

Supporting Information

Fully renewable photocrosslinkable polycarbonates from cellulose-derived monomers

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I. NMR

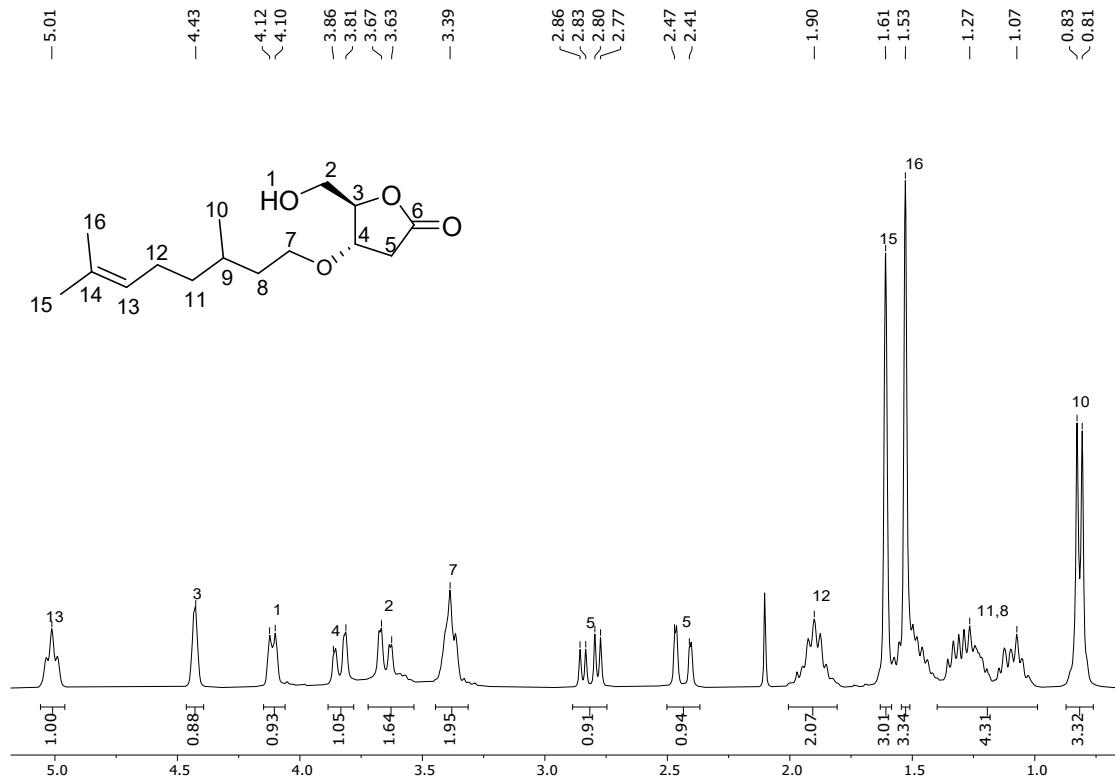


Figure S1. ^1H NMR (CDCl_3) spectrum of HBO-citro

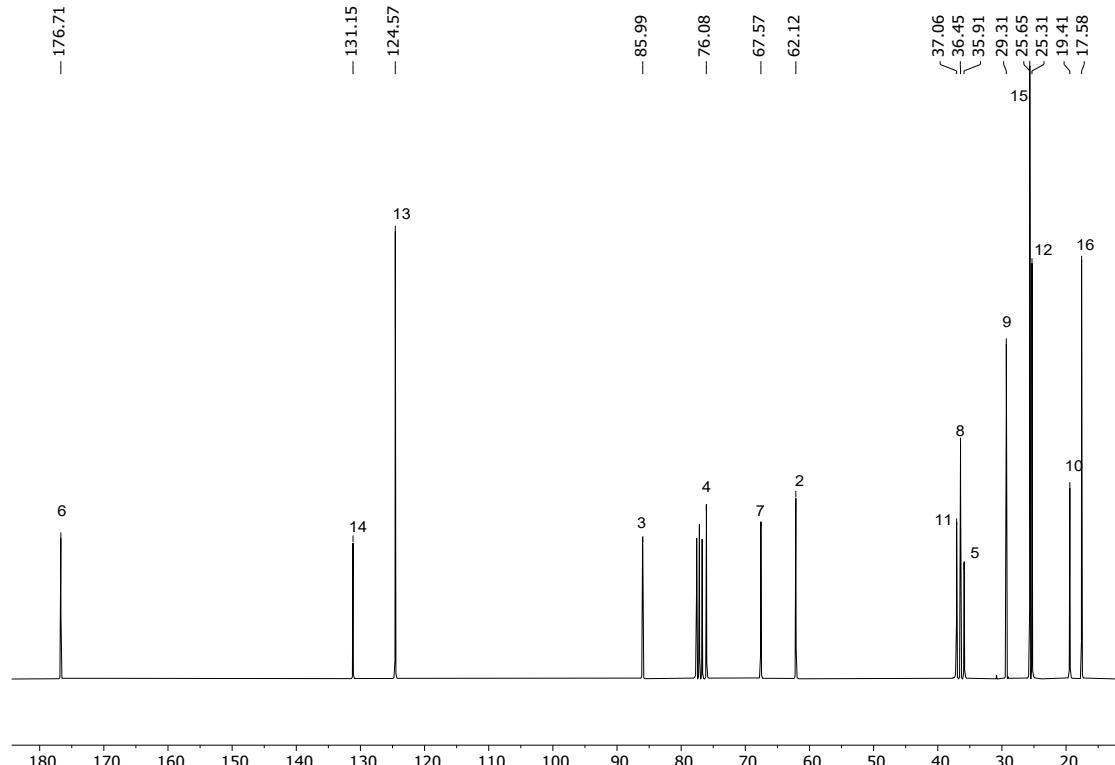


