materials

MDPI

Supplementary Materials

Synthesis of Bio-Based Polyester Resins for Vat Photopolymerization 3D Printing

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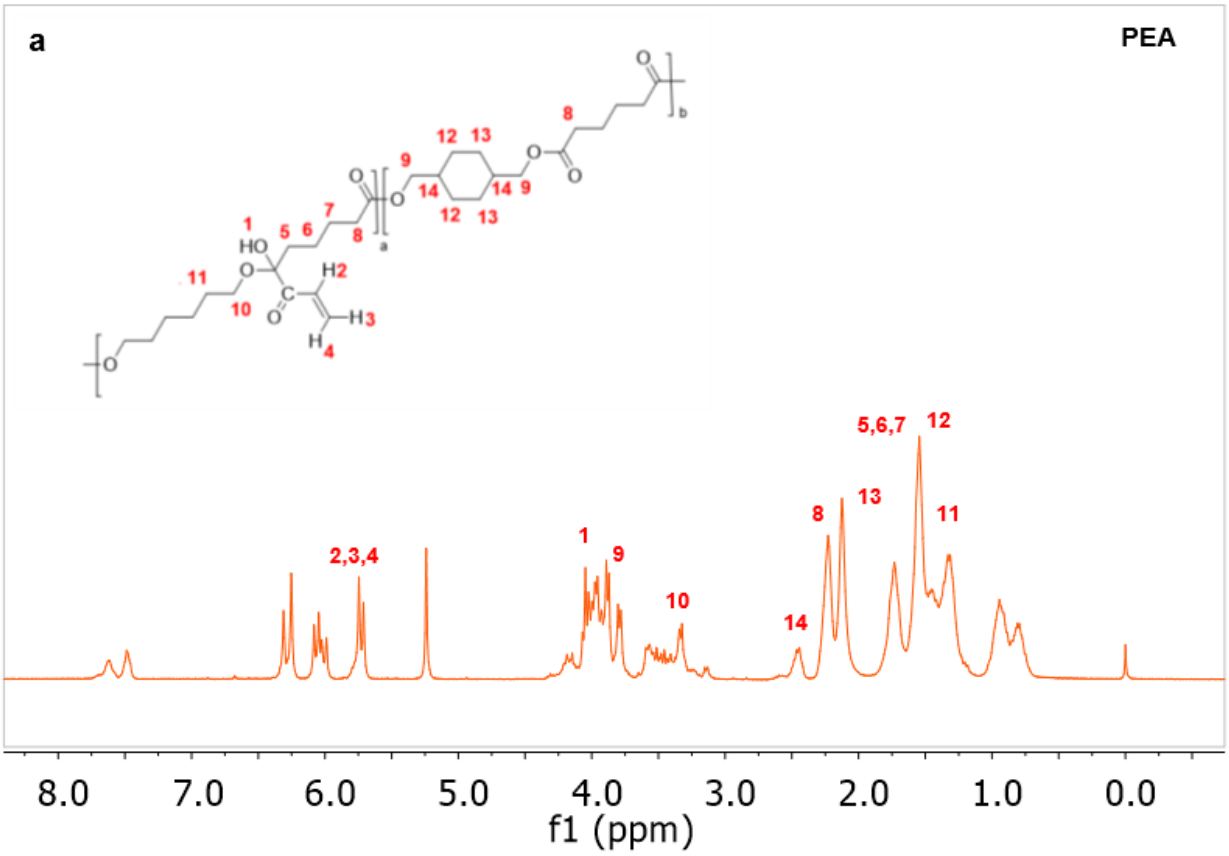
