

Electronic Supplementary Information for

Bio-based difuranic polyol monomers and their derived linear and cross-linked polyurethanes

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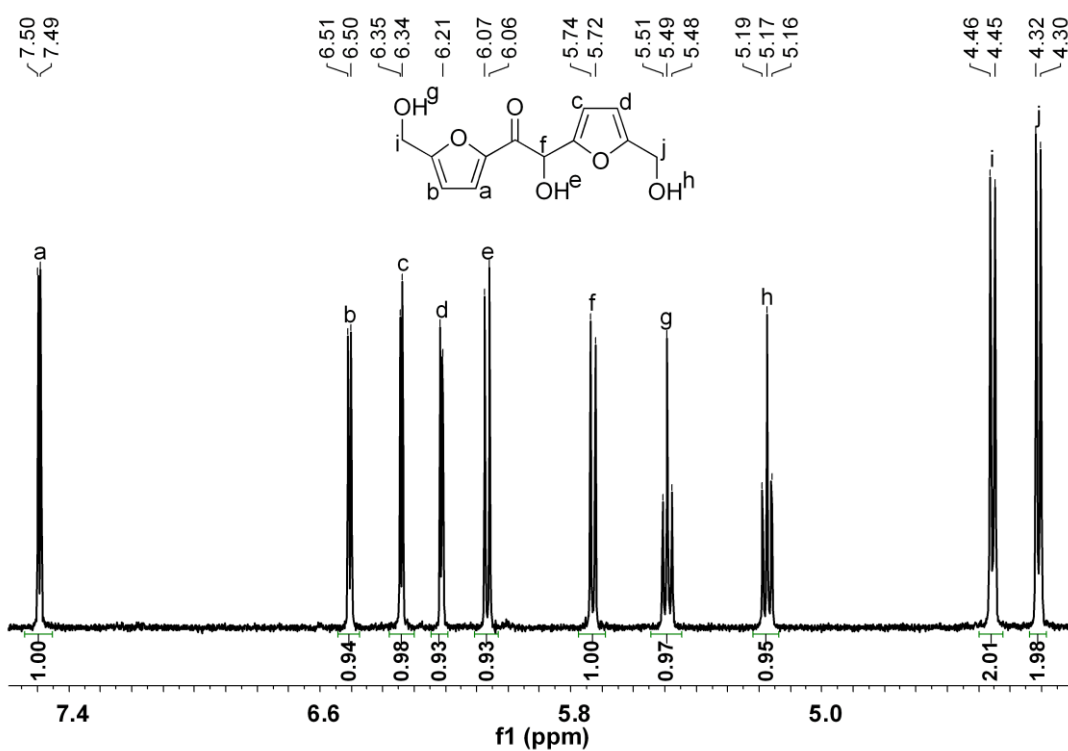


Fig. S1. ¹H NMR (DMSO-*d*₆) spectrum of DHMF.

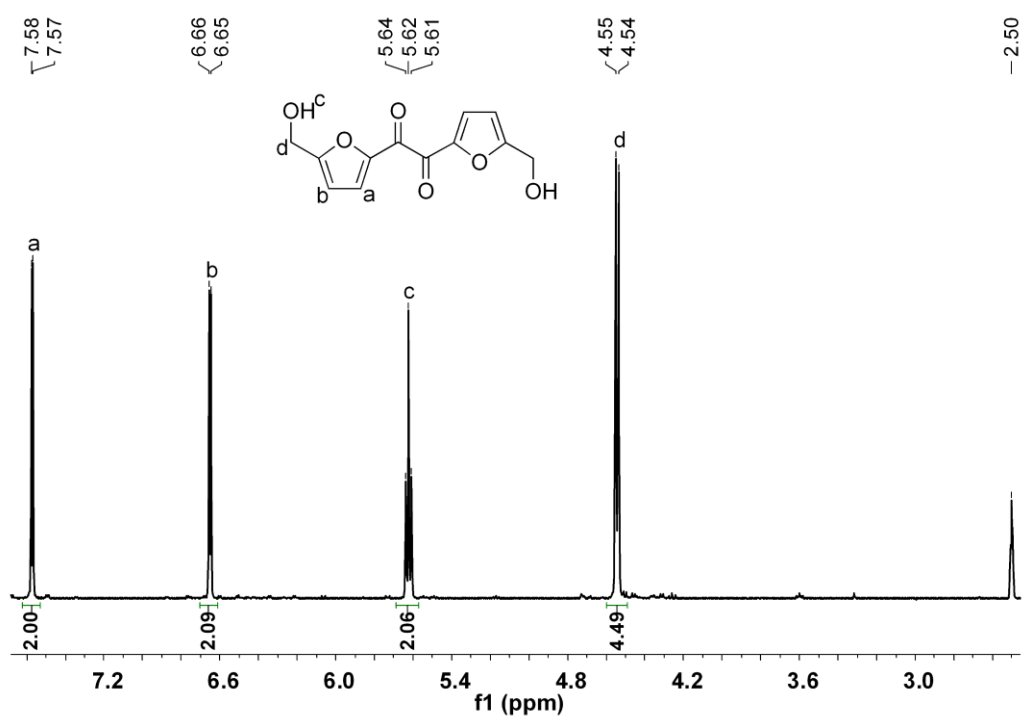


Fig. S2. ^1H NMR ($\text{DMSO-}d_6$) spectrum of BHMF.

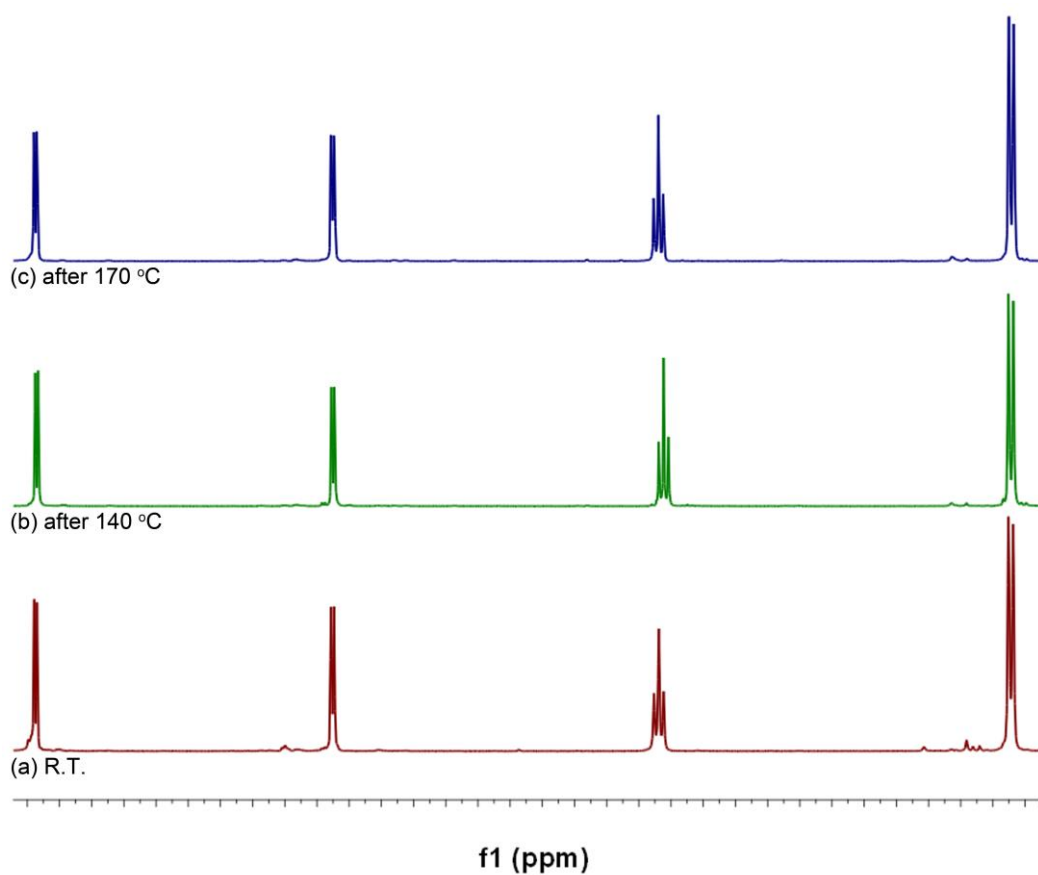


Fig. S3. ^1H NMR ($\text{DMSO-}d_6$) spectra of BHMF after heat treatment.