Figure S2. ^{13}C NMR (CDCl_3) spectrum of HBO-citro

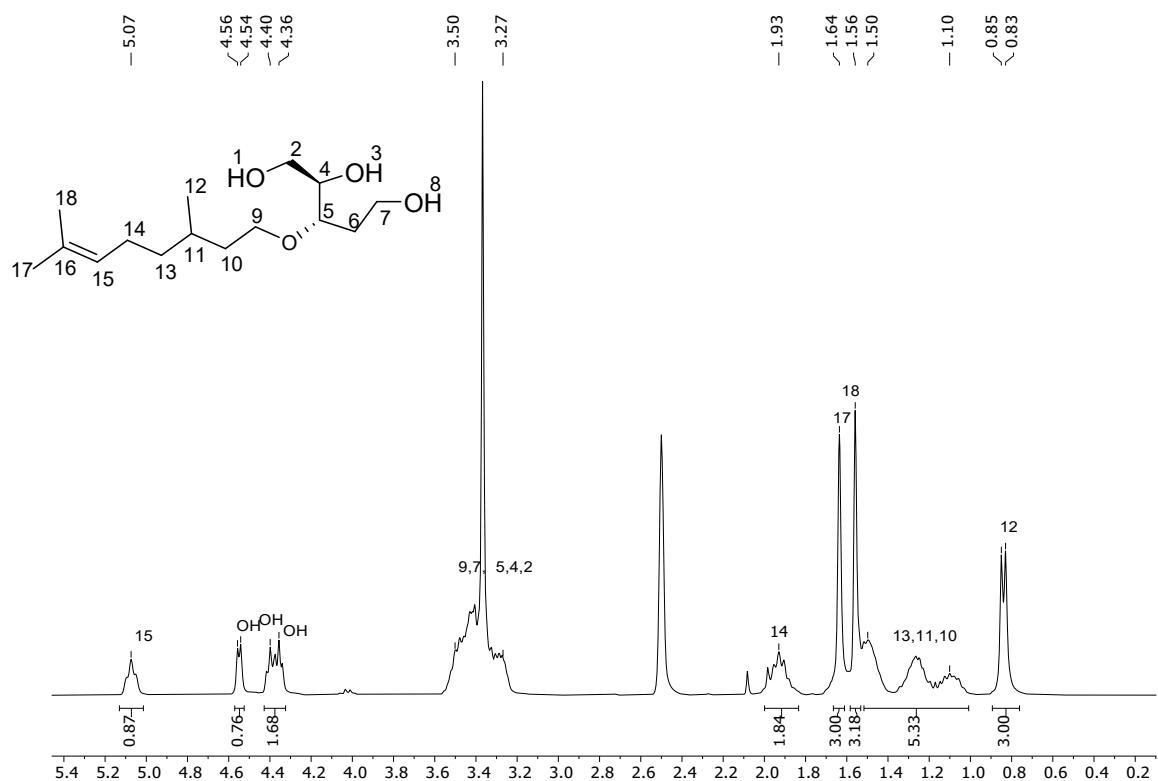


Figure S3. ^1H NMR ($\text{DMSO}-d_6$) spectrum of Triol-citro

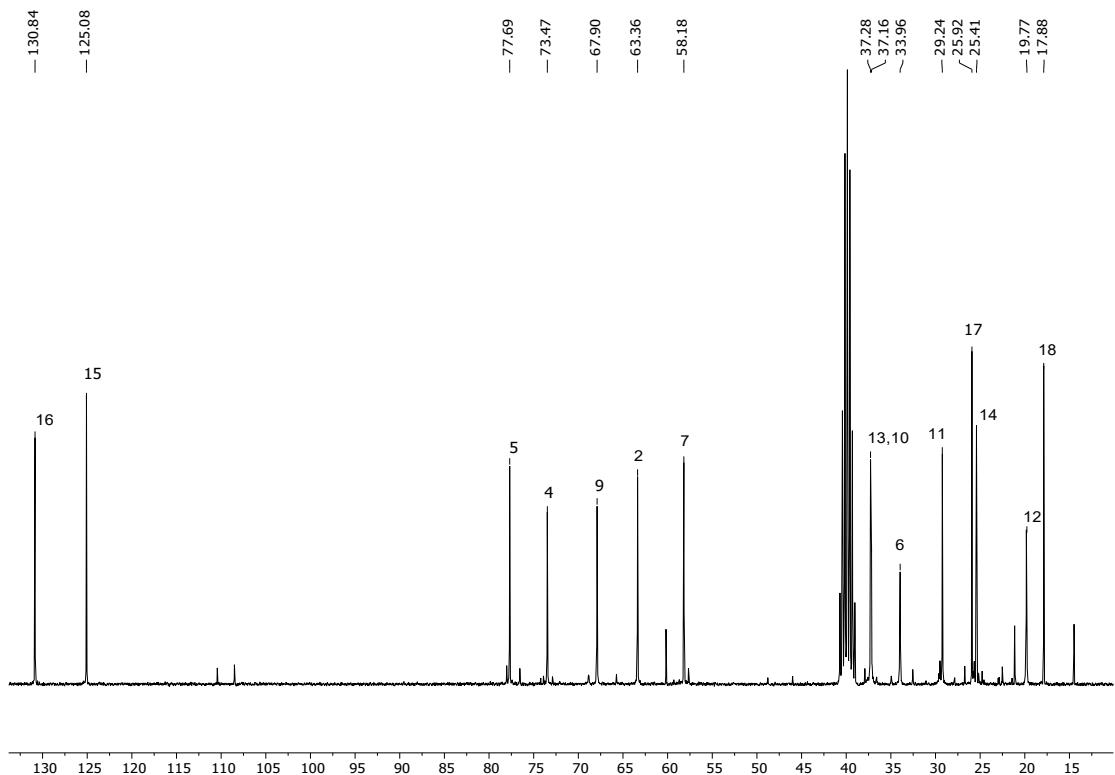


Figure S4. ^{13}C NMR ($\text{DMSO}-d_6$) spectrum of Triol-citro

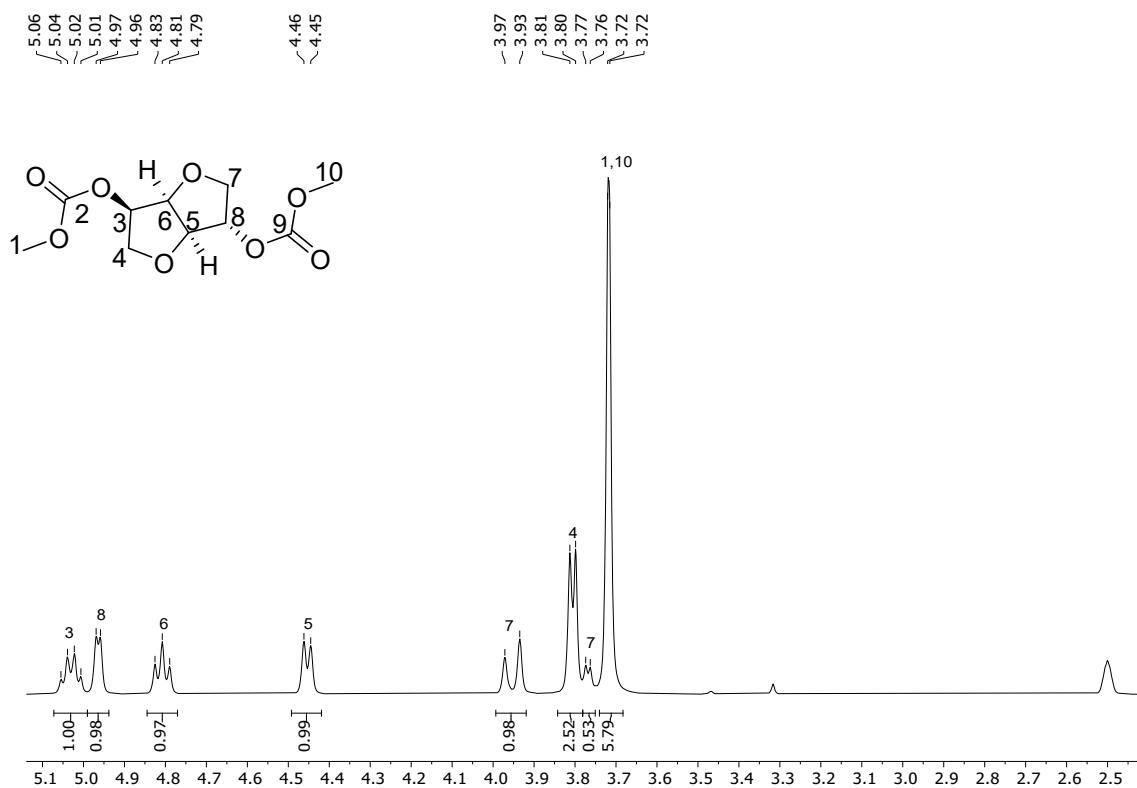


Figure S5. ^1H NMR ($\text{DMSO}-d_6$) spectrum of DCI

