

Electronic Supplementary Information (ESI)

Efficient Control of Ethylene–Norbornene Copolymerization Behavior of Fluorenylamido–Ligated Titanium Complex: Substituent Effects of Amido Ligand and Copolymer Properties

Huajin Wang,^{a,b} Hailong Cheng,^a Ryo Tanaka,^c Takeshi Shiono,^c * and Zhengguo Cai^a *

^aState Key Laboratory for Modification of Chemical Fibers and Polymer Materials, College of Materials Science and Engineering, Donghua University, Shanghai 201620, P. R. China

^bCollege of Materials and Textile Engineering, Jiaying University, Jiaying 314001, P. R. China

^cGraduate School of Engineering, Hiroshima University, Higashi-Hiroshima, 739-8527, Japan

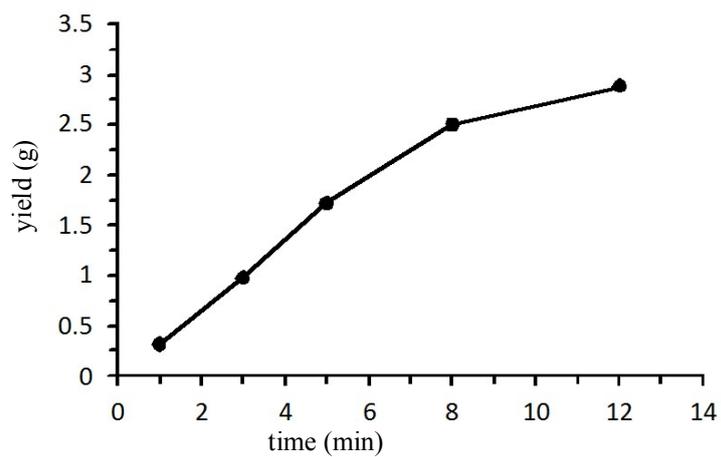


Figure S1. Plot of polymer yield versus time for complex **1b** at 20°C.

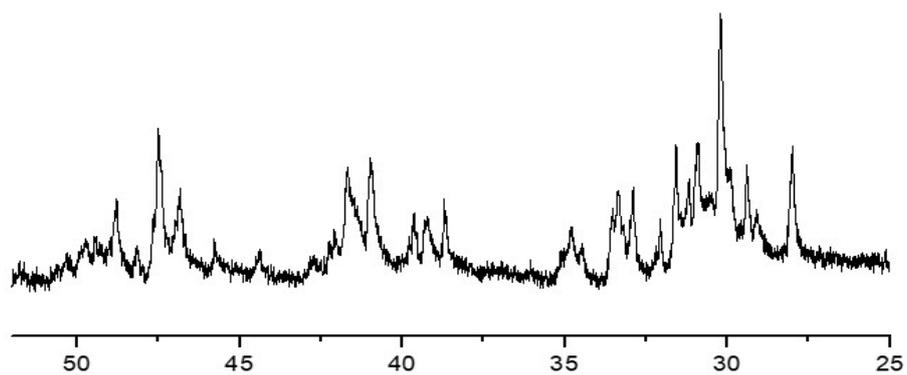


Figure S2. ¹³C NMR spectrum of E-NB copolymers obtained by **D2** at 0 °C with norbornene content of 38.3 mol%.

