

BLUE CAST X5

PRODUCT FEATURES

- Custom synthesized oligomer by BlueCast, not available to market, patent is going to be applied.
- Excellent casting of small engravings both positive and negative
- Fits all jewelry needs from filigree to medals as well dental ones
- Excellent for stones presetting
- Curing triggering tuned to maximize antialias smoothing
- No monomer inside, no smell
- No aggression on plastic parts (tested on PS, PMMA)
- No postcuring needed for casting
- No shrinkage
- No primer needed
- Less spruing needed, oxygen for burnout is released by resin during burnout (less scrap metal, less work on metal)
- Easy welding with wax, forget about pattern lost into investment
- Can be polished, engraved, drilled (postcure is needed)
- Low viscosity, easier to recover uncured resin from models, easy to wash
- No preheating required
- Very little hygroscopic while liquid, no water absorption while printed
- Atoxic, solvent free, very low phosphine content, very low skin irritant
- Fast and detailed
- Hard but elastic, good compression set
- Cleaner burnout, 0,00% ash residual
- Solvent free
- Suitable for fast burnout
- Full burnout also at lower temperature (750 C°)
- No expansion during burnout, sublimation starts at 130 Celsius



- Burnout will not release aggressive chemicals to investment (80% of burnout is composed by carbon dioxide and water and oxygen that is used to complete combustion)
- Low tension surface (better surface, no need to treat models with spray or dip baths)
- Excellent dimensional stability in time, no need to stock in cold/dark places
- Available for low power LCD, DLP and laser printers
- Shelf life 2 years

QUICK START GUIDE FORMLABS FORMULA

BlueCast Formlabs formula is fully compatible with form1+, form2, DWS, SLA machines, and high power dlp machine like Asiga Pico 2, Moonray, Solus, etc.

Use a new resin tank, or one that has been thoroughly cleaned.

Before use, shake the resin bottle for 60 seconds. If the resin has been sitting in the tank, use the putty knife to ensure it's thoroughly mixed.

Preheat the resin to 40°C (104°F) for best results with printing details.

In PreForm, choose the Gray V3 or Castable v2 setting. Upload the file to the printer (The choice of profile depends also on the functionality and on the year of manufacture of the machine).

On the Form 2, use the Settings menu to choose Open Mode. The wiper and heater will be disabled.

Fill the tank to the maximum fill line, or to the appropriate amount needed.

QUICK START GUIDE LCD/DLP FORMULA

Blue Cast LCD/DLP resin is fully compatible with all LCD printers like Wanaho D7, Micromake 2017 L2, EAST Micromake L2, X-CUBE LCD, Vodainfo Tech. LCD, Xayav Model V, etc (405nm _ min. 30 watt LED power).

Use a resin tank provided with high quality FEP (127 HD, 150)

Preheat the resin to 40°C (104°F) for best results with printing details.

Before use, shake the resin container for 60 seconds. If the resin has been sitting in the tank, use the putty knife to ensure it's thoroughly mixed.



On the LCD printers like Wanaho D7 and Anycubic Photon (30 / 40 watt) start from this settings:

0,05 mm z Resolution

5 bottom layers - exp time 60 seconds

Other layers - from 10 to 14 seconds (depend on geometry)

Z lift - 5mm

Z lift speed -40 mm/min

Antialiasing - Off

0,03 mm z Resolution

5 bottom layers - exp time 60 seconds

Other layers - from 7 to 10 seconds (depend on geometry)

Z lift - 5mm

Z lift speed - 40 mm/min

Antialiasing – Off

POST-PRINTING CLEANUP

Clean the prints by pouring 91%/99% denatured alcohol (IPA) or ethyl alcohol 90%/99% over the prints instead of the usual cleaning process of dipping.

Dry and clean the pieces using a can of compressed air for best results.

UV post-curing is not necessary, unless the pieces require hand-finishing.

Invest the pieces as usual and burn out.

Follow the manufacturer's burnout cycle for your chosen investment.

FAST BURNOUT

The ideal temperature for burnout of BlueCast resin is 850°C or 1560°F.

For fast burnout it is necessary to use a investment able to work over 850°C . We recommend the use of high quality investment.



For a fast burnout schedule, let the flask/investment stand for at least 60-90 minutes, preheat the kiln to 850-860°C (1560-1580°F), then insert the cylinder and keep the temperature constant for 60-90 minutes. Reduce the temperature to your casting temperature and hold for 60 minutes before casting as usual.

During initial burnout, turn the flask on its side, then turn with the button facing up for the rest of the cycle to ensure good air flow.

IMPORTANT TIPS

Check resin tank before EVERY print. BlueCast is not liable for any damage caused to the printer by cracking or leakage of the resin tank.

We recommend printing large rings horizontally.

DO NOT store the resin for more than 24 hours in the resin tank. BlueCast is highly hygroscopic, and will absorb moisture from the air. It is advisable to filter the resin after each print cycle and store it in its original container for optimal preservation and to prevent alteration of its characteristics.

Do not store the resin in clear containers, as it is highly light-sensitive and will damage the resin.

HOW TO FIX PLATFORM ADHESION ISSUE

- check Z offset and if necessary let the platform push more on PDMS (-0.2, -0.3)
- use sand paper (200 400 grain) to abrade alu plate to promote adhesion
- use corners of table instead central position
- use bigger base into 3D model
- use a drop of uv glue well massaged on plate onto printing position (Loca UV glue, Ebay) (pay attention that will be very hard to remove part from plat.
- try our special primer: Primer Cat

If you have again problem....please advise us.