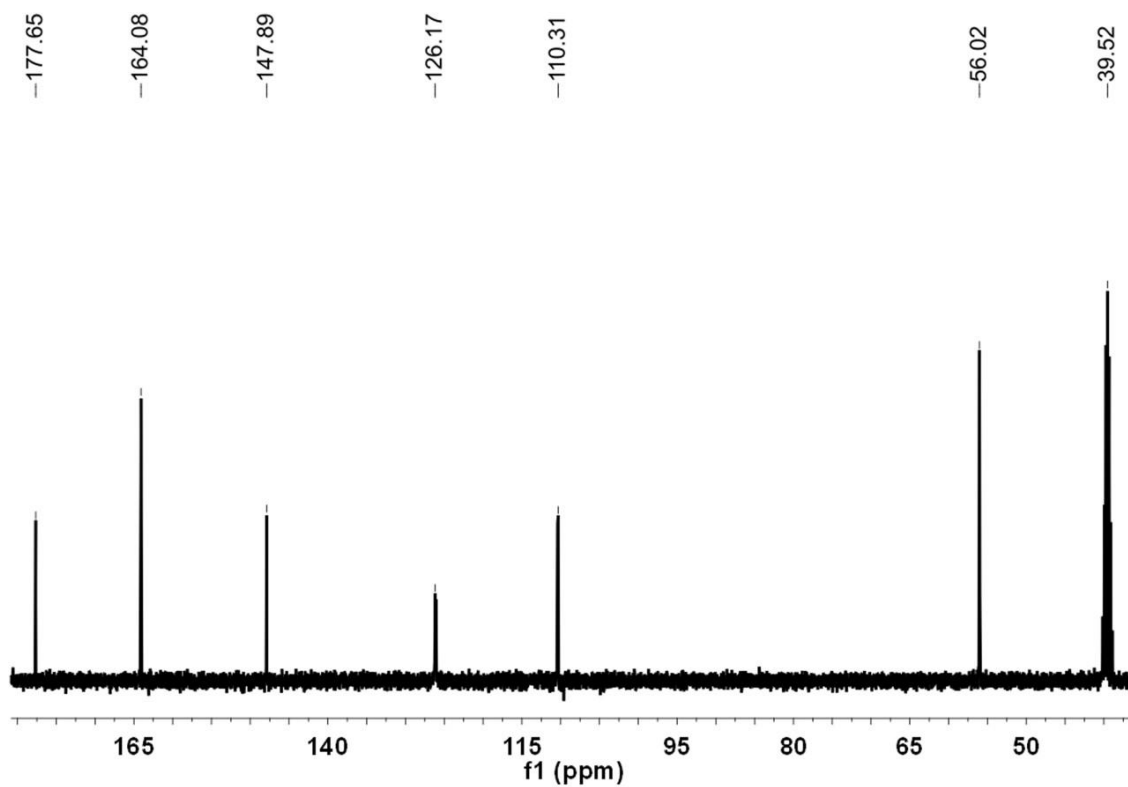


Fig. S4. ^{13}C NMR (DMSO- d_6) spectrum of BHMf.

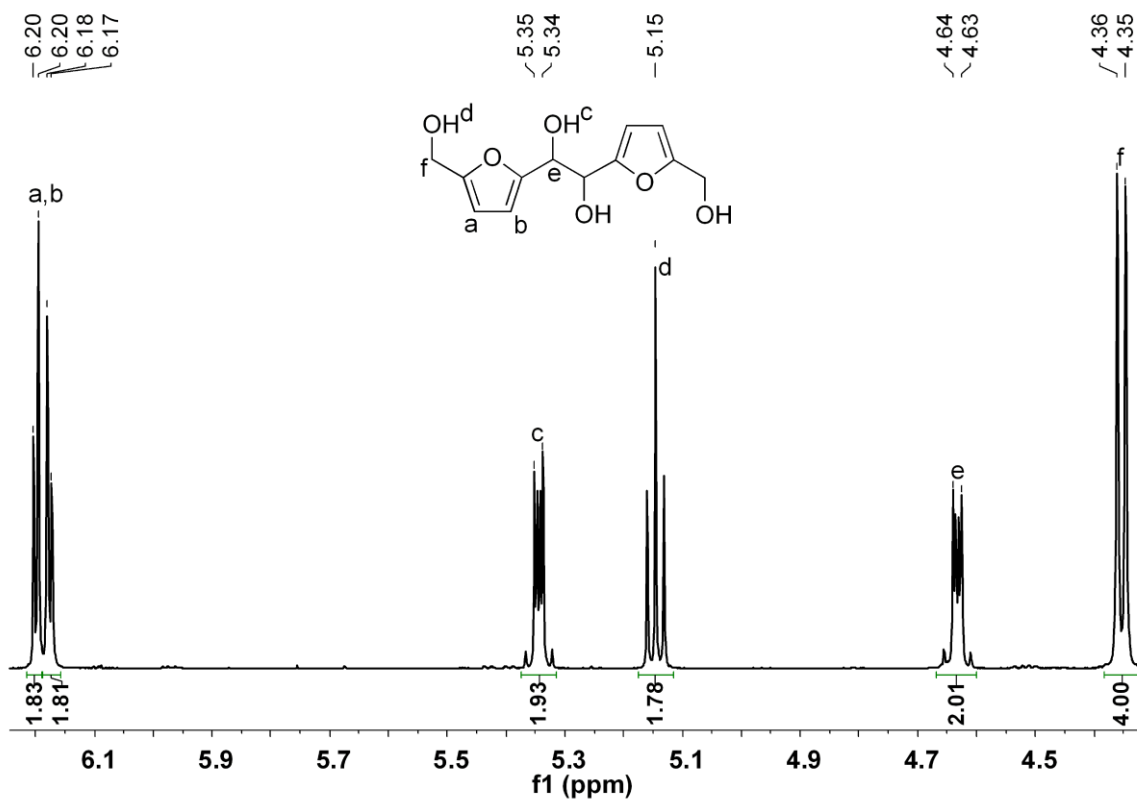


Fig. S5. ^1H NMR (DMSO- d_6) spectrum of BHMf.