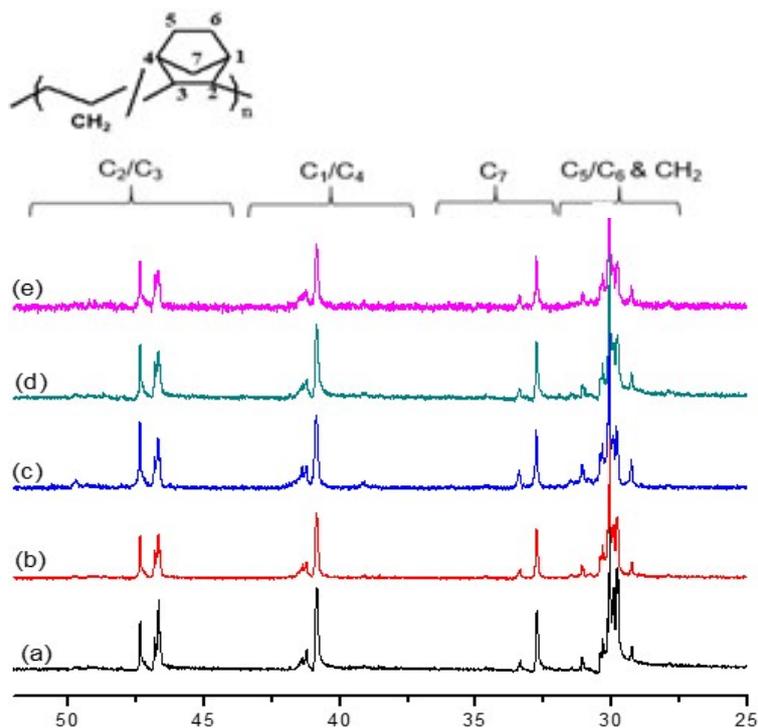


Figure S3. ^{13}C NMR spectra of E-NB copolymers obtained by **1b** with different norbornene feeding at 0 °C (a: 30.6 mol%; b: 33.7 mol%; c: 38.0 mol%; d: 38.7 mol%; e: 40.8 mol%)

The norbornene content in the copolymer was calculated from the ^{13}C NMR spectrum by the equation: $\text{mol\% of NB} = [1/3(I_{\text{C}2/3} + I_{\text{C}1/4} + 2I_{\text{C}7}) \times 100] / I_{\text{C}5/6\&\text{CH}2}$

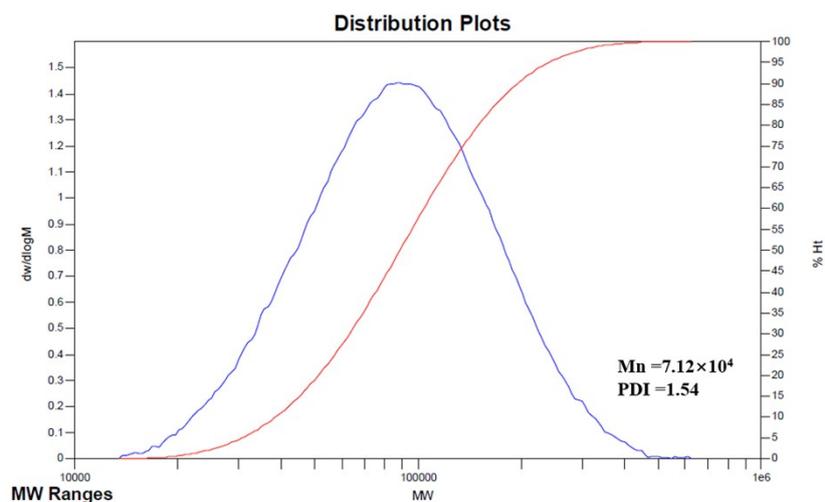


Figure S4. CPC curve of E-N copolymer from Table 2, entry 1.

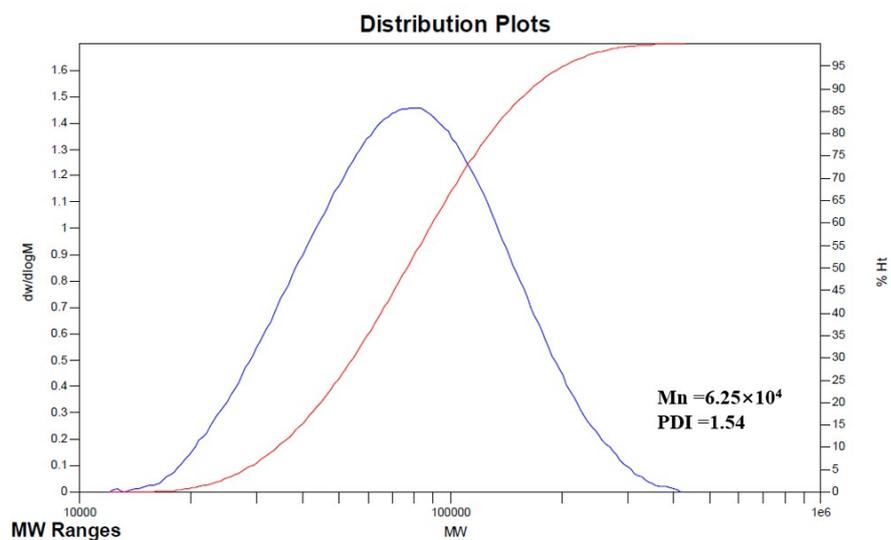


Figure S5. CPC curve of E-N copolymer from Table 2, entry 3.