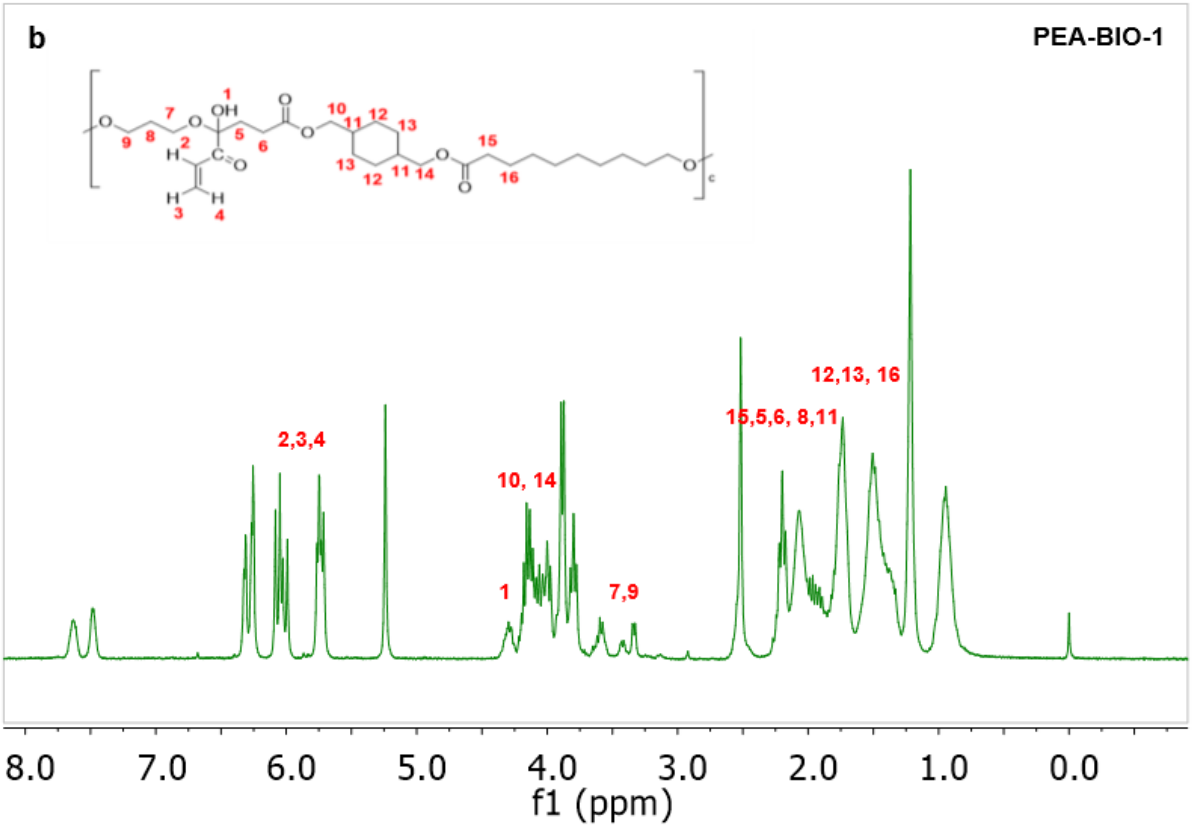
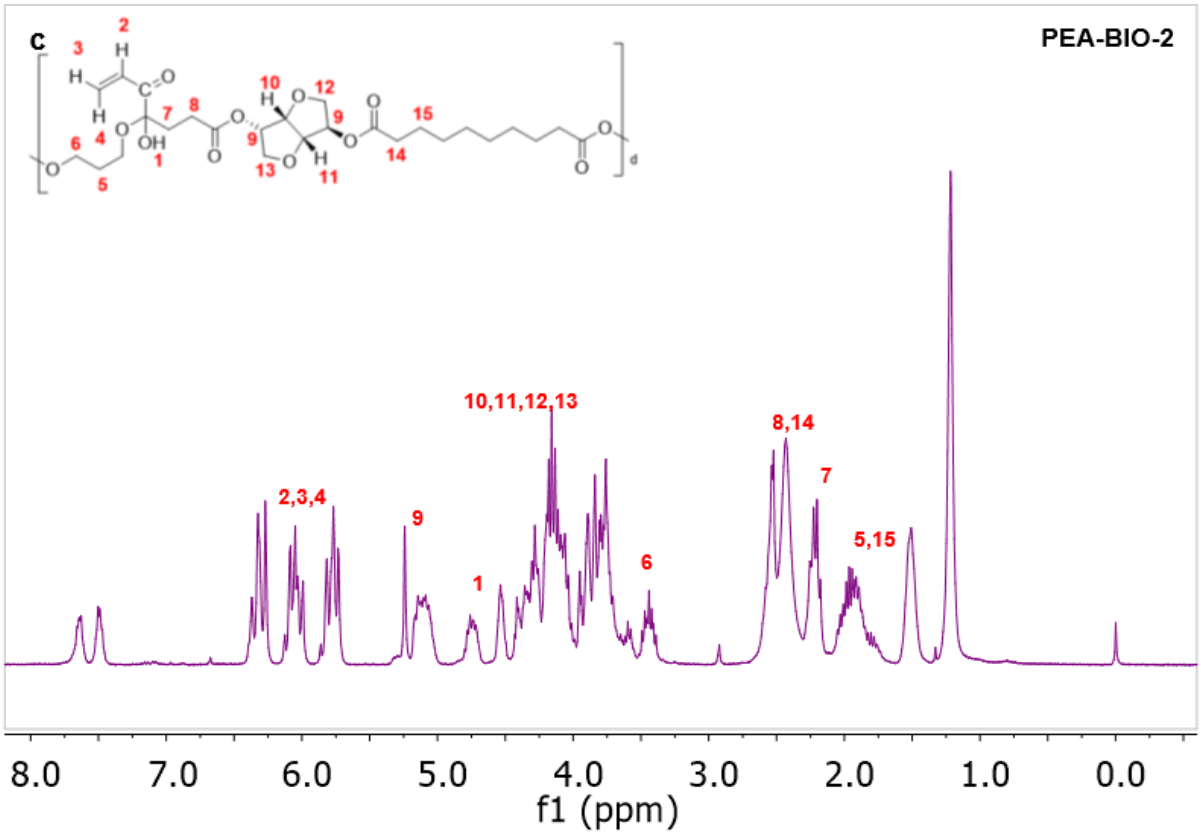