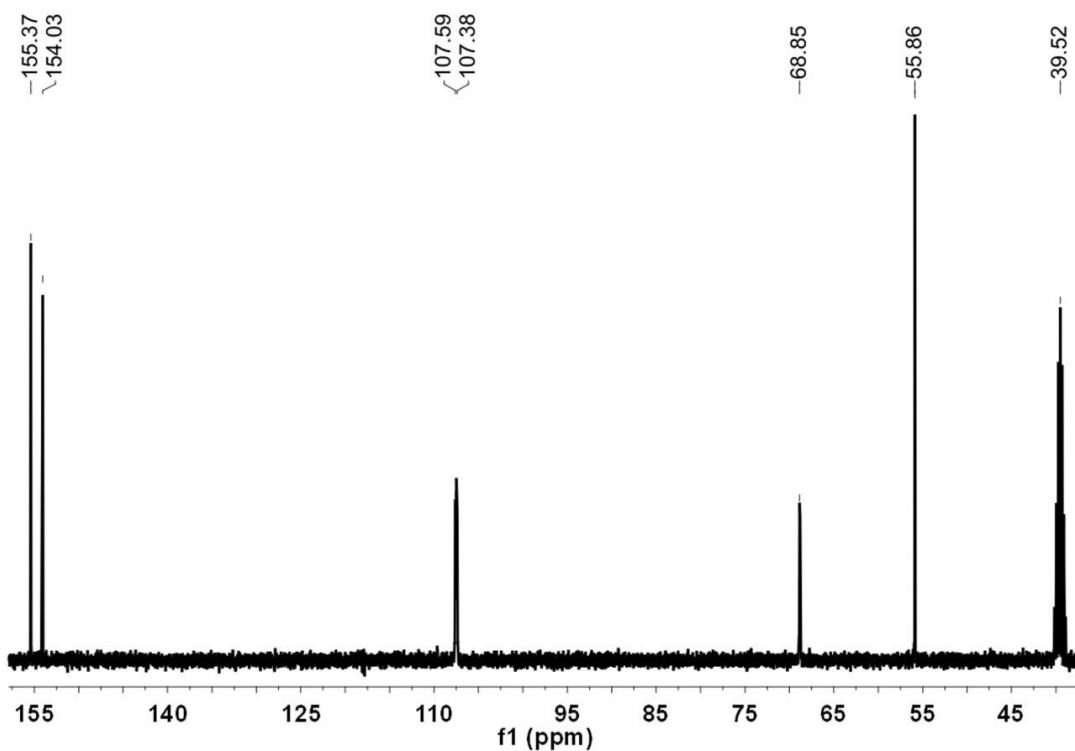


Fig. S6. ^{13}C NMR ($\text{DMSO-}d_6$) spectrum of BHMH.

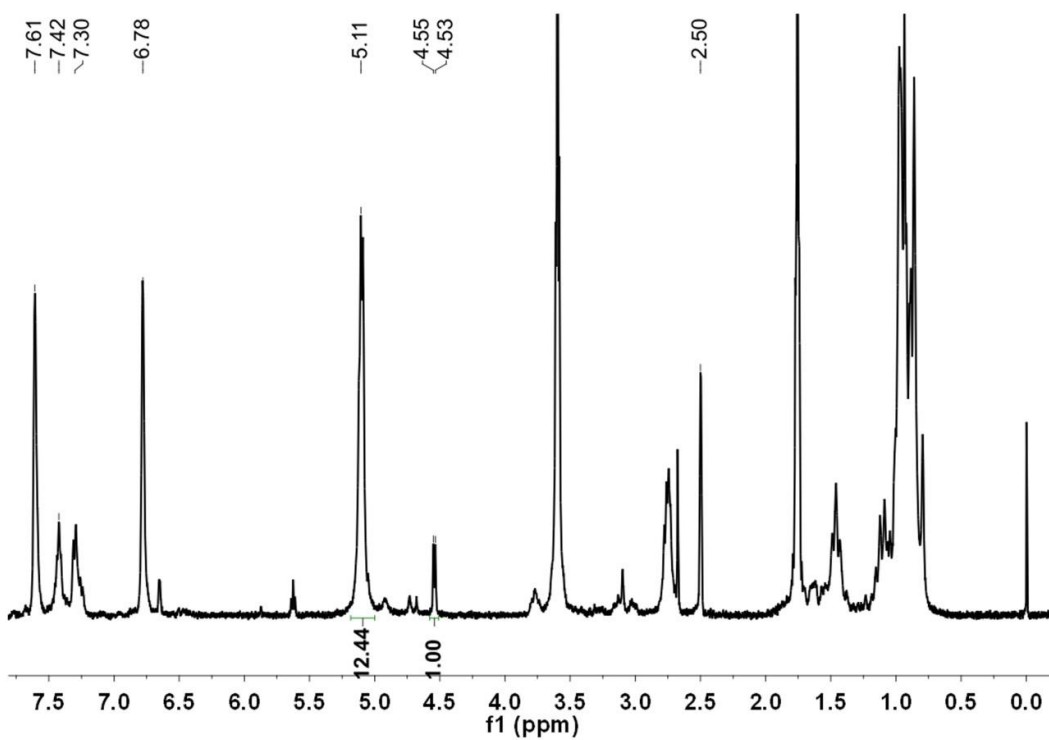


Fig. S7. ^1H NMR ($\text{DMSO-}d_6$) spectrum of polymerization reaction mixture (BHMf and IPDI) catalyzed by DABCO ($30\text{ }^\circ\text{C}$, 24 h).

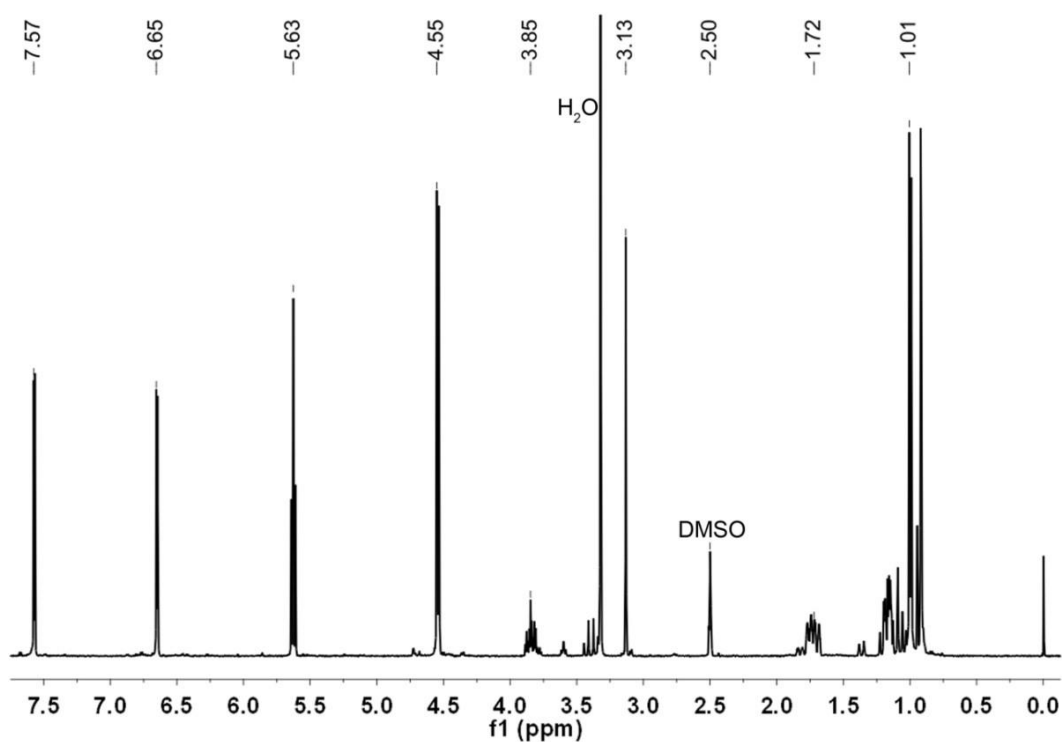


Fig. S8. ^1H NMR ($\text{DMSO-}d_6$) spectrum of mixture (BHMf and IPDI) without any catalyst ($30\text{ }^\circ\text{C}$, 24 h).