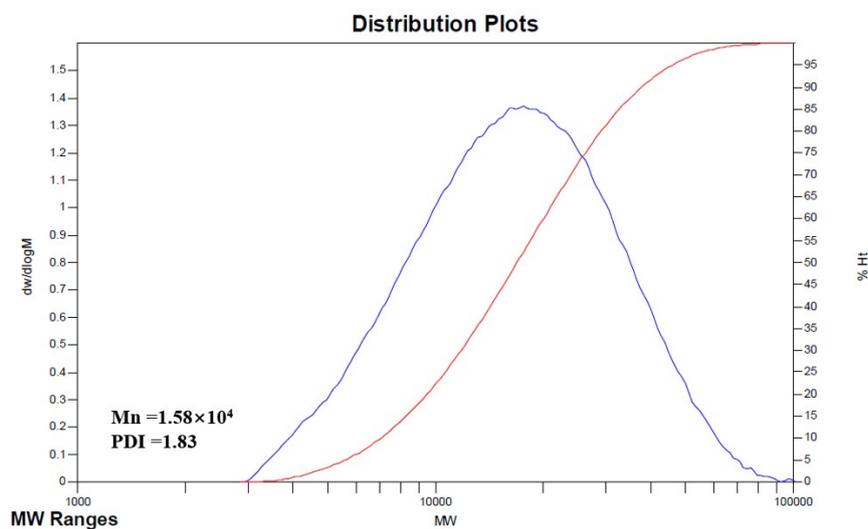


Figure S6. CPC curve of E-N copolymer from Table 2, entry 5.

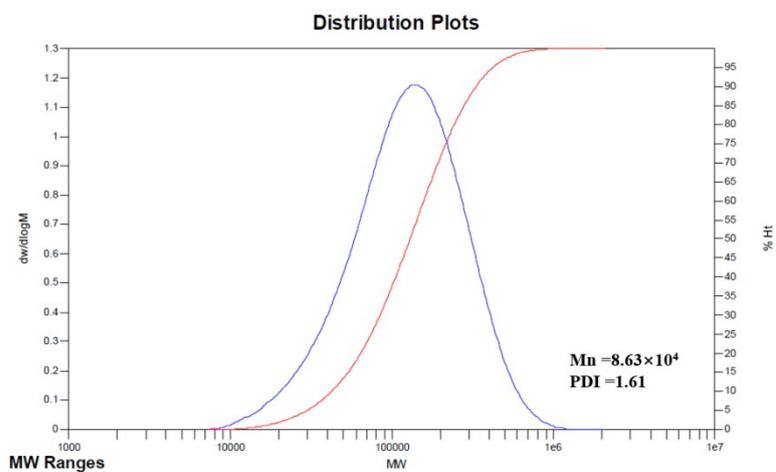


Figure S7. CPC curve of E-N copolymer from Table 2, entry 6.

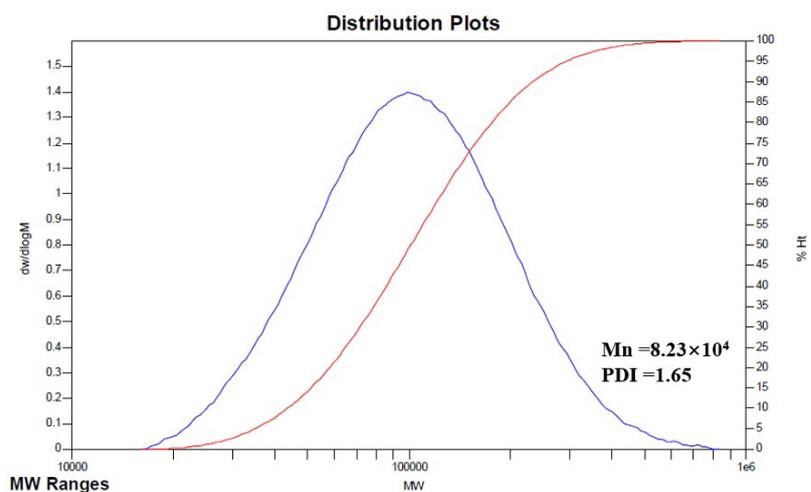


Figure S8. CPC curve of E-N copolymer from Table 2, entry 8.