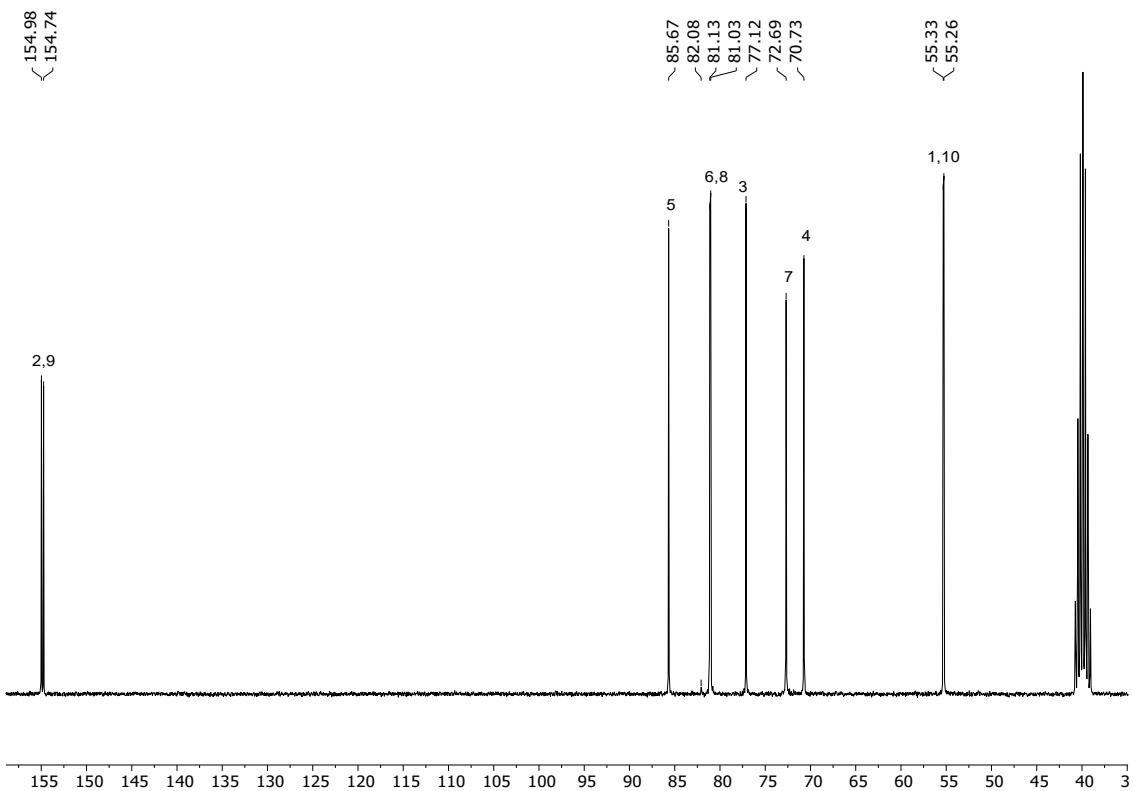


Figure S6. ^{13}C NMR ($\text{DMSO}-d_6$) spectrum of DCI

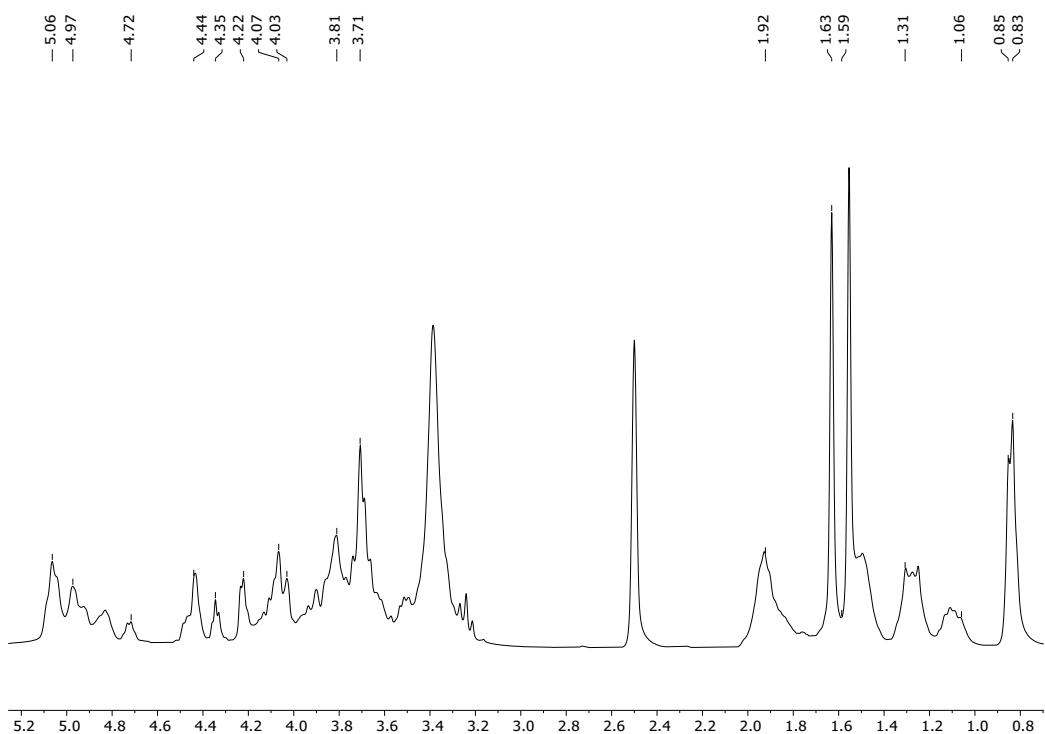


Figure S7. ^1H NMR (DMSO- d_6) spectrum of PC (Table 1, run 7)

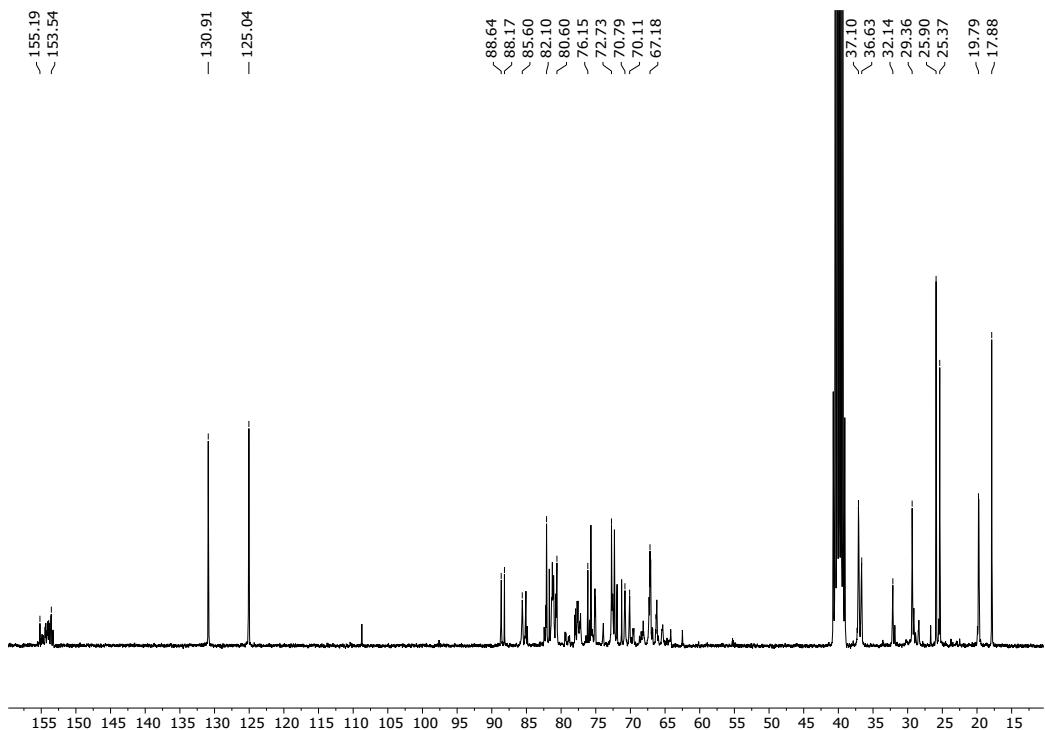


Figure S8. ^{13}C NMR (DMSO- d_6) spectrum of PC (Table 1, run 7)