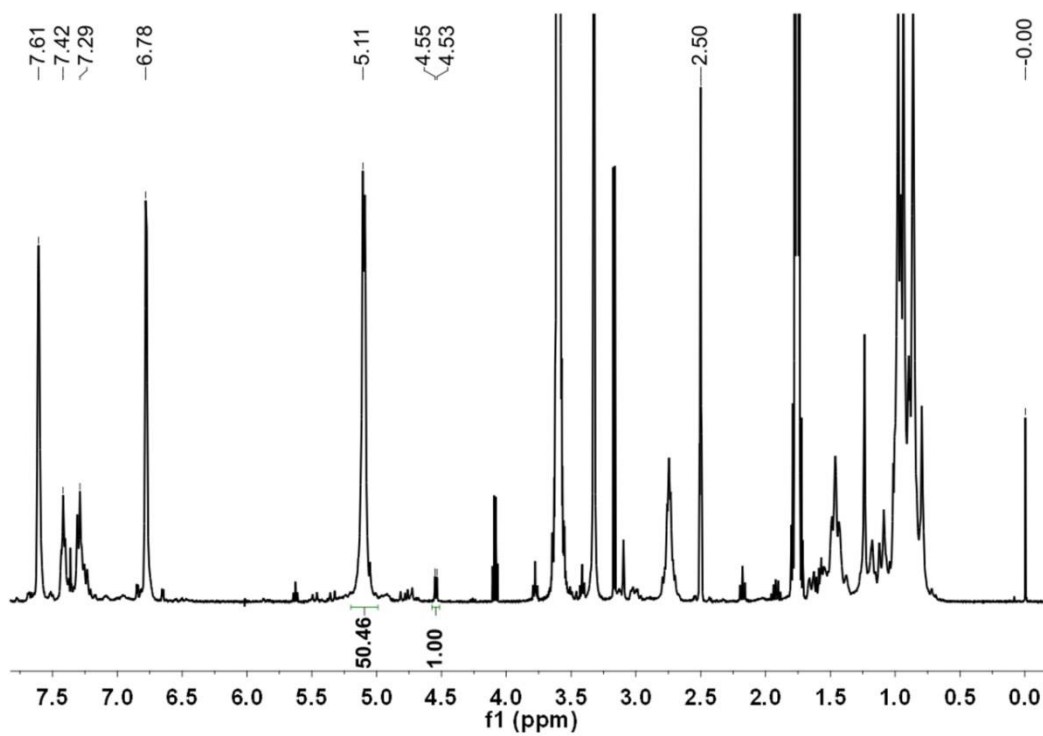


Fig. S9. ^1H NMR ($\text{DMSO-}d_6$) spectrum of polymerization reaction mixture (BHMf and IPDI) catalyzed by DBTDL ($30\text{ }^\circ\text{C}$, 24 h).

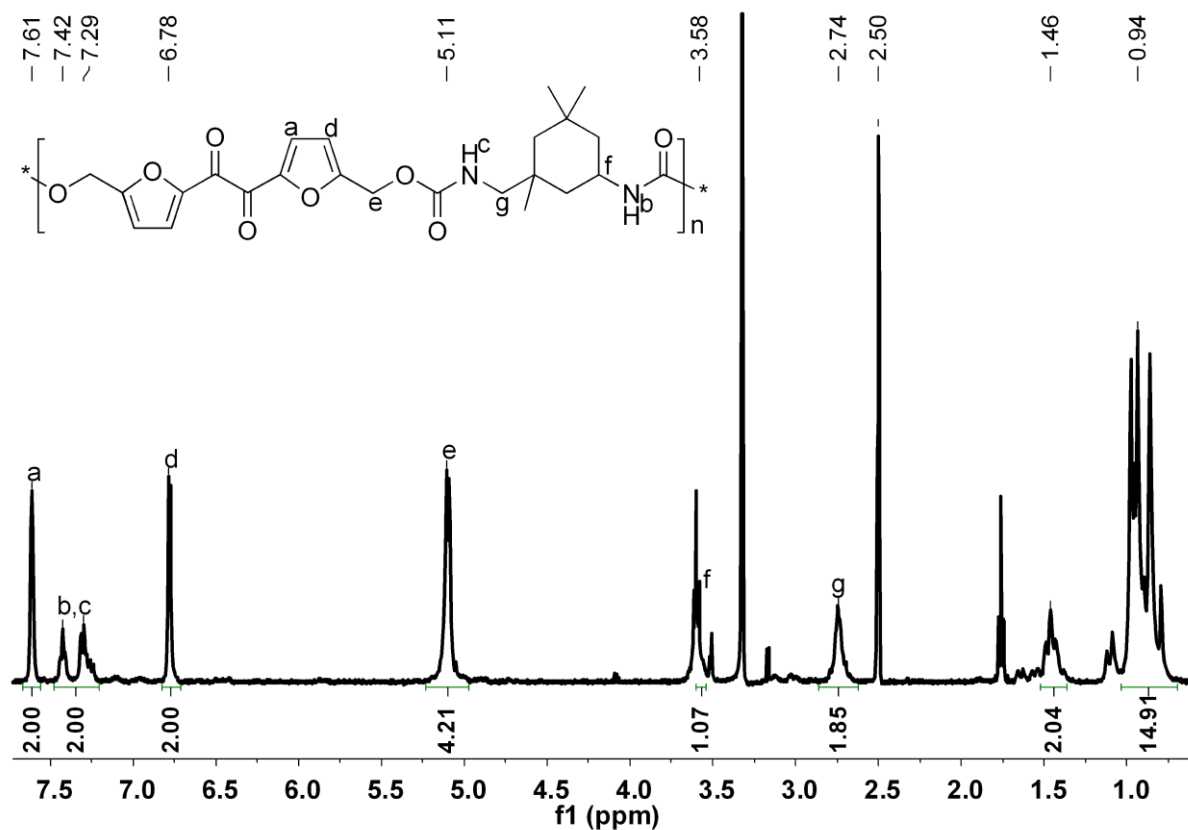


Fig. S10. ¹H NMR (DMSO-*d*₆) spectrum of PU-1.