b
PEA-BIO-1
2,3,4
10, 14
1
7,9
15,5,6, 8,11
12,13, 16
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
f1 (ppm)


c
PEA-BIO-2
2,3,4
9
1
10,11,12,13
6
8,14
7
5,15
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
f1 (ppm)

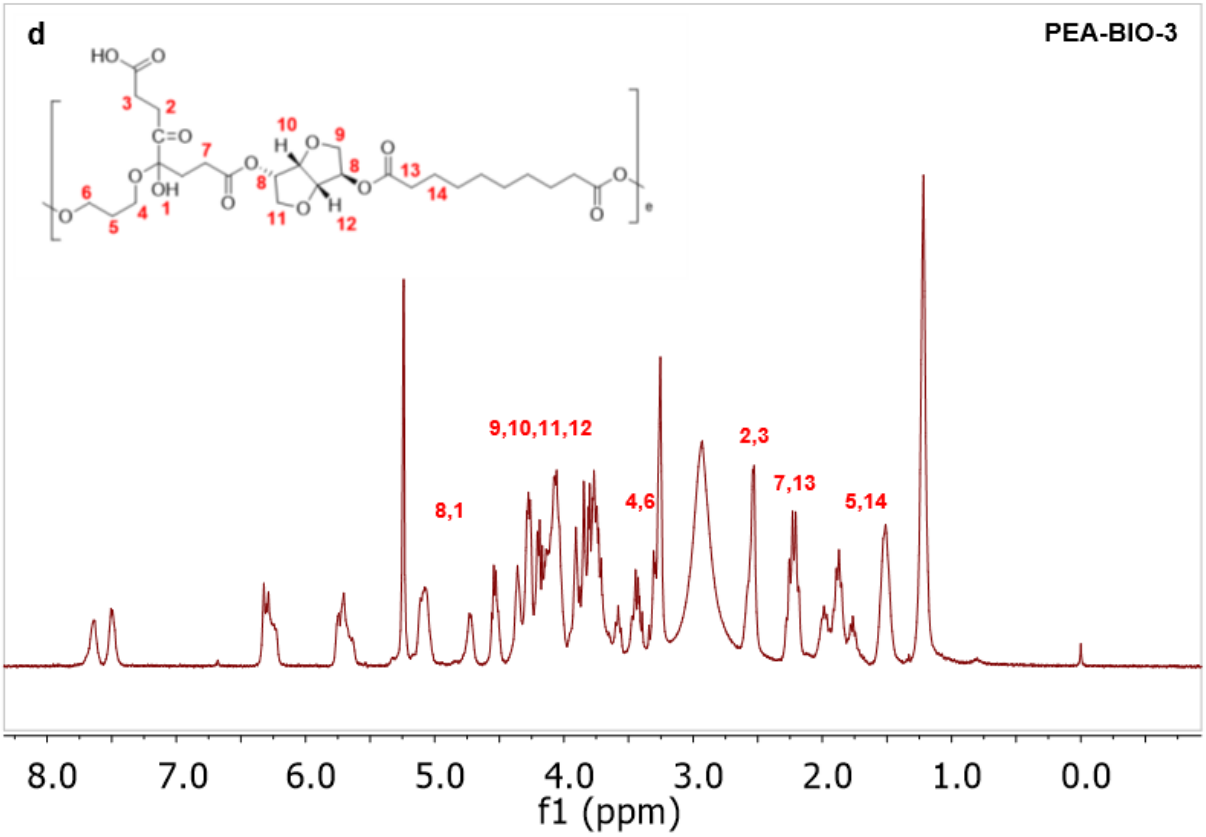


Figure S1. ^{1}H-NMR spectra of acrylic modified polyester resins: (a) PEA, (b) PEA-BIO-1, (c) PEA-BIO-2, (d) PEA-BIO-3.

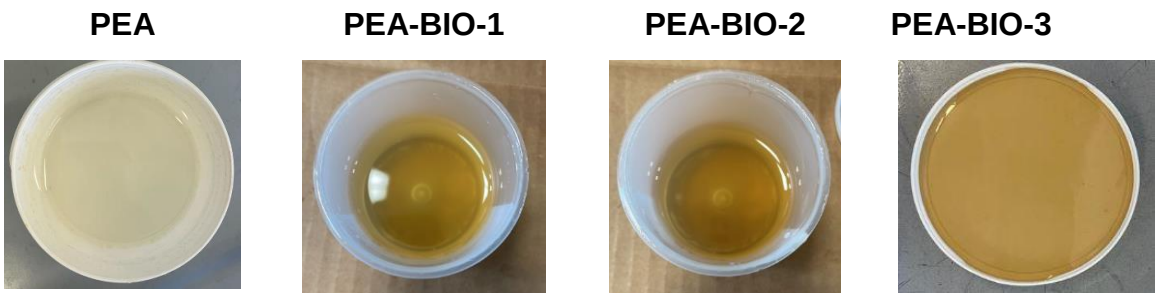


Figure S2. Appearance of synthetic and bio-based polyester acrylates.