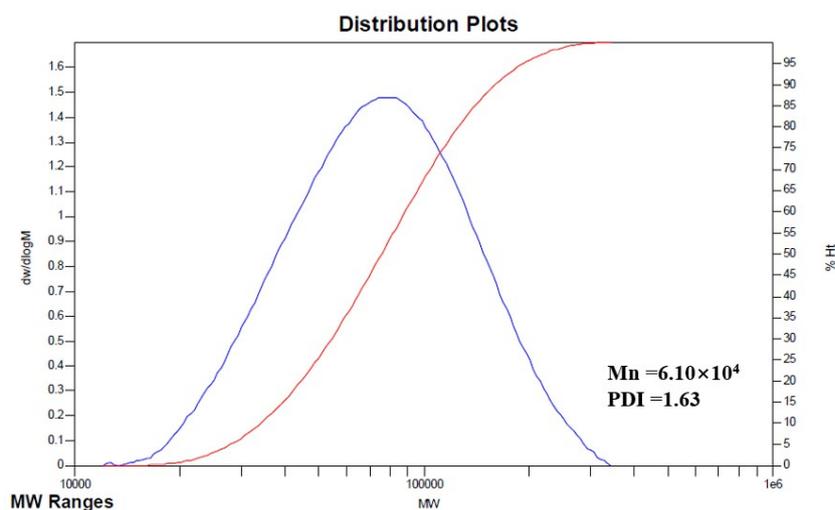


Figure S9. CPC curve of E-N copolymer from Table 2, entry 10.

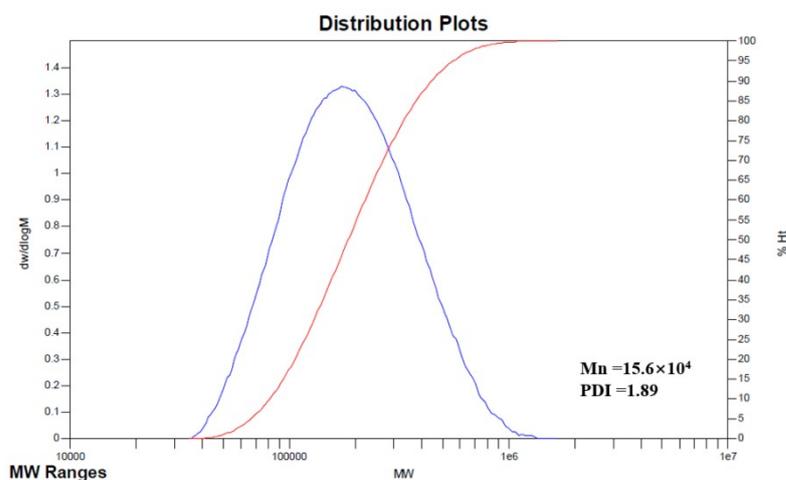


Figure S10. CPC curve of E-N copolymer from Table 2, entry 12.

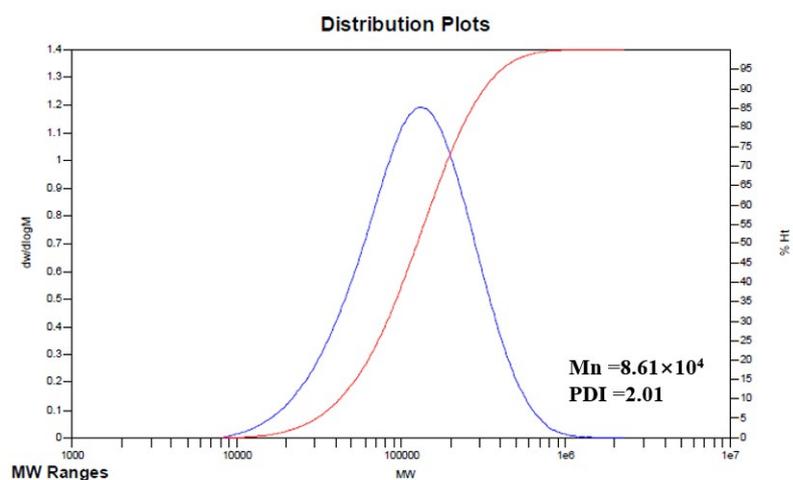


Figure S11. CPC curve of E-N copolymer from Table 2, entry 14.

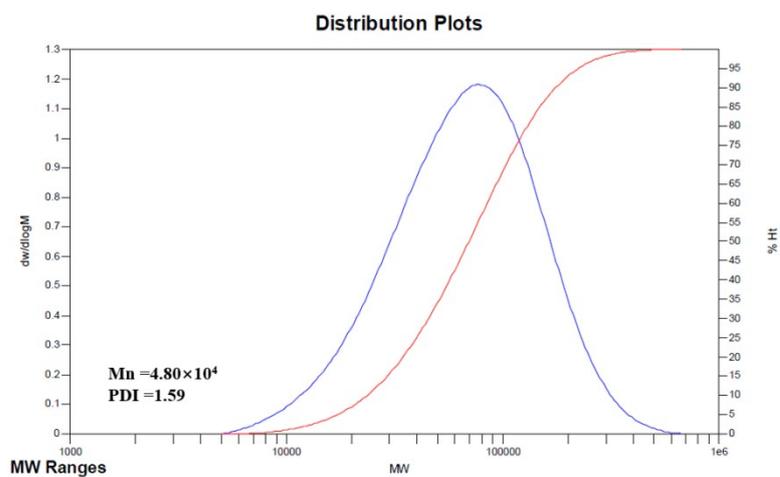


Figure S12. CPC curve of E-N copolymer of from Table 2, entry 17.