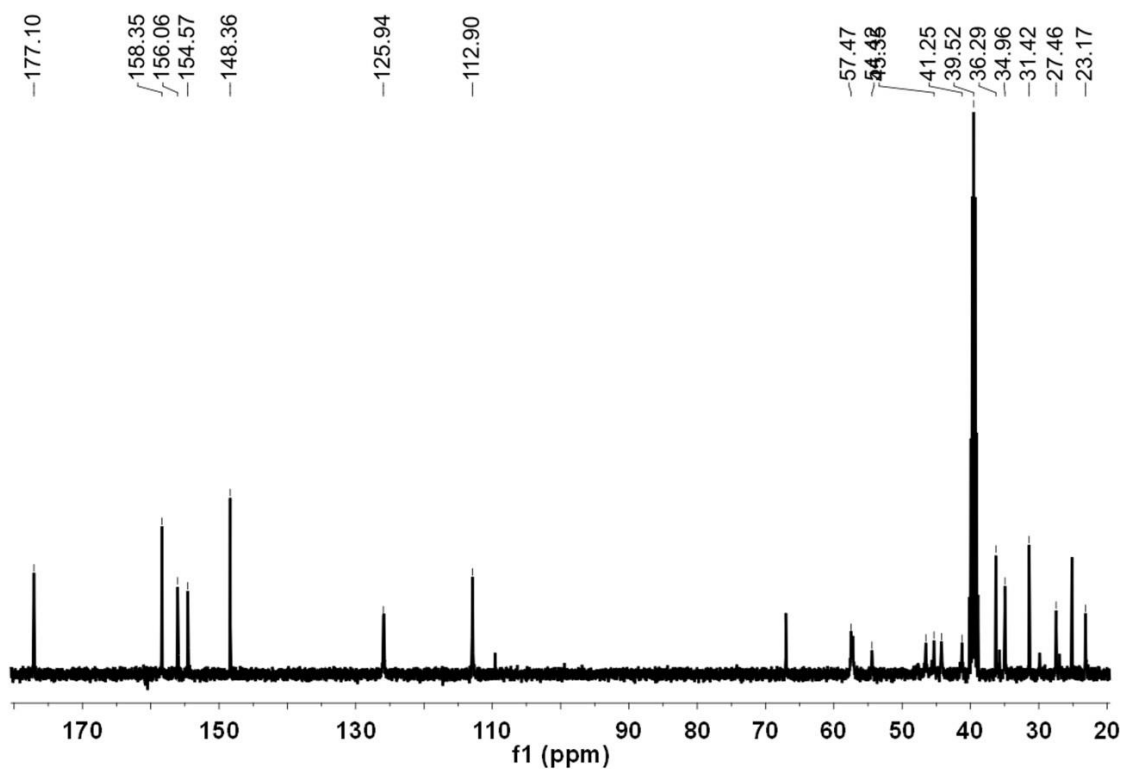


Fig. S11. ¹³C NMR (DMSO-*d*₆) spectrum of PU-1.

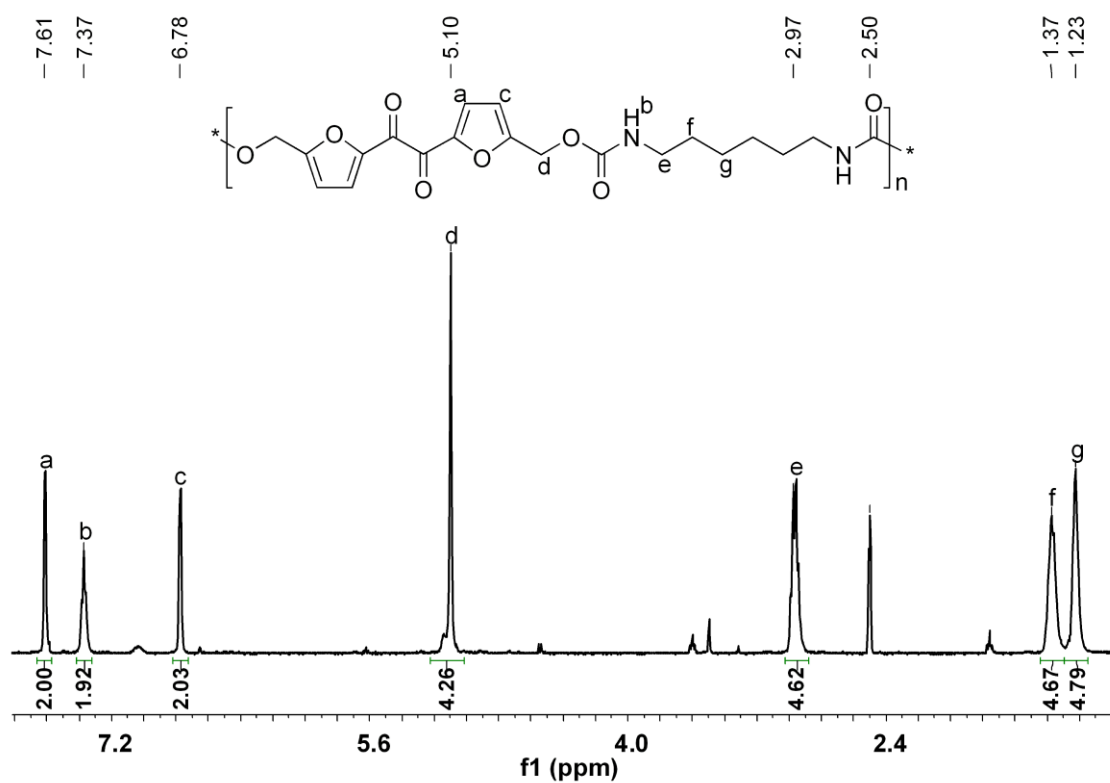


Fig. S12. ^1H NMR (DMSO- d_6) spectrum of PU-2.

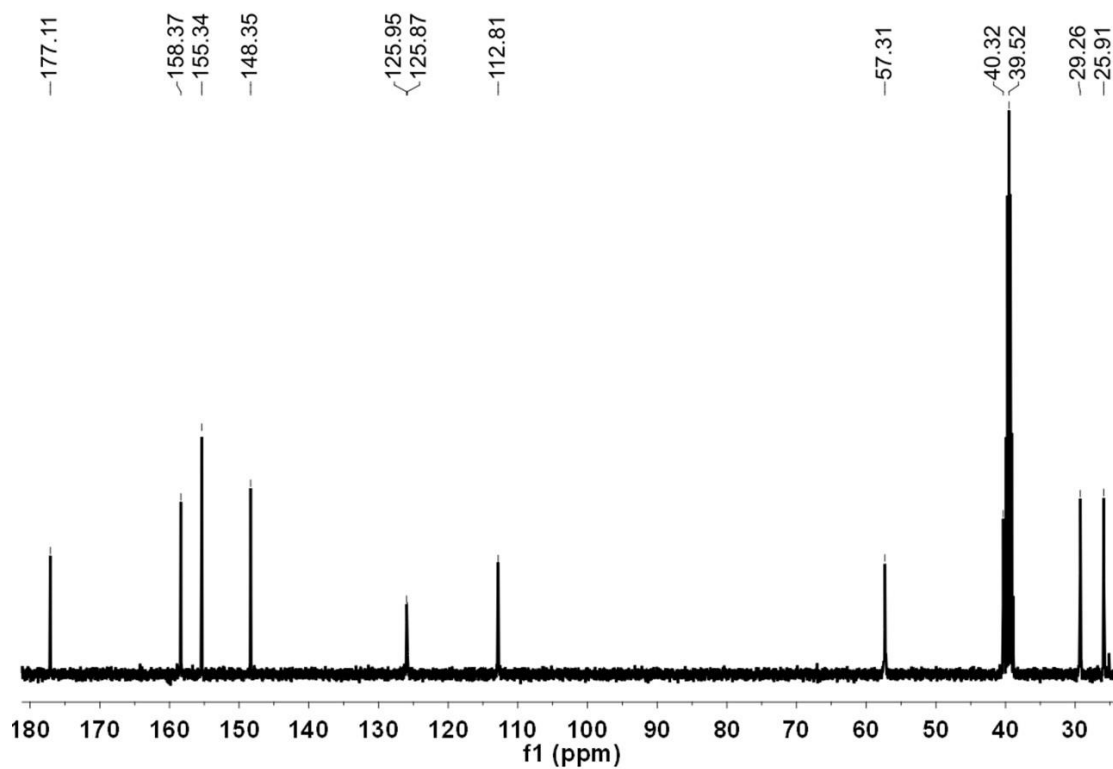


Fig. S13. ^{13}C NMR (DMSO- d_6) spectrum of PU-2.