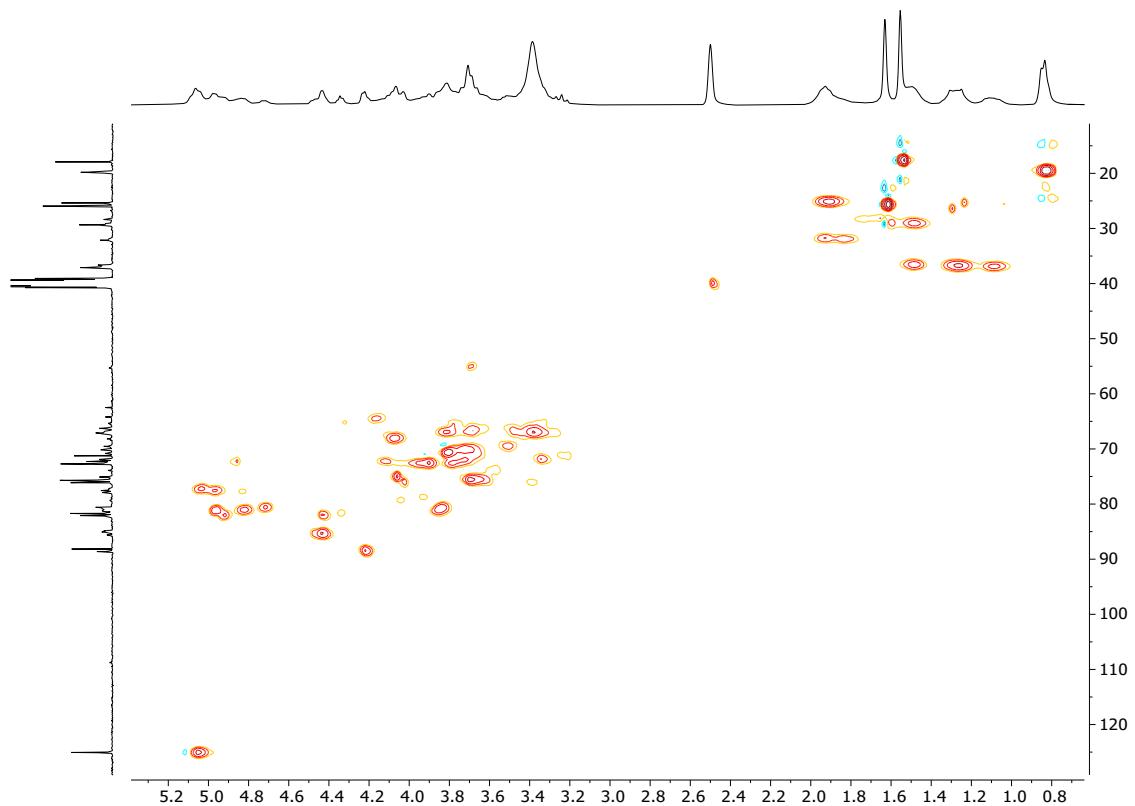


Figure S9. ^1H - ^{13}C HSQC ($\text{DMSO}-d_6$) spectrum of PC (Table 1, run 7)

II. FTIR

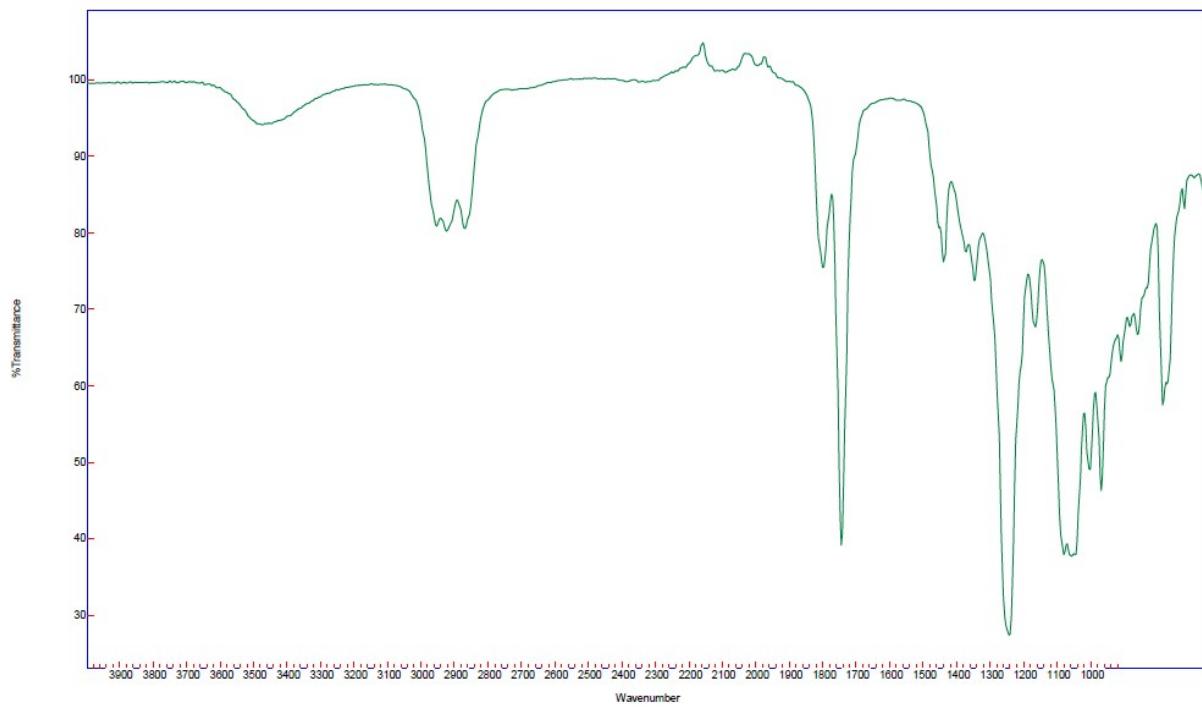


Figure S10. FTIR spectrum of PC (Table 1, run 2)

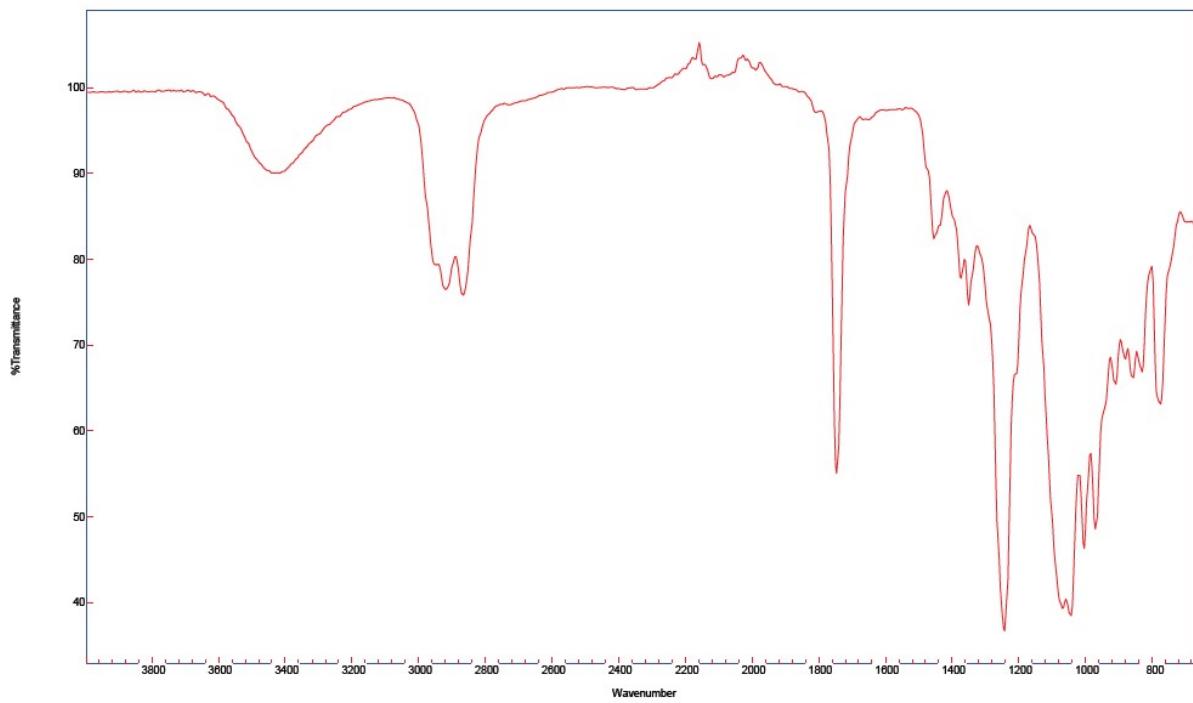


Figure S11. FTIR spectrum of PC (Table 1, run 3)