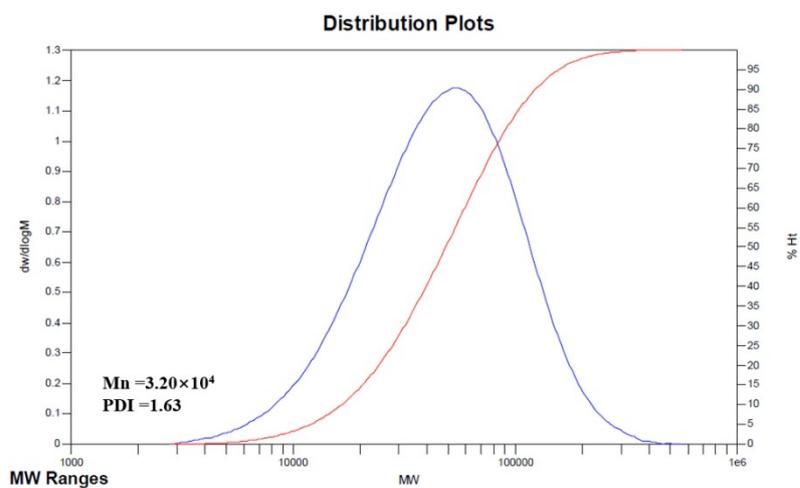


Figure S13. CPC curve of E-N copolymer from Table 2, entry 18.

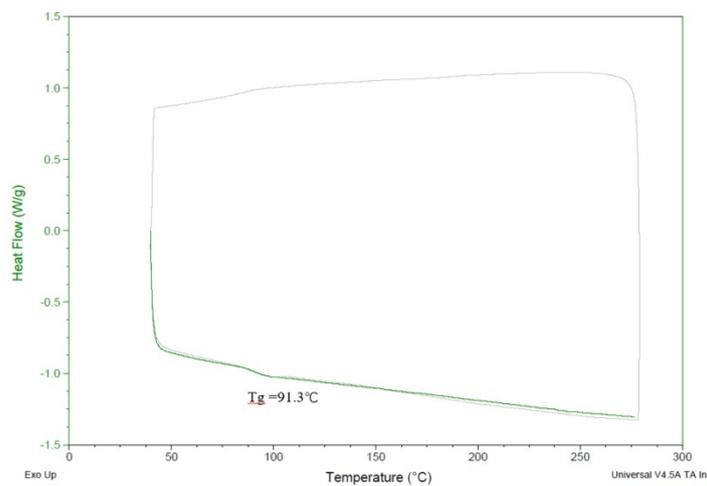


Figure S14. DSC curve of E-N copolymer from Table 2, entry 1.

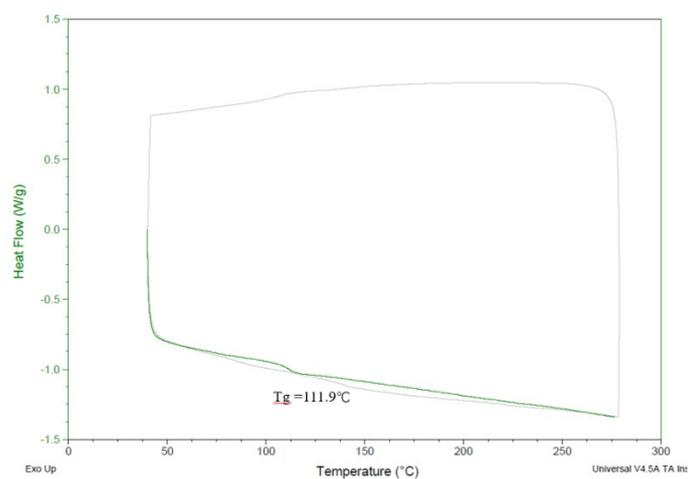


Figure S15. DSC curve of E-N copolymer from Table 2, entry 2.

