

## SUPPORTING INFORMATION

### Retarding crystal transitions of polybutene-1 in blends

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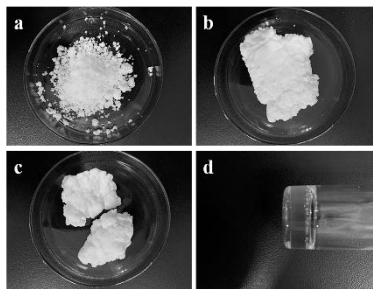


Figure S1. Photos of samples. (a) neat-PB; (b) PB-5.4 mol%; (c) PB-14.6 mol%; (d) PB-36.6 mol%.

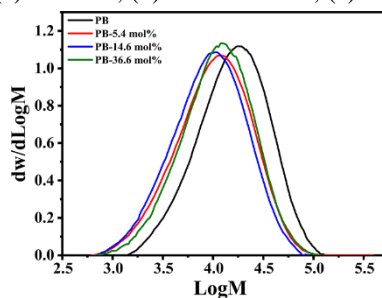


Figure S2. GPC curves of PB-TMAS copolymers.

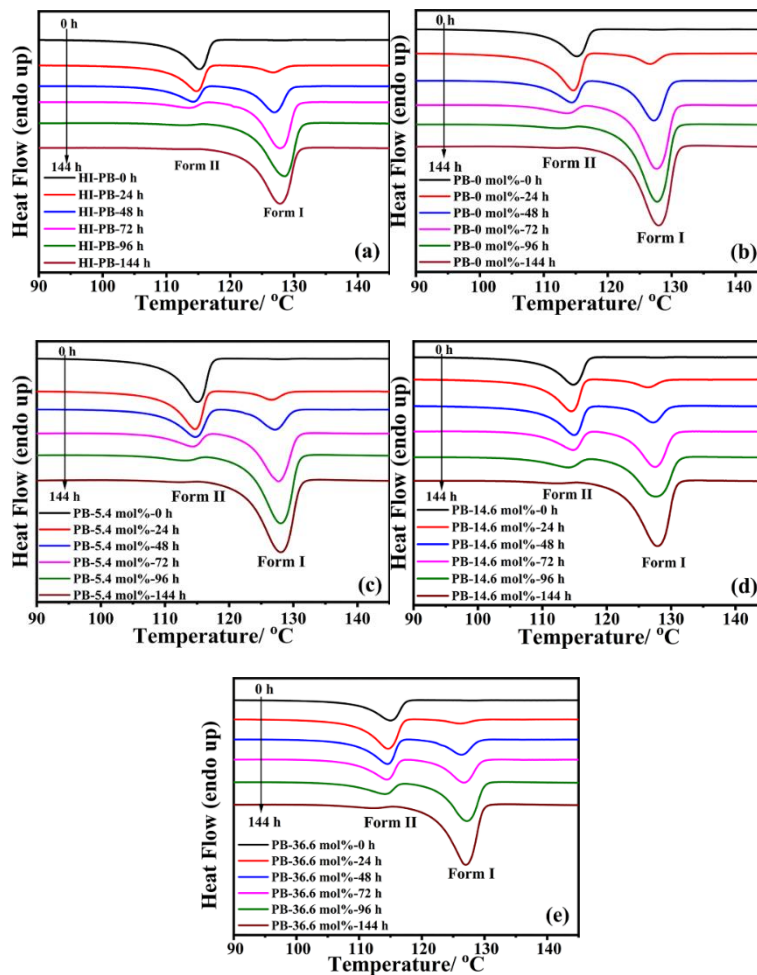
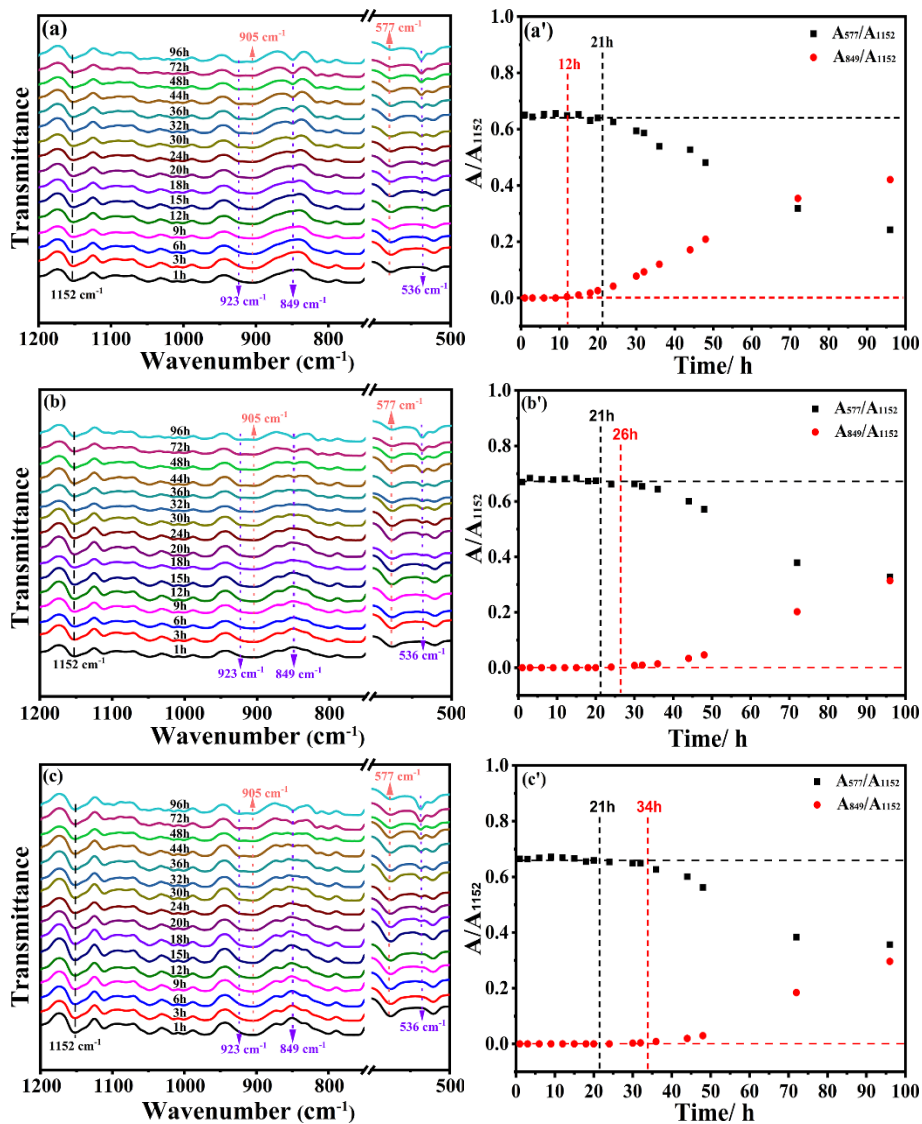
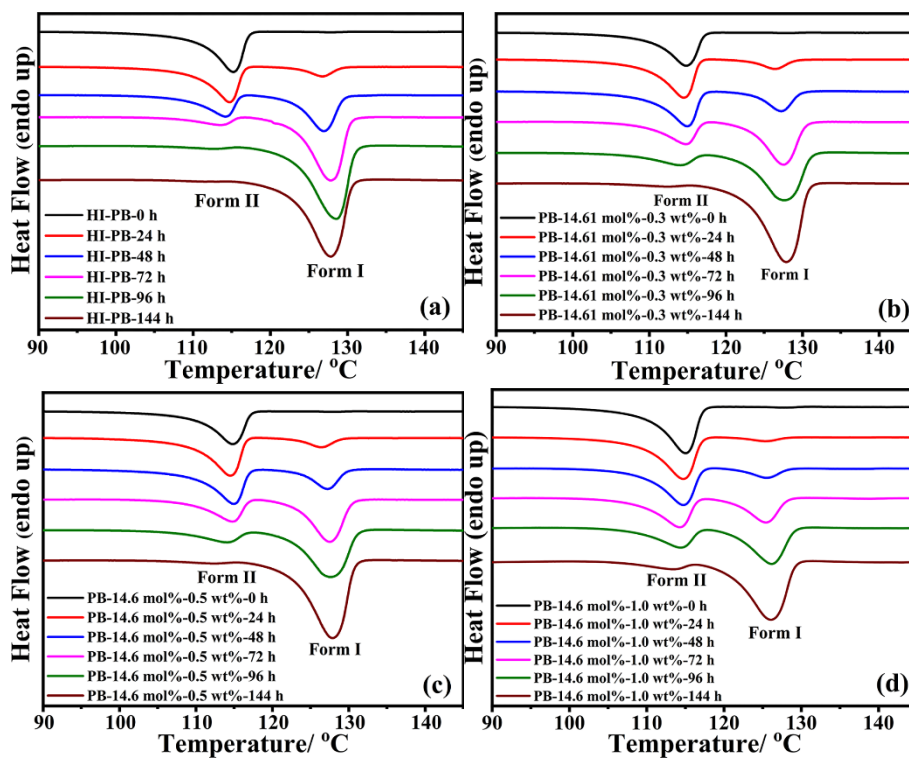


Figure S3. DSC curves of phase transition of HI-PB blending with PB-TMAS with different TMAS contents: (a) HI-PB; (b) PB-0 mol%; (c) PB-5.4 mol%; (d) PB-14.6 mol%; (e) PB-36.6 mol%.



**Figure S4.** FT-IR and area ratios  $A/A_{1152}$  curves of phase transition of HI-PB blending with PB-TMAS with different TMAS contents: (a) HI-PB; (b) PB-14.6 mol%; (c) PB-36.6 mol%; (a') HI-PB; (b') PB-14.6 mol%; (c') PB-36.6 mol%.



**Figure S5.** DSC curves of phase transition of HI-PB blending with different weight of PB-TMA contents: (a) HI-PB; (b) PB-14.6 mol%-0.3 wt%; (c) PB-14.6 mol%-0.5 wt%; (d) PB-14.6 mol%-1.0 wt%.