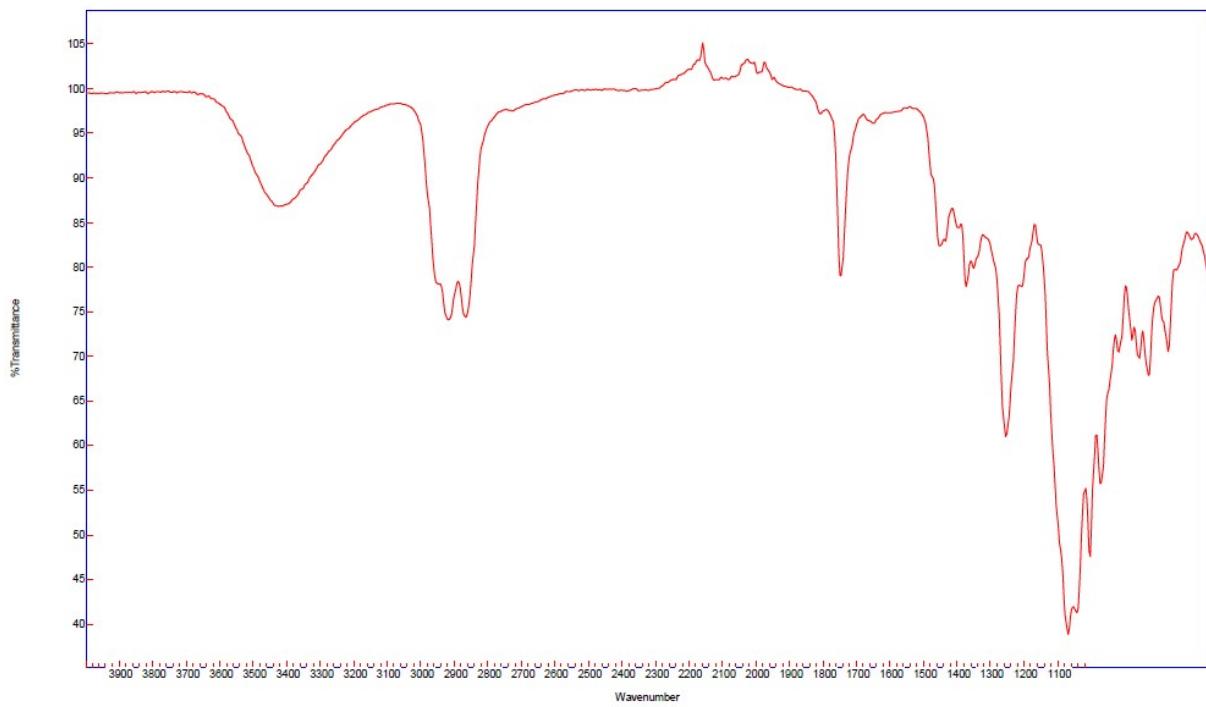


Figure S12. FTIR spectrum of PC (Table 1, run 4)

III. SEC

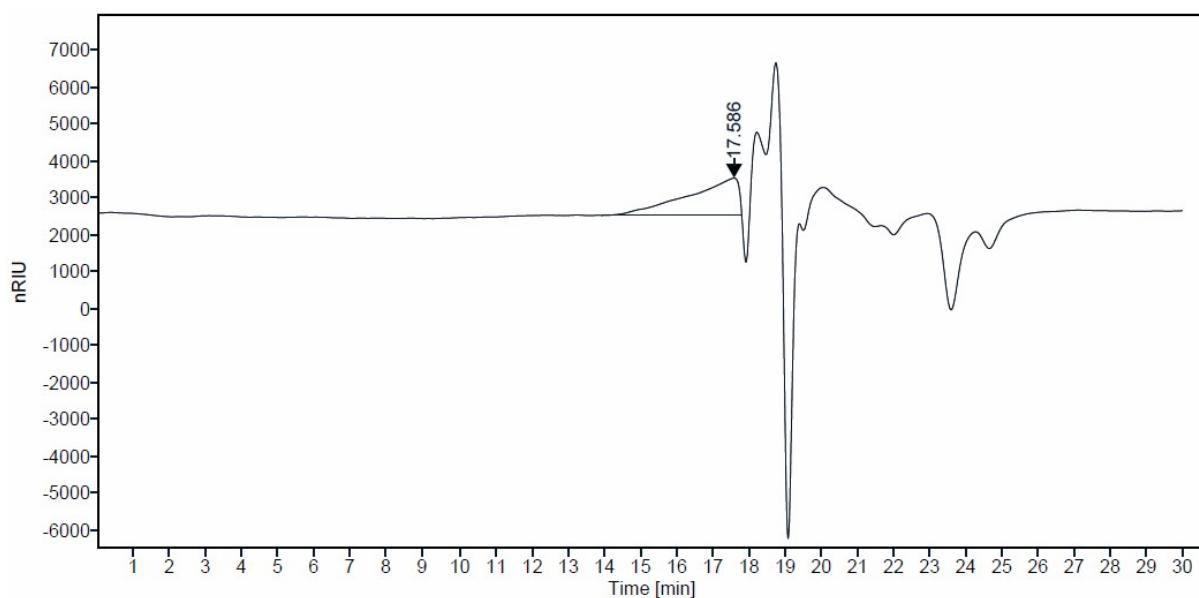


Figure S13. SEC trace of PC (Table 1, run 1)

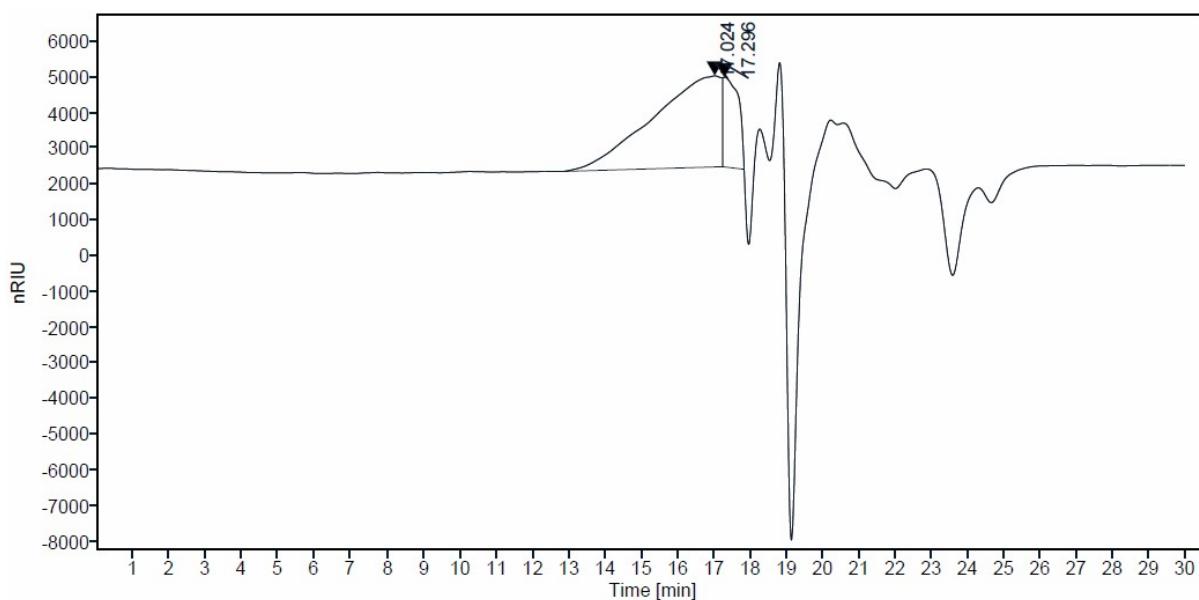


Figure S14. SEC trace of PC (Table 1, run 3)