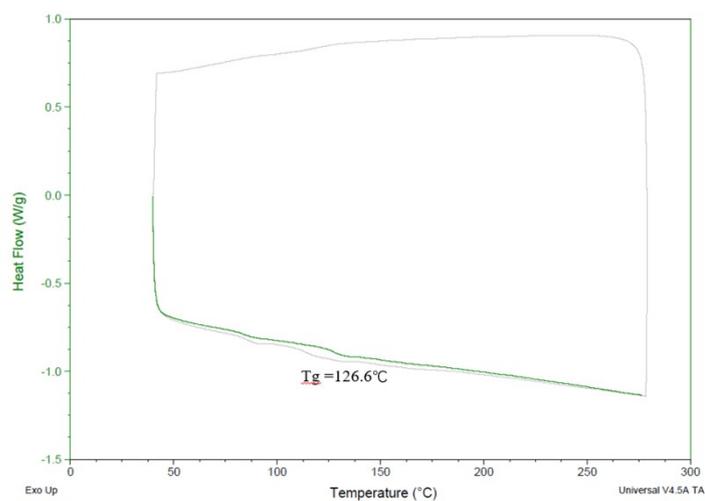


Figure S16. DSC curve of E-N copolymer from Table 2, entry 4.

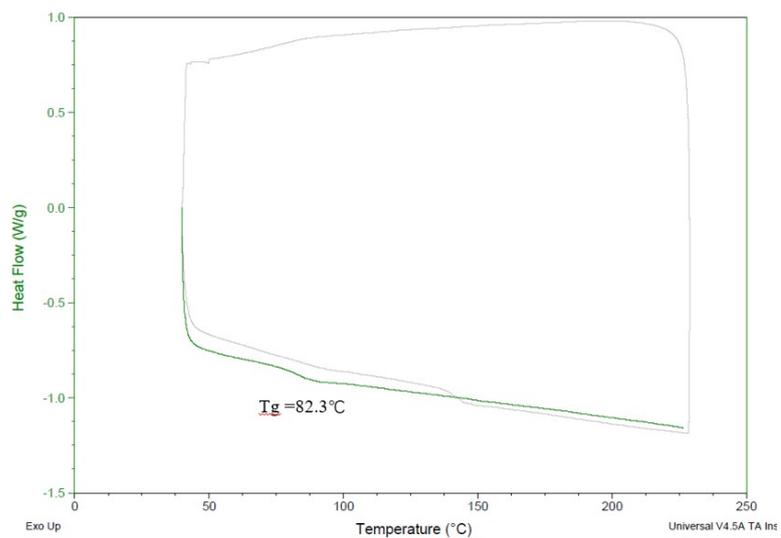


Figure S17. DSC curve of E-N copolymer from Table 2, entry 6.

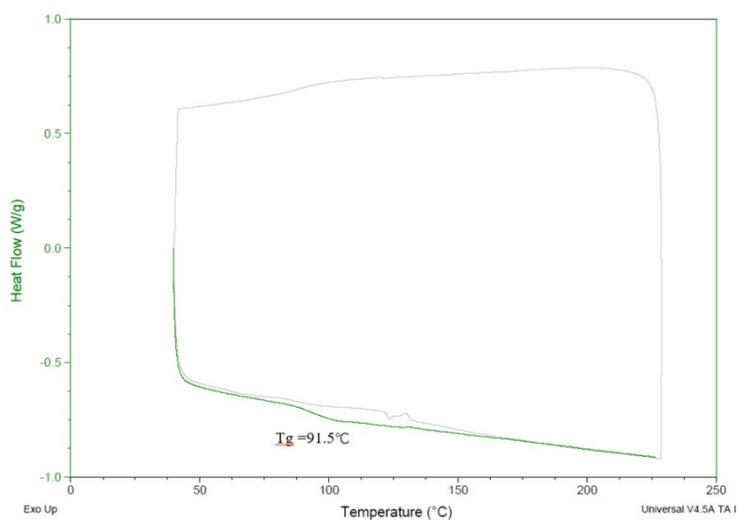


Figure S18. DSC curve of E-N copolymer from Table 2, entry 7.

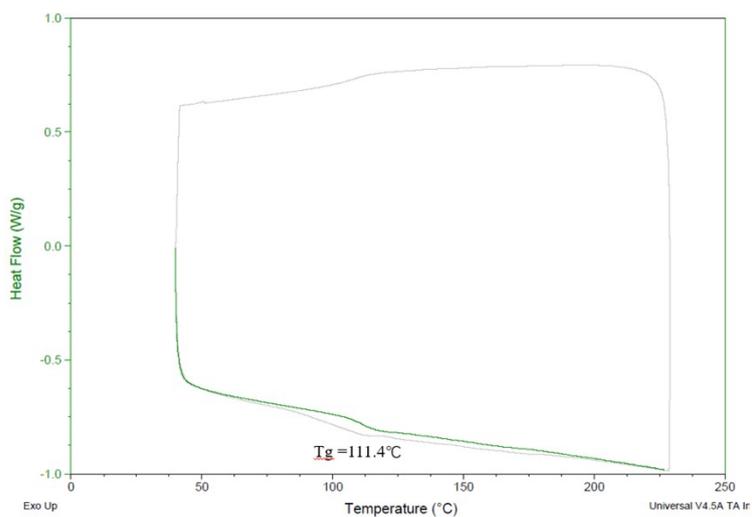


Figure S19. DSC curve of E-N copolymer from Table 2, entry 9.

