## POLITECNICO DI TORINO Repository ISTITUZIONALE

Correction: Riccio et al. Effects of Curing on Photosensitive Resins in SLA Additive Manufacturing. Appl. Mech. 2021, 2, 942–955

Original

Correction: Riccio et al. Effects of Curing on Photosensitive Resins in SLA Additive Manufacturing. Appl. Mech. 2021, 2, 942–955 / Riccio, Carmela; Civera, Marco; Grimaldo Ruiz, Oliver; Pedullà, Perla; Rodriguez Reinoso, Mariana; Tommasi, Giulia; Vollaro, Martina; Burgio, Vito; Surace, Cecilia. - In: APPLIED MECHANICS. - ISSN 2673-3161. - 3:1(2022), pp. 123-124. [10.3390/applmech3010009]

Availability: This version is available at: 11583/2971964 since: 2022-10-01T17:43:57Z

Publisher: MDPI

Published DOI:10.3390/applmech3010009

Terms of use:

This article is made available under terms and conditions as specified in the corresponding bibliographic description in the repository

Publisher copyright

(Article begins on next page)





## Correction Correction: Riccio et al. Effects of Curing on Photosensitive Resins in SLA Additive Manufacturing. *Appl. Mech.* 2021, 2, 942–955

Carmela Riccio <sup>(1)</sup>, Marco Civera \*<sup>(1)</sup>, Oliver Grimaldo Ruiz <sup>(1)</sup>, Perla Pedullà <sup>(1)</sup>, Mariana Rodriguez Reinoso <sup>(1)</sup>, Giulia Tommasi, Martina Vollaro, Vito Burgio <sup>(1)</sup> and Cecilia Surace <sup>(1)</sup>

Laboratory of Bio-Inspired Nanomechanics, Department of Structural, Geotechnical and Building Engineering, Politecnico di Torino, Corso Duca degli Abruzzi 24, 10129 Turin, Italy; s251391@studenti.polito.it (C.R.); oliver.grimaldo@polito.it (O.G.R.); s194969@studenti.polito.it (P.P.); mariana.rodriguez@polito.it (M.R.R.); s193785@studenti.polito.it (G.T.); s250836@studenti.polito.it (M.V.); s255602@studenti.polito.it (V.B.); cecilia.surace@polito.it (C.S.)

\* Correspondence: marco.civera@polito.it

The Authors of the paper "Effects of Curing on Photosensitive Resins in SLA Additive Manufacturing" [1] want to declare the following corrections to their original article.

A first correction has been made in Section 2.3—*Test Specimens (Pre- and Post-Curing)*: In Table 1, the settings for the Grey Pro resin were reported incorrectly. The correct values should have been 15 min at 80  $^{\circ}$ C and not 30 min at 60  $^{\circ}$ C.

Table 1. FormCure settings [4].

Resin	Time (min)	Temperature (°C)		
Tough	60	60		
Standard Clear	15	60		
Grey Pro	15	80		
BioMed Amber	30	60		
Dental LT Clear	60	60		
Tough 1500	60	70		
Tough 2000	60	70		
Custom Tray	30	60		
High Temp	120	80		
Durable	60	60		
Rigid	15	80		

Table 1 is enclosed here in its corrected version (the references, included in the original Table 1 and omitted here, can be found in [1]).

A second correction has been made in Section 3.1—Load at Break and Young's Modulus:

In Table 2, four columns of standard deviation values  $\sigma$  were increased by one decimal place. The last two columns of standard deviation values  $\sigma$  were reported in MPa and not in GPa. The values should have been all divided by 1000.

Table 2 is enclosed here in its corrected version (the references, included in the original Table 2 and omitted here, can be found in [1]).

The Authors apologize for any inconvenience caused by these mistakes. We state that these textual errors did not affect the experimental testing and are inconsequential on the results reported in the remaining parts of the article.

The original article has been updated.



Citation: Riccio, C.; Civera, M.; Grimaldo Ruiz, O.; Pedullà, P.; Rodriguez Reinoso, M.; Tommasi, G.; Vollaro, M.; Burgio, V.; Surace, C. Correction: Riccio et al. Effects of Curing on Photosensitive Resins in SLA Additive Manufacturing. *Appl. Mech.* 2021, *2*, 942–955. *Appl. Mech.* 2022, *3*, 123–124. https://doi.org/ 10.3390/applmech3010009

Received: 17 January 2022 Accepted: 24 January 2022 Published: 28 January 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/).