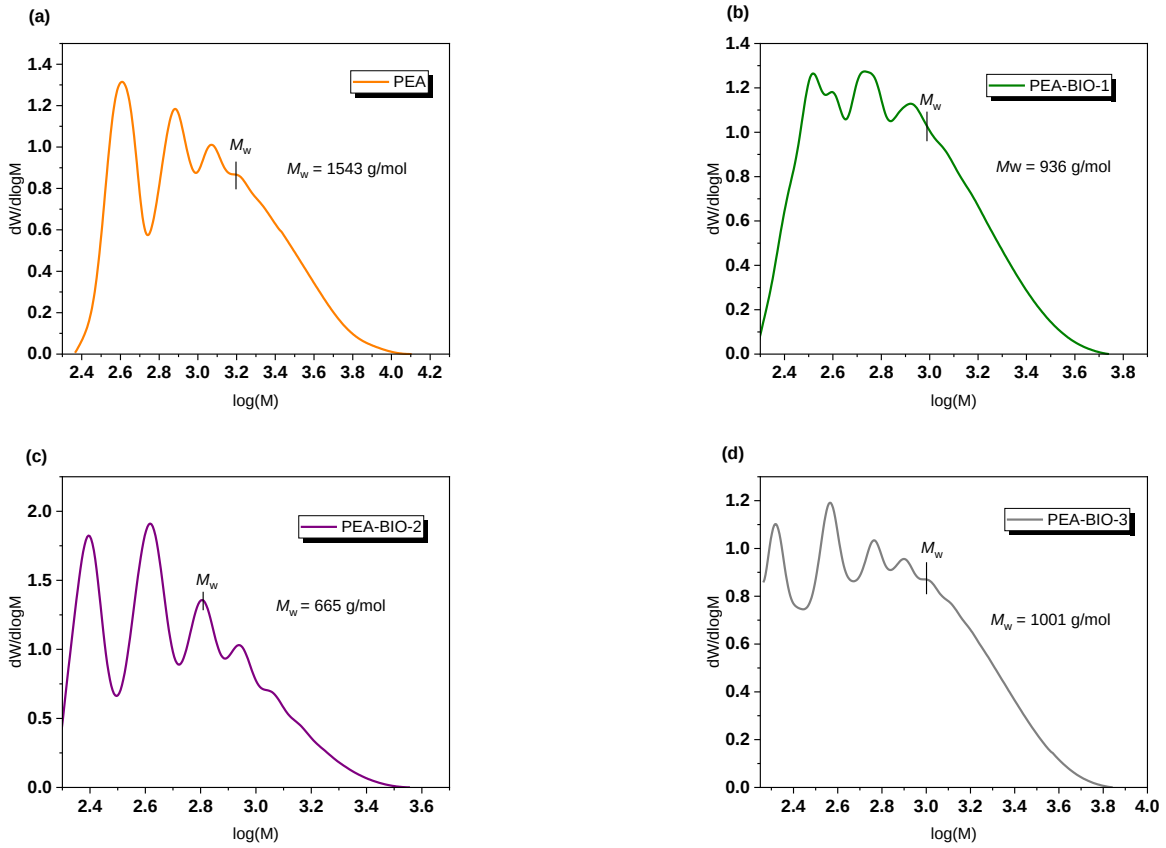
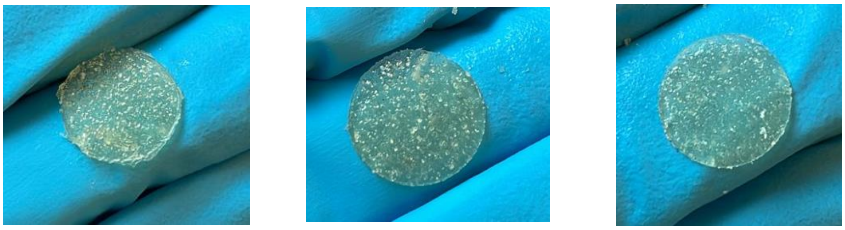


Figure S3. GPC data for (a) PEA, (b) PEA-BIO-1, (c) PEA-BIO-2 and (d) PEA-BIO-3.



Curing time:	100 s	75 s	50 s
Sample thickness:	0.94 mm	0.62 mm	0.49 mm

Figure S4. DLP 3D-printed specimens from PEA-BIO-3 resin diluted with AEUG (mass ratio was 1:1).

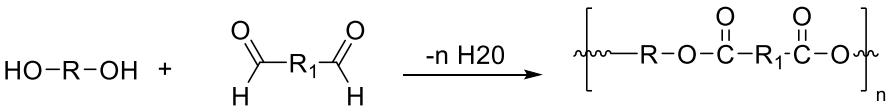


Figure S5. Schematic representation of polyester synthesis.