

Electronic Supplementary Information

Tailor made compostable Polyurethanes[†]

Pin Hu,^a Anil Kumar,^a Reza Gharibi and Seema Agarwal*^{a,b}

^a*Macromolecular Chemistry II, University of Bayreuth, Universitätsstraße 30, 95440 Bayreuth, Germany. E-mail: agarwal@uni-bayreuth.de*

^b*Macromolecular Chemistry II, Bavarian Polymer Institute, University of Bayreuth, Universitätsstraße 30, 95440 Bayreuth, Germany.*

**Corresponding author*

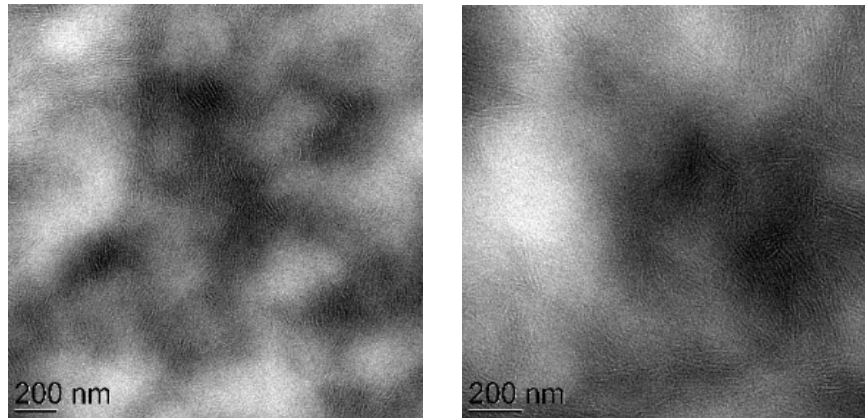


Fig. S1 TEM images of PCL-PU (left) and PCL-PU⁺_{24h} (right) samples. The samples were stained with RuO₄ to get a contrast between hard and soft segments. The aromatic and amino groups in the amorphous section of hard segments were stained.

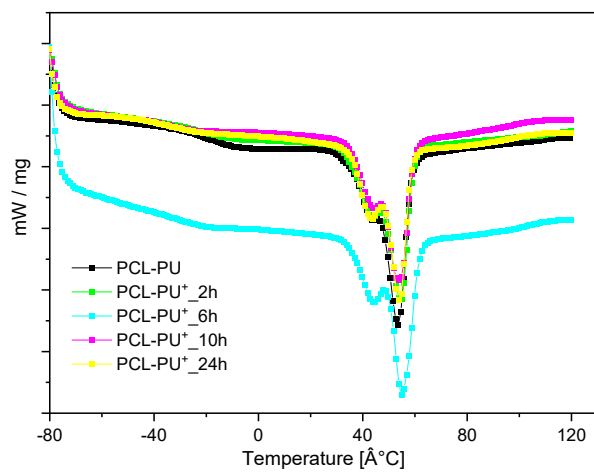


Fig. S2 First heating curves of PCL-PU and PCL-PU⁺ samples in DSC measurements.

Table S1 Tensile test of PCL-PU and PCL-PU⁺.

Sample	E_{modulus} (MPa)	Elongation at break (ϵ_{br}) (%)	F_{max} at break (MPa)
PCL-PU	95	1630	13
PCL-PU ⁺ _2h	134	1600	16
PCL-PU ⁺ _6h	196	1600	24
PCL-PU ⁺ _10h	224	1570	31
PCL-PU ⁺ _24h	259	1440	30