

Supporting information

Facile synthesis of polyamide 6 (PA6)-based thermoplastic elastomers with well-defined microphase separation structure by melt polymerization

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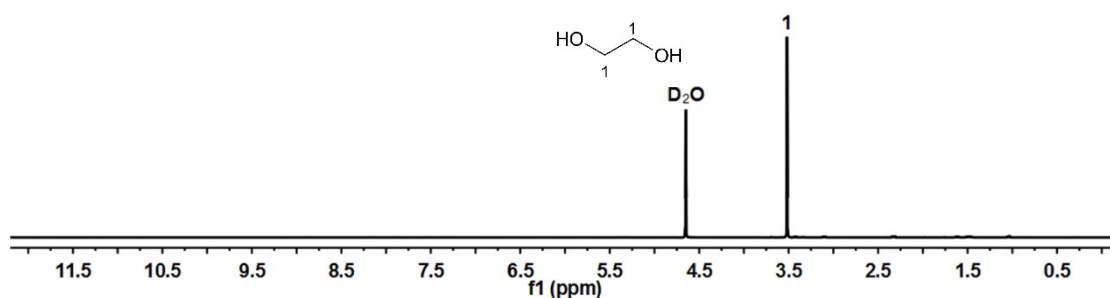


Fig. S1 ¹H NMR spectra of By-products stemmed from Step 2.

Table S1. Tensile Properties of TPAEs

Samples	Young's modulus ^a (MPa)	Stress at break ^a (MPa)	Strain at break ^a (%)	Tensile toughness ^b ($\times 10^9 \text{ J} \cdot \text{m}^{-3}$)
TPAE-0	3.3 ± 0.3	63 ± 1.2	93 ± 15	5.1 ± 0.3
TPAE-10	2.8 ± 0.4	55 ± 2.0	101 ± 24	5.2 ± 0.3
TPAE-30	2.4 ± 0.2	40 ± 1.8	369 ± 51	13.2 ± 0.5
TPAE-50	1.5 ± 0.3	33 ± 2.5	461 ± 55	13.9 ± 0.6
TPAE-70	1.0 ± 0.2	29 ± 1.1	514 ± 40	12.6 ± 0.5

^a Directly determined from tensile test. ^b Calculated by using area underneath the stress-strain curve.¹

1. O.Balkan and H.Demirer (2010). "Polym. Compos". 31: 1285. ISSN 1548-0569.