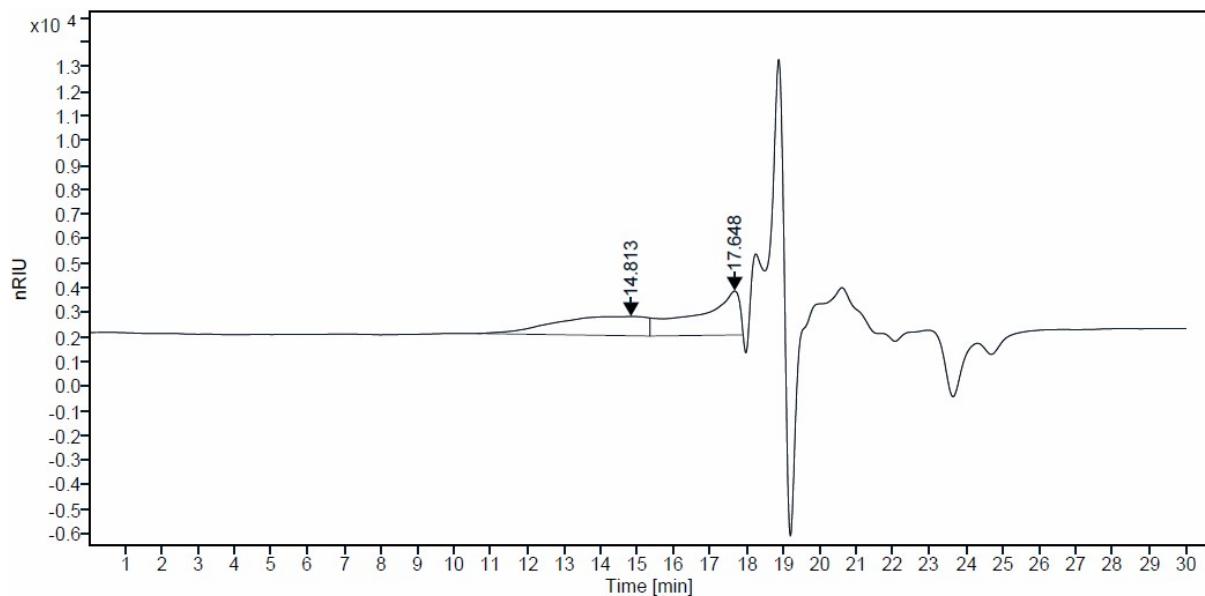


Figure S15. SEC trace of PC (Table 1, run 6)

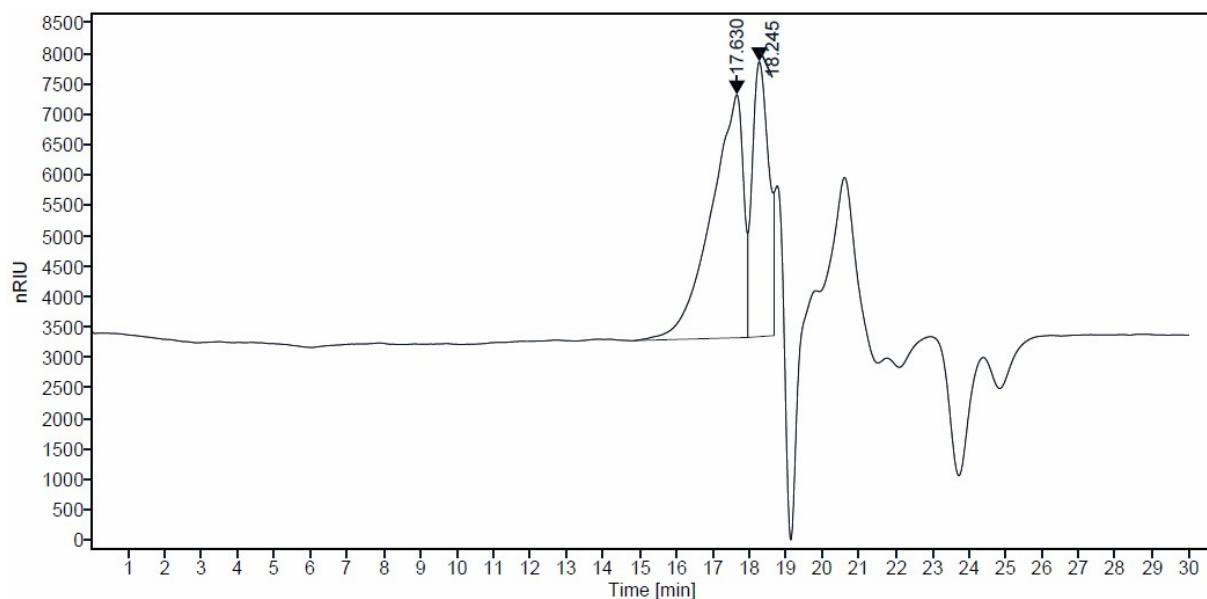


Figure S16. SEC trace of PC (Table 2, run 9)

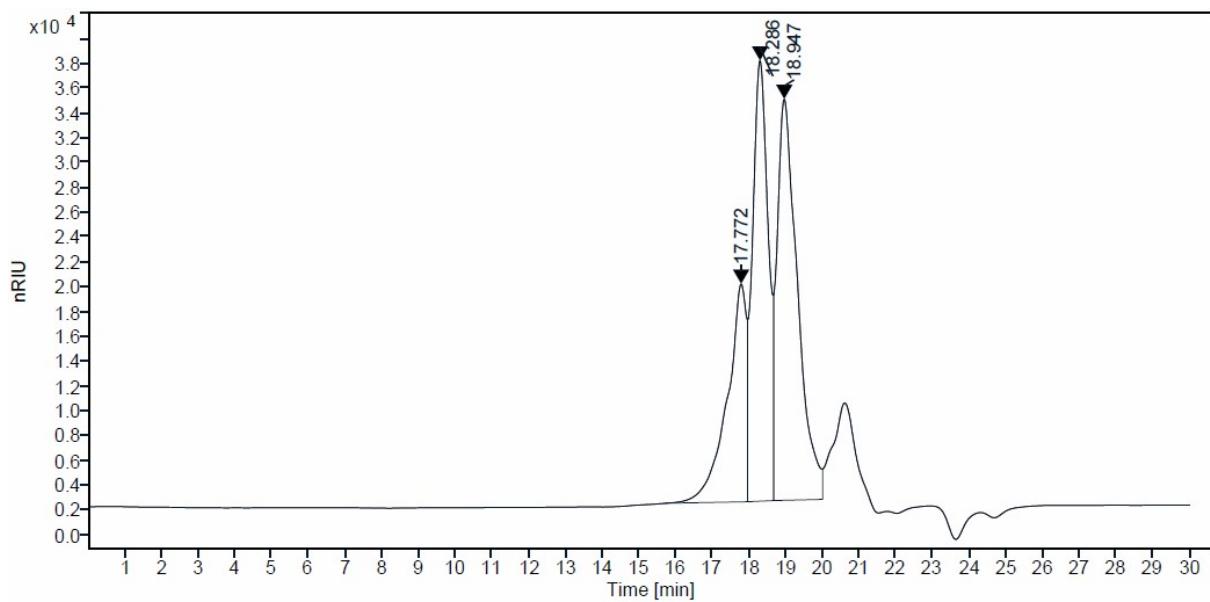


Figure S17. SEC trace of PC (Table 2, run 10)