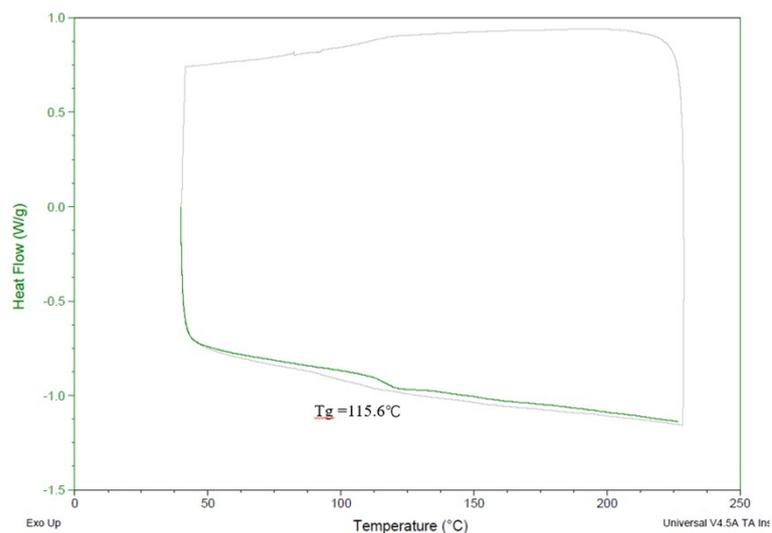


Figure S20. DSC curve of E-N copolymer from Table 2, entry 10.

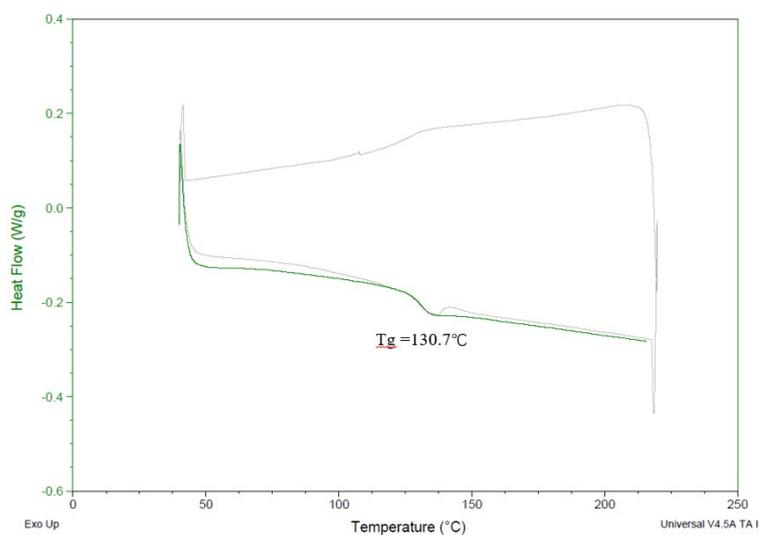


Figure S21. DSC curve of E-N copolymer from Table 2, entry 11.

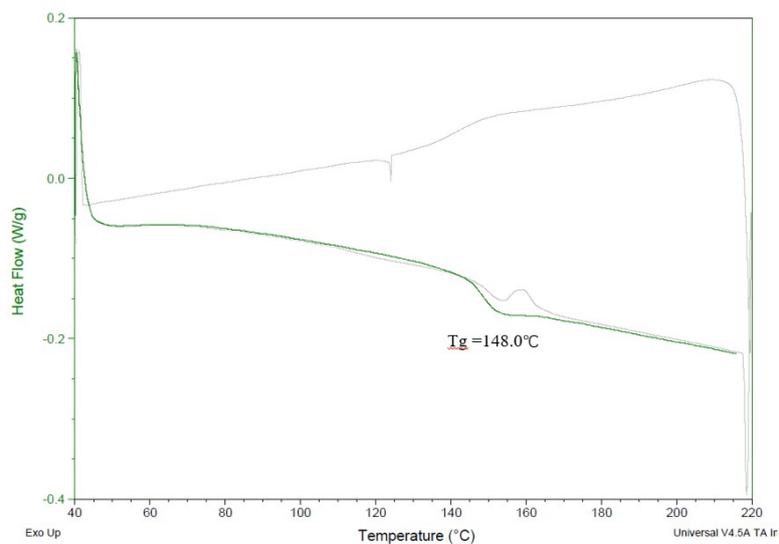


Figure S22. DSC curve of E-N copolymer from Table 2, entry 13.

