**MATERIALS LIBRARY** 

# **Castable Wax**

## Sharp Detail and Clean Casting Every Time

\$299/L

A 20% wax-filled photopolymer for reliable casting with zero ash content and clean burnout, Castable Wax accurately captures intricate features and offers the smooth surfaces stereolithography 3D printing is known for.

### **FLCWPU01**

 Prepared
 07.05.2018

 Rev
 01
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To the best of our knowledge the information contained herein is accurate. However, Formlabs, Inc. makes no warranty, expressed or implied, regarding the accuracy of these results to be obtained from the use thereof.

# Material Properties Data for Castable Wax FLCWPU - Green<sup>1</sup>

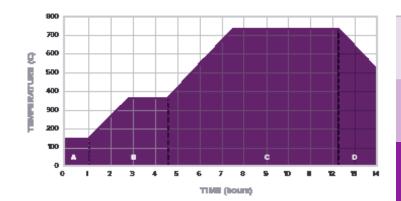
	METRIC <sup>2</sup>	IMPERIAL <sup>2</sup>	METHOD
Tensile Properties			
Ultimate Tensile Strength	11.6 MPa	1680 psi	ASTM D 638-10
Young's Modulus	220 MPa	32 ksi	ASTM D 638-10
Elongation at Break	13 %	13 %	ASTM D 638-10
Burnout Properties			
Temp @ 5% Mass Loss	249 °C	480 °F	ASTM E 1131
Ash content (TGA)	0.0-0.1%	0.0-0.1%	ASTM E 1131

 $^1$  Data was obtained from parts printed using Form 2, Castable 50  $\mu m$  Fine Detail settings, and post-cured with 2.5 mW/cm² of fluorescent bulb UV light, centered at 405 mm.

<sup>2</sup>Material properties can vary with part geometry, print orientation, print settings, and temperature.

# Standard Burnout Schedule

The Standard Burnout Schedule is designed to provide the maximum possible investment strength and complete burnout of the finest details using R&R Plasticast or similar investment materials. Use this schedule as a starting point and make adjustments as needed.



	PHASE	TIME	SCHEDULE °C	SCHEDULE °F
	Insert Flasks	0 min	150 °C	302 °F
	Hold	60 min	150 °C	302 °F
В	Ramp	100 min	2.2 °C / min	4 °F / min
	Hold	120 min	371 °C	700 °F
	Ramp	180 min	2.0 °C / min	3.6 °F / min
С	Hold	280 min	732 °C	1350 °F
	Ramp	100 min	- 2.2 °C / min	- 4 °F / min
D	Hold (casting window)	Up to 2 hours	512 °C or casting temp	954 °F or casting temp