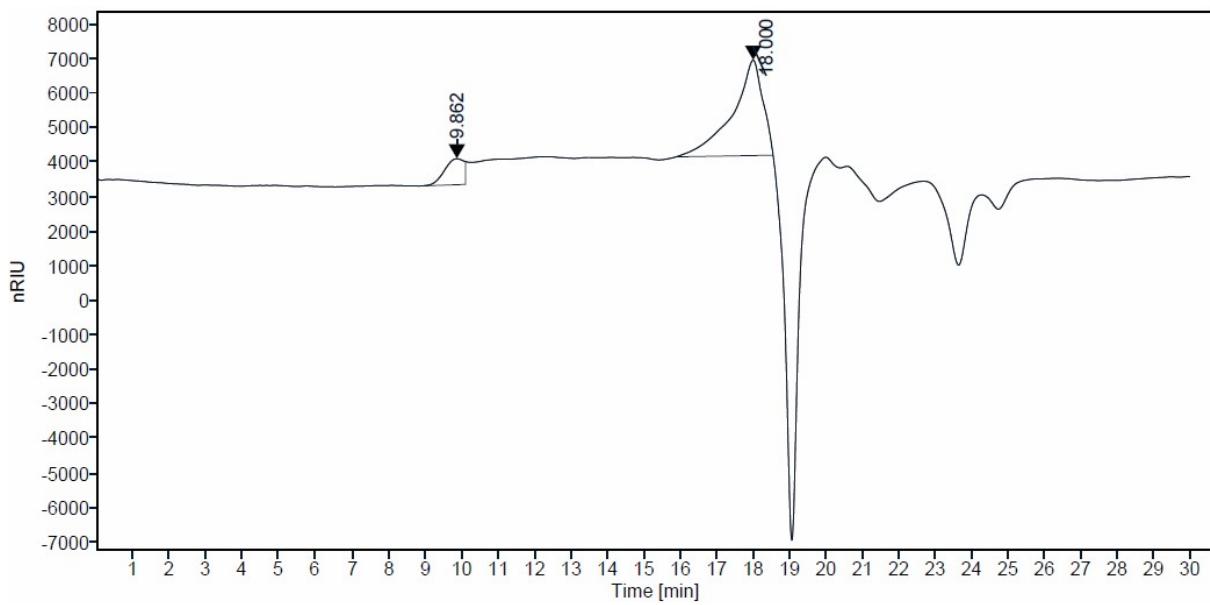


Figure S18. SEC trace of PC (Table 3, run 14)

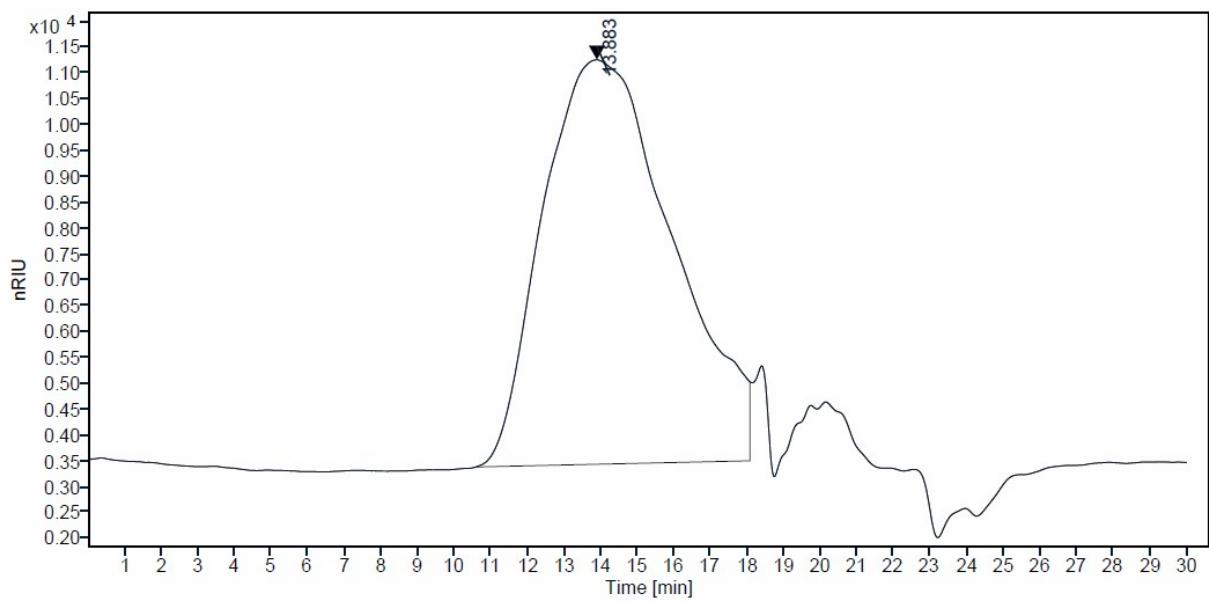


Figure S19. SEC trace of PC (Table 3, run 15)

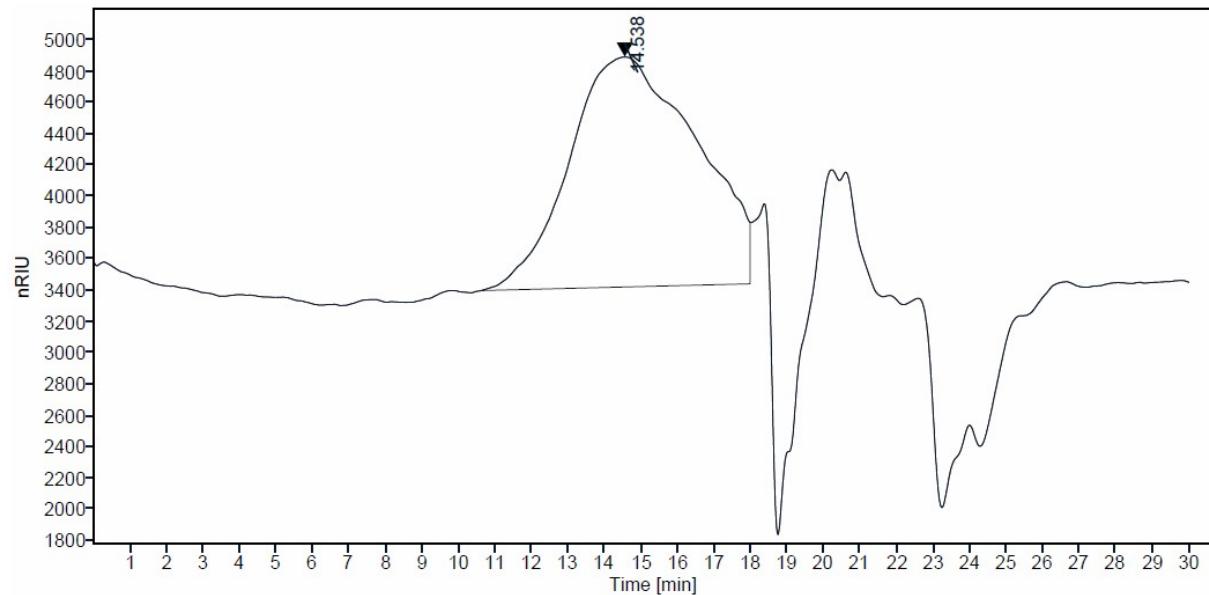


Figure S20. SEC trace of PC (Table 3, run 16)

