

Post-curing with the Form Cure

Post-curing helps 3D printed parts achieve optimal material properties. Follow these recommendations to configure the Form Cure for Formlabs resins.

	Resin Type	Cure	Time (min)	Temperature (°C)
Standard Resins	Clear Resin	Recommended ¹	15	60
		Full cure	30	60
	Black Resin White Resin Grey Resin	Recommended ¹	30	60
		Full cure	60	60
	Color Resin	Recommended ¹	30	60
		Full cure	60	60
	Draft Resin	Better elongation	5	No heat
		Better UTS	5	60
Tough and Durable Resins	Tough 2000 Resin	Recommended ¹	60	70
	Tough Resin V5	Recommended ¹	60	60
		Full Cure	120	60
	Tough 1500 Resin	Full cure	60	70
	Durable Resin	Full cure ²	60	60
Engineering Resins	Flexible Resin	Recommended ¹	15	60
		Full cure	60	60
	High Temp Resin v1	Recommended ¹	30	60
		Full cure	60	60
	High Temp Resin v2	Recommended ³	120	80
	Rigid Resin	Full Cure ⁴	15	80
	Grey Pro Resin	Full Cure ⁴	15	80
	Elastic Resin	Full Cure	20	60
Ceramic Resin	N/A ⁵	N/A	N/A	

¹ The recommended post-cure settings achieve close-to-maximum mechanical performance and minimize the post-cure time. The full post-cure settings achieve the maximum mechanical properties and require significantly more time. Use full post-cure settings when using materials for functional applications.

2 For parts printed with Durable Resin, the tensile modulus continues to increase steadily throughout the first hour of post-curing. There is only one proposed post-curing setting.

3 There are several post-curing options for High Temp Resin v2. To achieve the highest HDT, also post-cure the parts in a non-food oven. Refer also to the technical data sheet to understand how different options affect mechanical properties, and choose the post-cure option that is best suited to the intended application.

4 There is no significant gain in properties after 15 minutes. There is only one recommended post-curing time.

5 Does not require post-curing. After washing, allow parts to fully dry before firing/casting.

These settings will be updated periodically. Always refer to formlabs.com/cure-support for the most updated information about post-curing printed parts with the Form Cure.

	Resin Type	Cure	Time (min)	Temperature (°C)
Dental Resins	Dental SG Resin	Full cure ⁶	30	60
	Dental LT Clear Resin	Full cure ⁶	20	80
	Model Resin	Recommended ¹	30	60
		Full cure	60	60
	Denture Teeth Resin Denture Base Resin	Full cure ⁷	30 + 30	80
	Surgical Guide Resin	Full cure ⁶	30	Form 2: 60 Form 3B: 70
	Castable Wax Resin	N/A ⁵	N/A	N/A
Jewelry Resins	Castable Resin	Full cure ⁸	240	60
	Castable Wax Resin	N/A ⁵	N/A	N/A

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5 Does not require post-curing. After washing, allow parts to fully dry before firing/casting.

6 This cure setting ensures that parts achieve both biocompatibility and optimum mechanical properties.

7 Fill a glass container with glycerin. Preheat the glycerin to 80 °C in the Form Cure. Use heat resistant silicone tongs to fully submerge the assembled denture in the glycerin, leaving the container inside the Form Cure. Cure for 30 minutes. After the first 30 minute post-cure, flip the denture to the opposite side. Post-cure again for 30 minutes. **Warning:** The glycerin and denture at 80 °C are hot. Use heat resistant silicone tongs to insert and remove the denture from the curing chamber.

8 Cure for 4 hours to increase the part strength. After curing, follow the Recommended Burnout Guide. Increasing the cure time may improve casting results, particularly for thicker parts, though casting success depends more on the part geometry and casting process. Testing results show no disadvantages for increasing cure time.

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