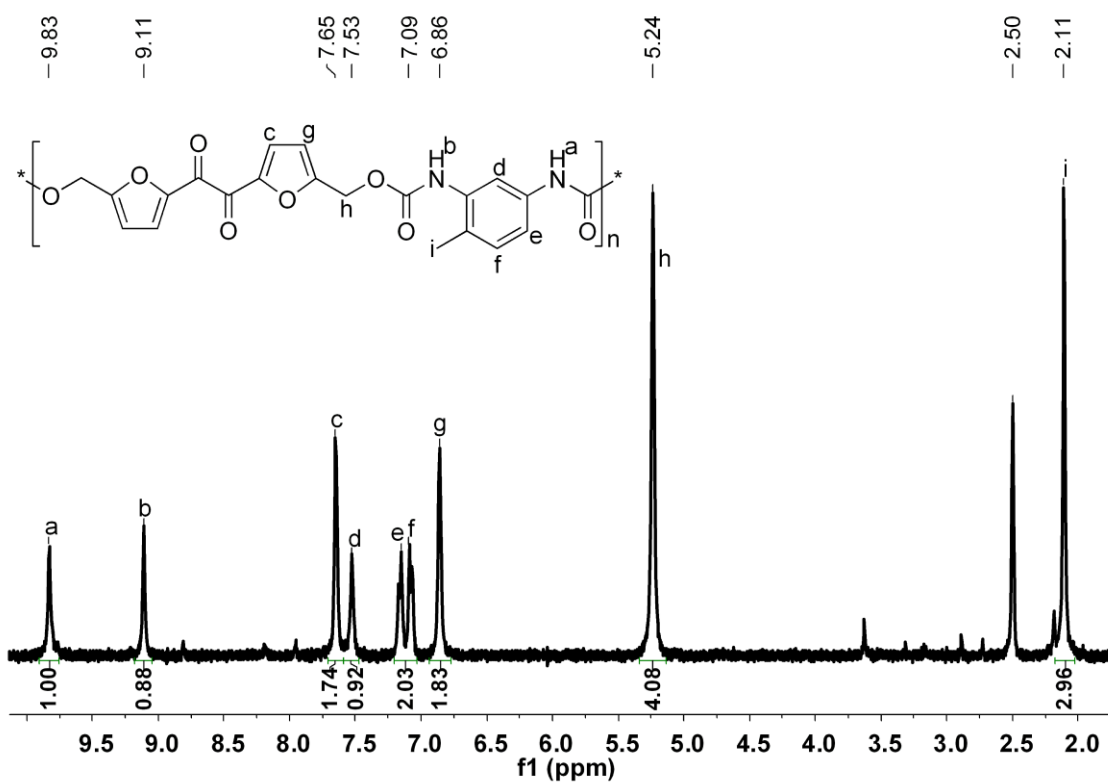


Fig. S14. ¹H NMR (DMSO-*d*₆) spectrum of PU-3.

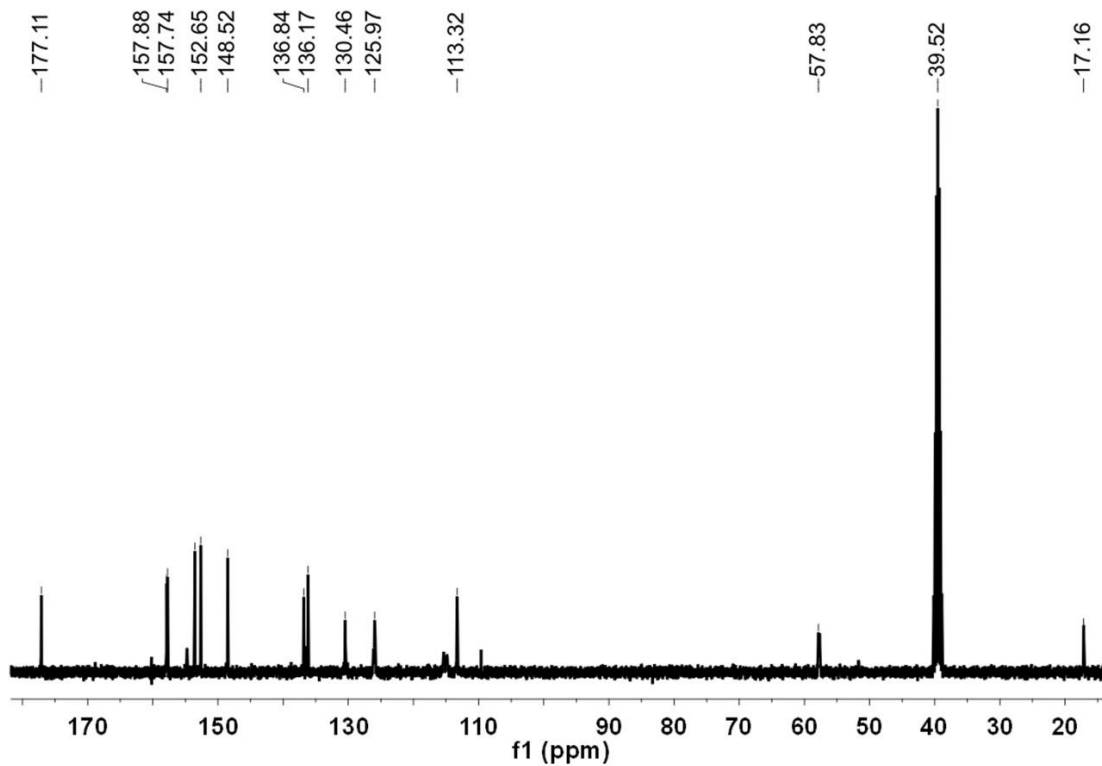


Fig. S15. ¹³C NMR (DMSO-*d*₆) spectrum of PU-3.

