

ELECTRONIC SUPPLEMENTARY INFORMATION

for

Quantitative Synthesis of Bis(cyclic carbonate)s by Iron Catalyst for Non-isocyanate Polyurethane Synthesis

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Contents

1. Detailed experimental results
2. DSC thermogram of various NIPUs.
3. TGA thermogram of various NIPUs.

1. Detailed experimental results

Table S1 Coupling reaction of 1a/CO₂ catalyzed by Fe(BPMCDAC).^a

Entry	Cocatalyst	Conversion (%) ^b	TON ^c	TOF (h ⁻¹) ^d
1	TBAB	91	910	455
2	PPNCl	50	500	250
3	DMAP	42	420	210

^a Reaction conditions: 0.1 mol-% Fe(BPMCDAC), 0.1 mol-% cocatalyst (relative to epoxy group), 100 °C, 3 MPa CO₂ pressure, 2 h. ^b Conversion was determined by ¹H NMR spectroscopy. ^c Moles of epoxy group per mole of catalyst. ^d Moles of epoxy group produced per mole of catalyst per hour.

2. DSC thermograms of various NIPUs.

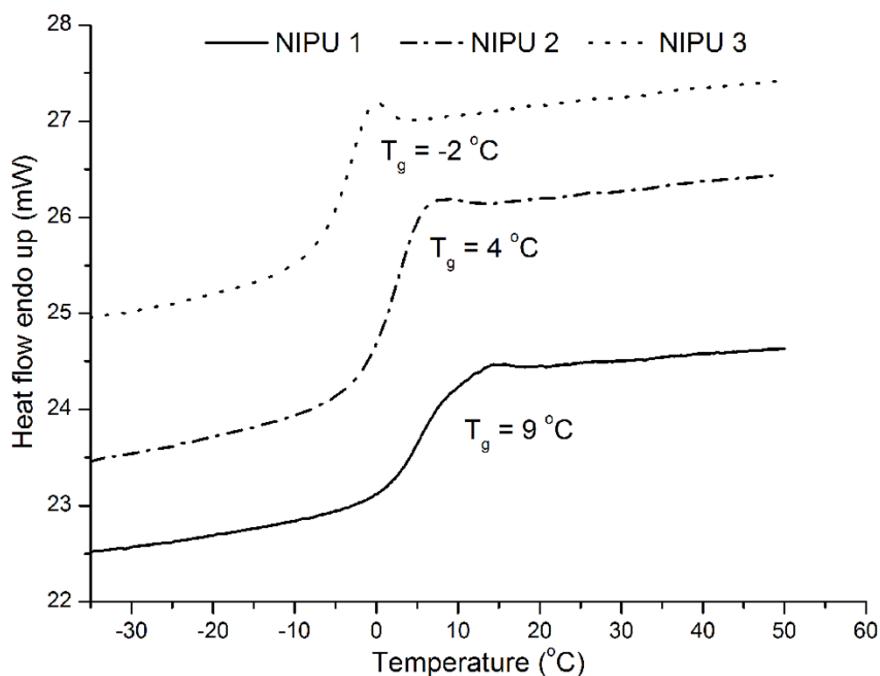


Fig.S1 DSC thermograms of various NIPUs.

3. TGA thermogram of various NIPUs.

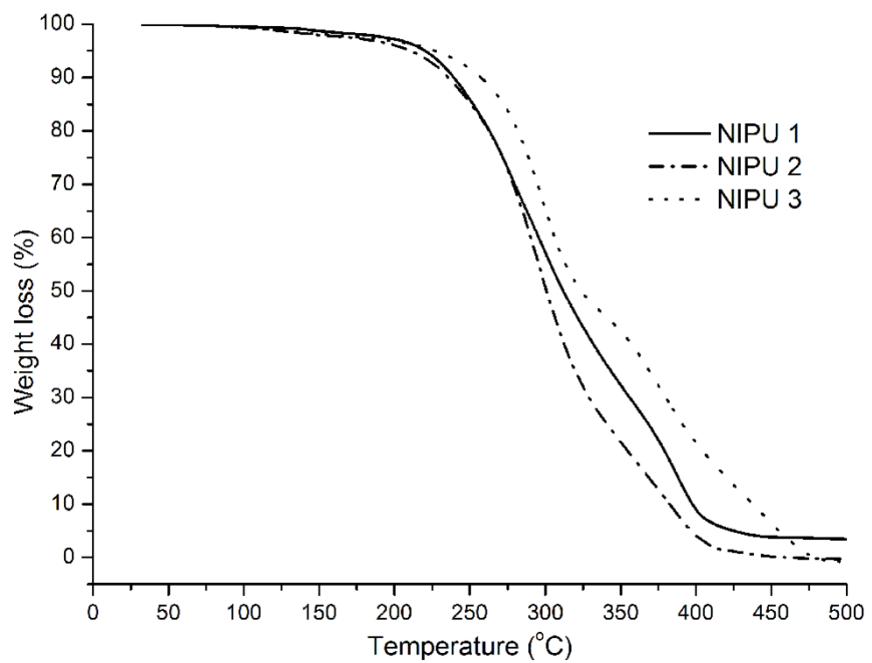


Fig.S2 TGA thermogram of various NIPUs.