Load at Break (MPa)						Young's Modulus (GPa)						
	Green			Post-Cure		Green			Post-Cure			
	Data Sheet	Exp. Results		Data Sheet	Exp. Results		Data Sheet	Exp. Results		Data Sheet	Exp. Results	
Resin		$\overline{\mathbf{X}}$	σ		$\overline{\mathbf{X}}$	σ		$\overline{\mathbf{X}}$	σ		$\overline{\mathbf{X}}$	σ
Tough Standard Clear Grey Pro	34.7 [22] 38.0 [23] 35.0 [24]	23.5 20.1 32.2	1.83 2.17 5.68	55.7 [22] 65.0 [23] 61.0 [24]	30.4 42.2 60.4	22.17 1.91 1.90	1.7 [22] 1.6 [23] 1.4 [24]	0.3 0.7 0.8	0.03 0.09 0.02	2.7 [22] 2.8 [23] 2.6 [24]	0.6 1.0 1.0	0.08 0.03 0.03
BioMed Amber	N.A. [25]	41.2	1.04	73.0 [25]	76.8	4.09	N.A. [25]	0.8	0.02	2.9 [25]	1.2	0.02
Dental LT Clear	N.A. [26]	34.6	1.89	≥50.0 [26]	61.8	10.69	N.A. [26]	0.6	0.04	≥1.3 [26]	- (*)	- (*)
Tough 1500 Tough 2000 Custom Tray High Temp Durable BioMed Clear Rigid	26.0 [27] 29.0 [28] N.A. [29] 20.9 [30] 18.6 [31] N.A. [32] 40.0 [33]	30.4 26.5 26.9 26.2 17.0 30.9 39.8	2.63 0.41 1.98 0.30 0.79 1.87 3.07	$\begin{array}{c} 33.0 \ [27] \\ 46.0 \ [28] \\ \geq 70.0 \ [29] \\ 58.3 \ [30] \\ 31.8 \ [31] \\ 52.0 \ [32] \\ 75.0 \ [33] \end{array}$	$\begin{array}{c} 41.2 \\ 42.0 \\ 84.7 \\ 48.2 \\ 34.5 \\ 60.1 \\ 74.5 \end{array}$	$\begin{array}{c} 0.96 \\ 1.43 \\ 2.43 \\ 7.90 \\ 1.34 \\ 0.55 \\ 7.69 \end{array}$	0.9 [27] 1.2 [28] N.A. [29] 0.8 [30] 0.5 [31] N.A. [32] 2.2 [33]	$\begin{array}{c} 0.4 \\ 0.4 \\ 0.3 \\ 0.2 \\ 0.4 \\ 0.7 \end{array}$	$\begin{array}{c} 0.02 \\ 0.04 \\ 0.01 \\ 0.01 \\ 0.03 \\ 0.02 \\ 0.02 \end{array}$	$\begin{array}{c} 1.5 \ [27] \\ 2.2 \ [28] \\ \geq 2.5 \ [29] \\ 2.8 \ [30] \\ 1.3 \ [31] \\ 2.1 \ [32] \\ 4.1 \ [33] \end{array}$	$\begin{array}{c} 0.6 \\ 0.8 \\ 1.1 \\ 0.8 \\ 0.4 \\ 0.9 \\ 1.3 \end{array}$	0.01 0.02 0.01 0.00 0.01 0.02 0.18

**Table 2.** Load at break and Young's modulus values as obtained for each resin. Comparison between green and post-cure conditions. Mean  $\overline{X}$  and standard deviation values  $\sigma$ .

(\*) After curing, the Dental LT Clear Resin became fragile to such an extent that it broke during clamping, making the experimental test unfeasible.

## Reference

1. Riccio, C.; Civera, M.; Ruiz, O.G.; Pedullà, P.; Reinoso, M.R.; Tommasi, G.; Vollaro, M.; Burgio, V.; Surace, C. Effects of Curing on Photosensitive Resins in SLA Additive Manufacturing. *Appl. Mech.* **2021**, *2*, 942–955. [CrossRef]