC PHOTON MONO**

LAYER EIGHT – 0.03 mm  
BOTTOM LAYER COUNT – 10n  
EXPOSURE TIME – 2.4s  
BOTTOM EXPOSURE TIME – 50s  
LIGHT OFF DELAY – 7s  
BOTTOM LIGHT OFF DELAY – 14s  
BOTTOM LIFT DISTANCE – 5mm  
LIFTING DISTANCE -5mm  
BOTTOM LIFT SPEED – 50 mm/min  
LIFTING SPEED – 80 mm/min  
RETRACT SPEED - 80 mm/min

Primer suggested

- **ANYCUBIC PHOTON MONO SE**

LAYER EIGHT – 0.03 mm  
BOTTOM LAYER COUNT – 10n  
EXPOSURE TIME – 2.3s  
BOTTOM EXPOSURE TIME – 50s  
LIGHT OFF DELAY – 7s  
BOTTOM LIGHT OFF DELAY – 14s  
BOTTOM LIFT DISTANCE – 5mm  
LIFTING DISTANCE -5mm  
BOTTOM LIFT SPEED – 50 mm/min  
LIFTING SPEED – 110 mm/min  
RETRACT SPEED 110 mm/min

Primer suggested

- **ELEGOO MARS**

LAYER EIGHT – 0.05 mm  
BOTTOM LAYER COUNT – 7n  
EXPOSURE TIME – 12s  
BOTTOM EXPOSURE TIME – 90s  
LIGHT OFF DELAY – 8s  
BOTTOM LIGHT OFF DELAY – 11s  
BOTTOM LIFT DISTANCE – 5mm  
LIFTING DISTANCE -5mm  
BOTTOM LIFT SPEED – 50 mm/min  
LIFTING SPEED – 80 mm/min  
RETRACT SPEED -100 mm/min

- **ELEGOO MARS PRO**

LAYER EIGHT – 0.04 mm  
BOTTOM LAYER COUNT – 7n  
EXPOSURE TIME – 10s  
BOTTOM EXPOSURE TIME – 80s  
LIGHT OFF DELAY – 8s  
BOTTOM LIGHT OFF DELAY – 11s  
BOTTOM LIFT DISTANCE – 5mm  
LIFTING DISTANCE – 5mm  
BOTTOM LIFT SPEED – 50mm/min  
LIFTING SPEED - 80mm/min  
RETRACT SPEED – 100mm/min

Primer needed

- **ELEGO MARS PRO 2**

LAYER EIGHT – 0.05 mm

BOTTOM LAYER COUNT – 7n  
EXPOSURE TIME – 3.5s  
BOTTOM EXPOSURE TIME – 60s  
LIGHT OFF DELAY – 8s  
BOTTOM LIGHT OFF DELAY – 10s  
BOTTOM LIFT DISTANCE – 5mm  
LIFTING DISTANCE – 5mm  
BOTTOM LIFT SPEED – 50mm/min  
LIFTING SPEED - 80mm/min  
RETRACT SPEED – 100mm/min

- **SparkMaker FHD**

BURN IN LAYER  
NUMBERS OF LAYERS: 8  
LAYER THICKNESS: 50u  
CURE TIME: 40 SEC  
WAIT BEFORE PRINT: 4 SEC  
WAIT AFTER PRINT: 0.5 SEC  
LIFT AFTER PRINT: 5 mm  
WAIT AFRER LIFT: 0.1 SEC

NORMAL LAYER  
LAYER THICKNESS: 50u  
CURE TIME: 14 SEC  
WAIT BEFORE PRINT: 1 SEC  
WAIT AFTER PRINT: 0.1 SEC  
LIFT AFTER PRINT: 5 mm  
WAIT AFRER LIFT: 0.1 SEC

MOTOR SPEED 200 u/SEC

- **Zortrax Inkspire**

LAYER THICKNESS 50  
LAYER EXPOSURE: 8 SEC  
BOTTOM LAYER EXPOSURE: 25 SEC  
EXPOSURE OFF TIME: 1.5 SEC  
BOTTOM LAYERS: 5  
ADDITIONAL SUPPORTS EXPOSURE: 1 SEC  
Z LIFT DISTANCE 5  
PLATFORM SPEED 90

MOTOR SPEED 90mm/M

- **Solus 1**

LAYER THICKNESS 30  
LAYER EXPOSURE TIME1  
INITIAL LAYER EXPOSURE 12  
NUMBER OF INITIAL LAYER 4  
EXPOSURE BUFFER TIME 1  
ANTI ALIASING – NONE  
SUPPORT MESH QUALITY – MEDIUM

## POST-PRINTING PROCESS

Remove the prints from the build plate

Wash the prints in ethyl alcohol 90% to 99%

Dry the patterns with compressed air for best results.

Place the prints in a vessel / plastic cup - Fill the vessel with CREA CURING LIQUID in order to fully submerge patterns

Place the vessel with the patterns inside at UV oven for 30 / 40 min according lamp power and patterns size

The UV cure is done when the pattern color will be BLU (ring on the right)

Wash with tapered water and dry with air AND GO TO CAST

