

Investment Casting

General Information

IC142 is formulated to work with DLP and SLA 3D printers using 385-405 nm light. It is specifically tuned to print on the Autodesk Ember printer. IC142 will extend the window lifetime of the Ember and other printers that use PDMS windows. IC142 produces reliable prints with very high resolution and excellent handling characteristics and burns out cleanly. IC142 is offered in black.

Chemical Data

			Method
Viscosity (cps @25 °C)	200		Brookfield SP #31
	Fresh Print	Post-cured	
Tensile Modulus (mPa)	200	550	ASTM D 638-14
Tensile Strength (mPa)	10	20	ASTM D 638-14
Elongation (%)	6	3	ASTM D 638-14

*Parts were post-cured for 10min a side with a broad spectrum UV light at 30mW/cm².

*Properties may vary in orientation and post-treatment.

Recommended Ember Print Parameters for 50 µm

IC 142 is tuned to print at 1.6 s for the model layers

Print parameters might require modification based on the geometry of the printed part.

Post Cure Procedure

For best results parts should be post cured under a broad band, UV light for 10 minutes on a side at 30 mW/cm²

Burnout Procedure

After thoroughly post curing the parts, the recommended cycle is:

- 150 °C for 2 hrs
- 450 °C for 5 hrs
- 750 °C for 3 hrs
- Casting temperature

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