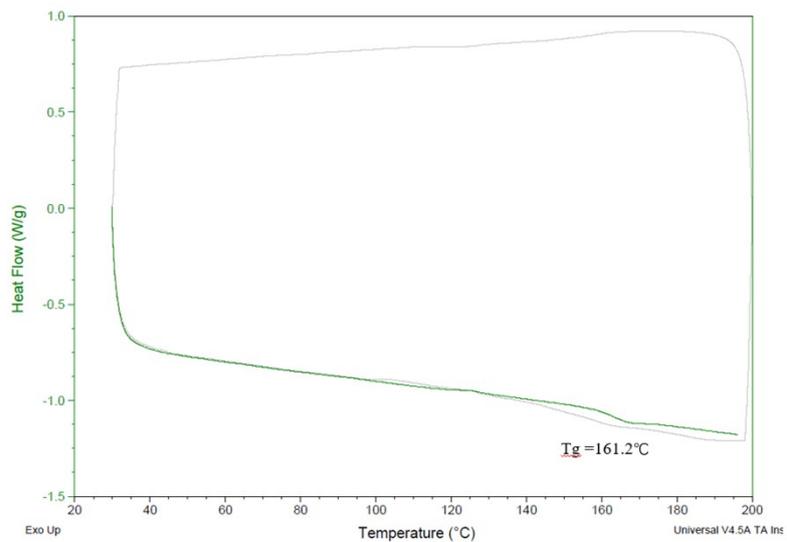


Figure S23. DSC curve of E-N copolymer from Table 2, entry 15.

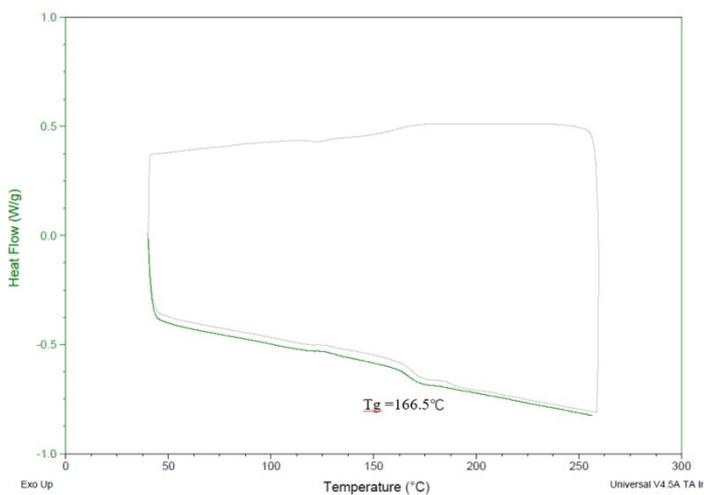


Figure S24. DSC curve of E-N copolymer from Table 2, entry 17.

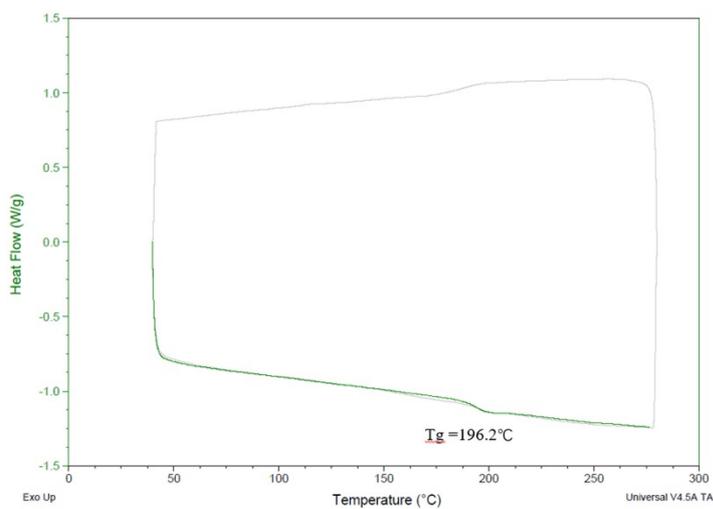


Figure S25. DSC curve of E-N copolymer from Table 2, entry 18.