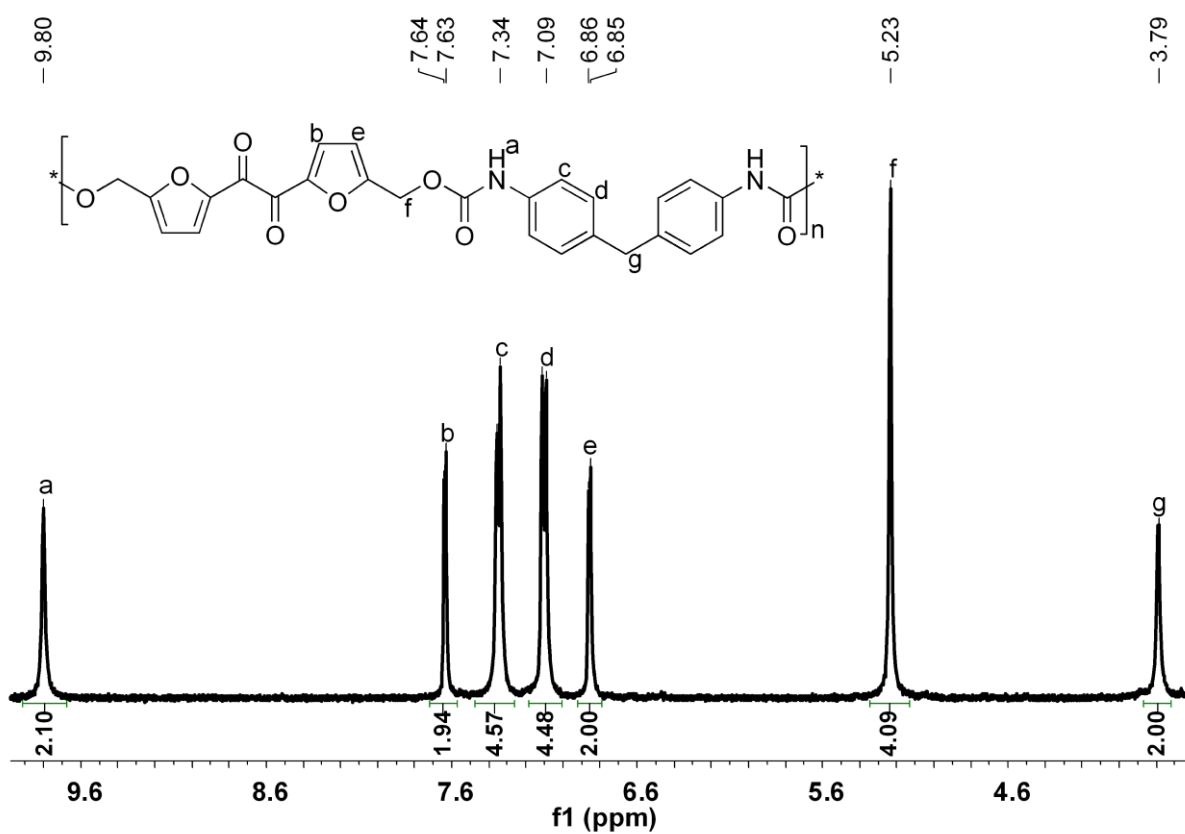


Fig. S16. ¹H NMR (DMSO-*d*₆) spectrum of PU-4.

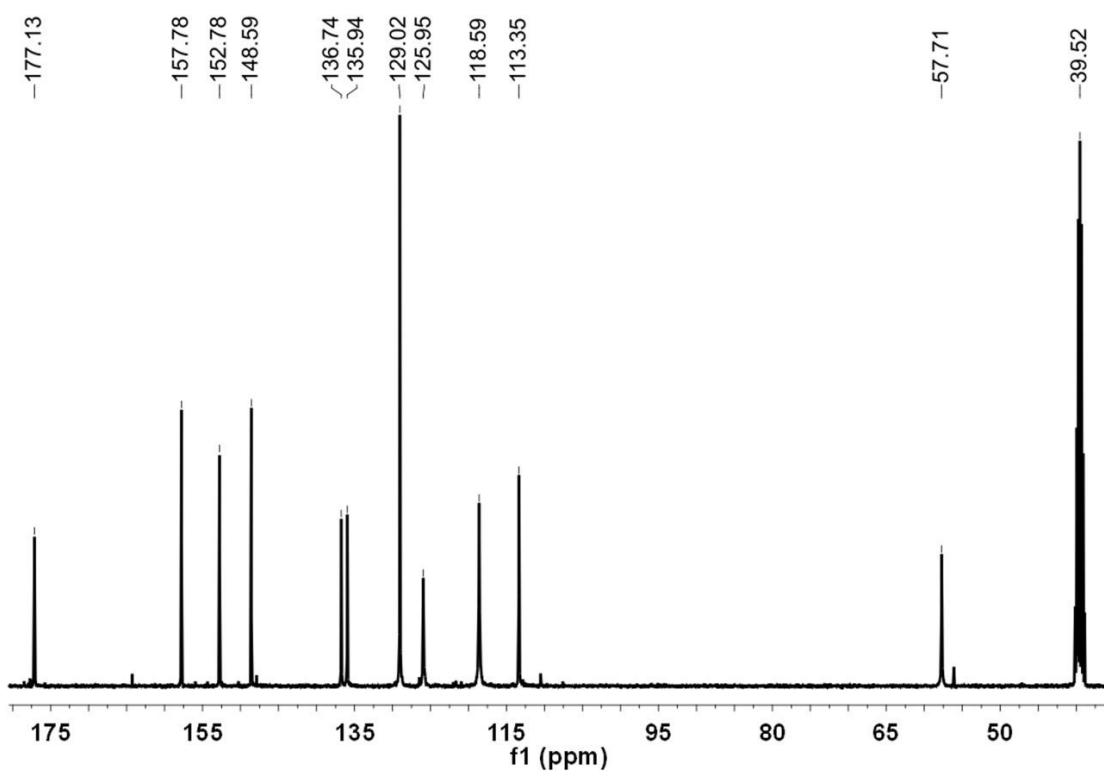


Fig. S17. ¹³C NMR (DMSO-*d*₆) spectrum of PU-4.

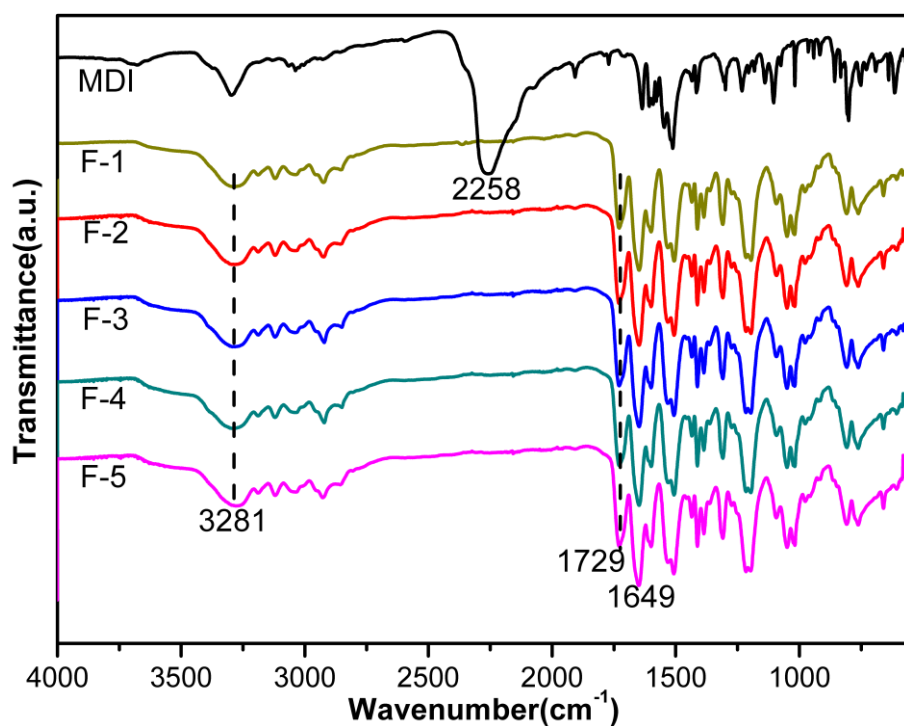


Fig. S18. FT-IR spectrum of PU films derived from BHMf (with or without DHMF or BHMh) and MDI.

