FORMLABS CUSTOMER SUPPORT GUIDES:

## **Post-Curing with Form Cure**

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

	Resin Type	Cure	Time (min)	Temperature (°C)
Standard Resins	Clear Resin	Recommended <sup>1</sup>	15	60
		Full Cure	30	60
	Black Resin White Resin Grey Resin	Recommended <sup>1</sup>	30	60
		Full Cure	60	60
	Color Resin	Recommended <sup>1</sup>	30	60
		Full Cure	60	60
Engineering Resins	Tough Resin	Recommended <sup>1</sup>	60	60
		Full Cure	120	60
	Durable Resin	Full Cure <sup>2</sup>	60	60
	Flexible Resin	Recommended <sup>1</sup>	15	60
		Full Cure	60	60
	High Temp Resin	Recommended <sup>1</sup>	30	60
		Full Cure	60	60
	Rigid Resin	Full Cure <sup>3</sup>	15	80
	Grey Pro Resin	Full Cure <sup>3</sup>	15	80
	Ceramic Resin	N/A <sup>6</sup>	N/A	N/A
Dental Resins	Dental SG Resin	Full Cure <sup>4</sup>	30	60
	Dental LT Clear Resin	Full Cure <sup>4</sup>	20	80
	Dental Model Resin	Recommended <sup>1</sup>	30	60
		Full Cure	60	60
Jewelry Resins	Castable Resin	Full Cure <sup>5</sup>	240	60
	Castable Wax Resin	N/A <sup>6</sup>	N/A	N/A

<sup>1</sup> 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.

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



<sup>2</sup> 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.

 $<sup>{\</sup>it 3}\ {\it There}\ is\ no\ significant\ gain\ in\ properties\ after\ 15\ minutes.\ There\ is\ only\ one\ recommended\ post-curing\ time.$ 

<sup>4</sup> This cure setting ensures that parts achieve both biocompatibility and optimum mechanical properties.

<sup>5</sup> 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.

<sup>6</sup> Does not require post-curing. After washing, allow parts to fully dry before firing/casting.