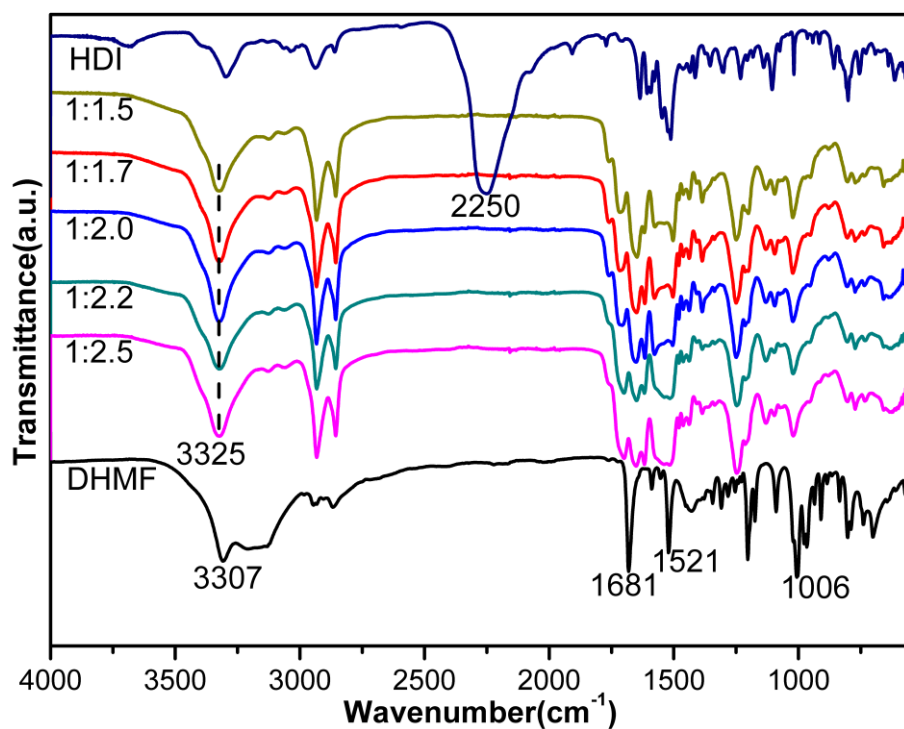


Fig. S19. FT-IR spectrum of PU films derived from DHMF and HDI.

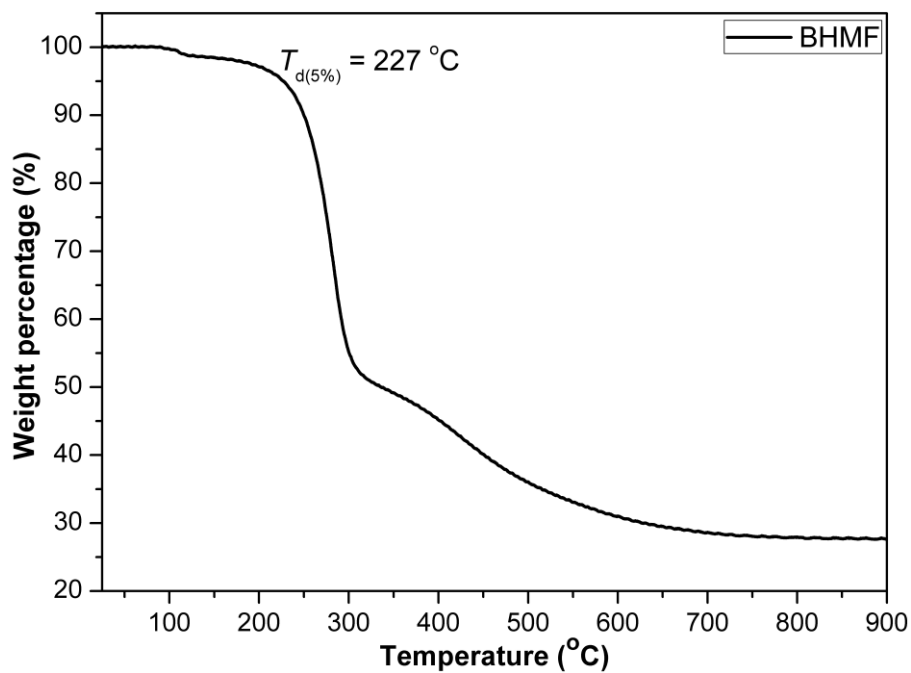


Fig. S20. TGA curve of BHMf.

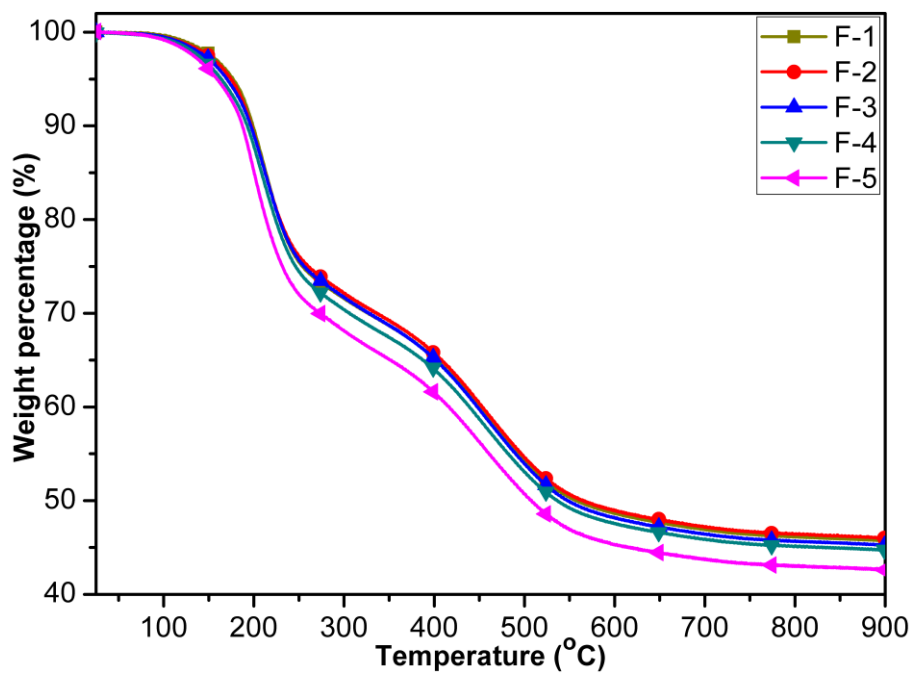


Fig. S21. TGA traces of PU films derived from BHMf (with or without DHMF or BHMH) and MDI.

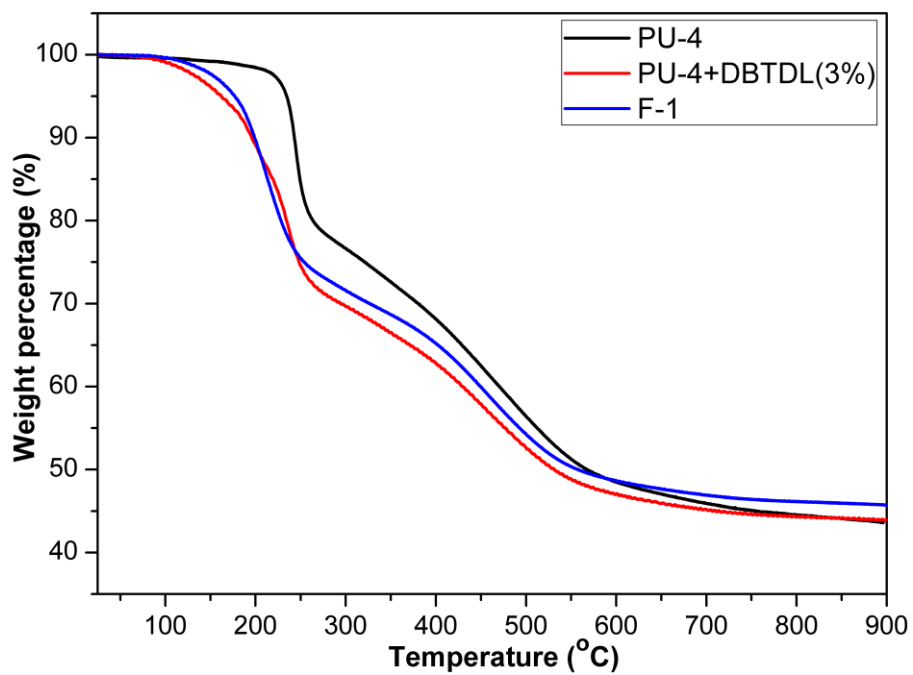


Fig. S22. TGA curves of different materials derived from BHMf and MDI under different conditions.