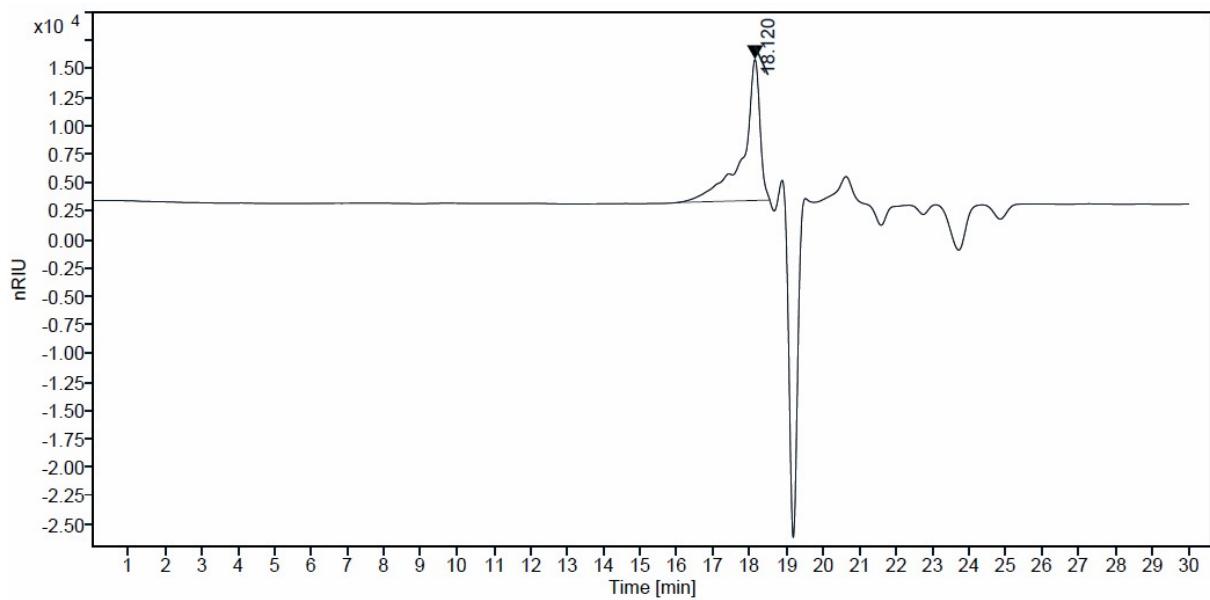


Figure S21. SEC trace of PC (Table 1, run 6) after UV irradiation for 1 h

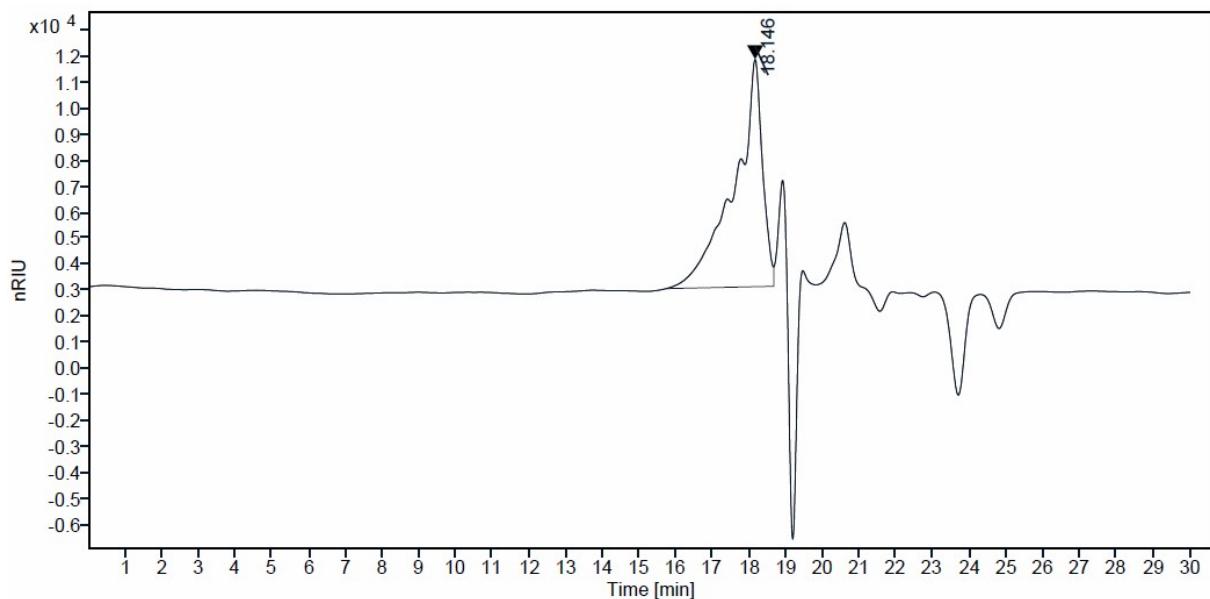


Figure S22. SEC trace of PC (Table 1, run 6) after UV irradiation for 6 h

IV. DSC

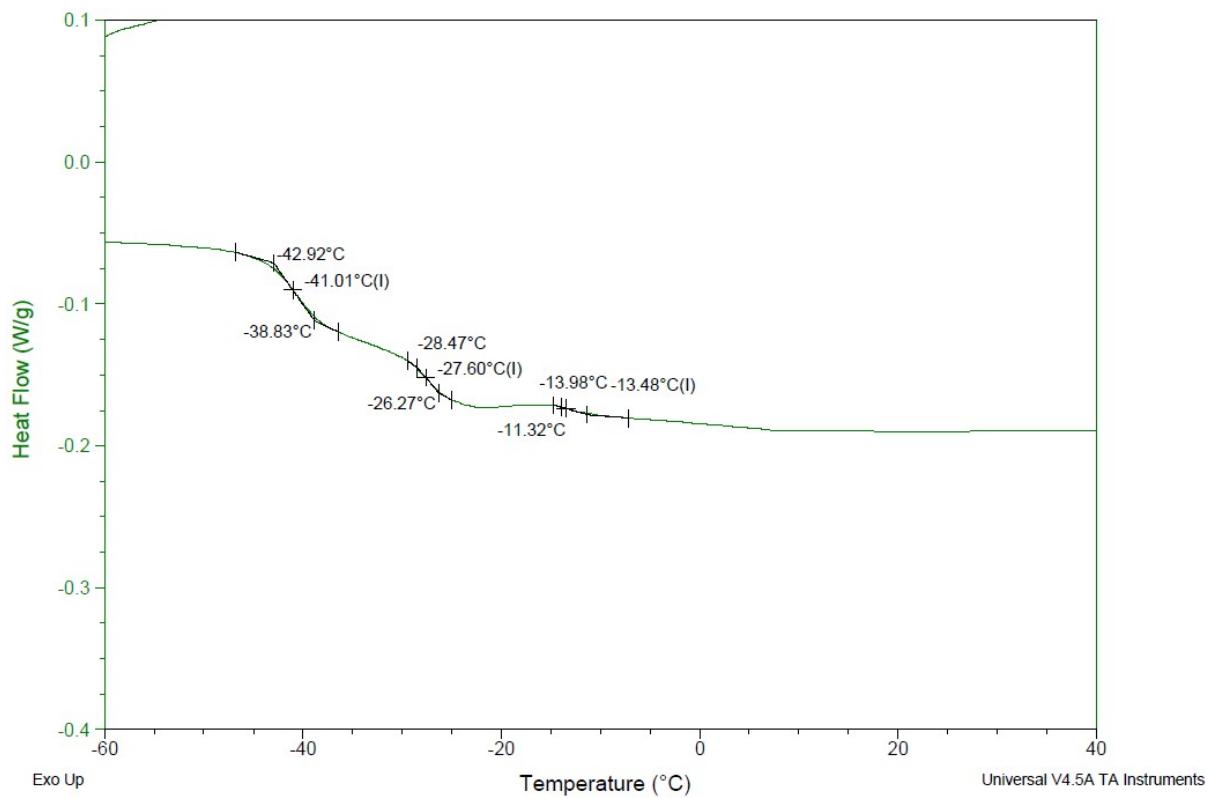


Figure S23. DSC thermogram (3rd heat cycle) of PC (Table 1, run 1)

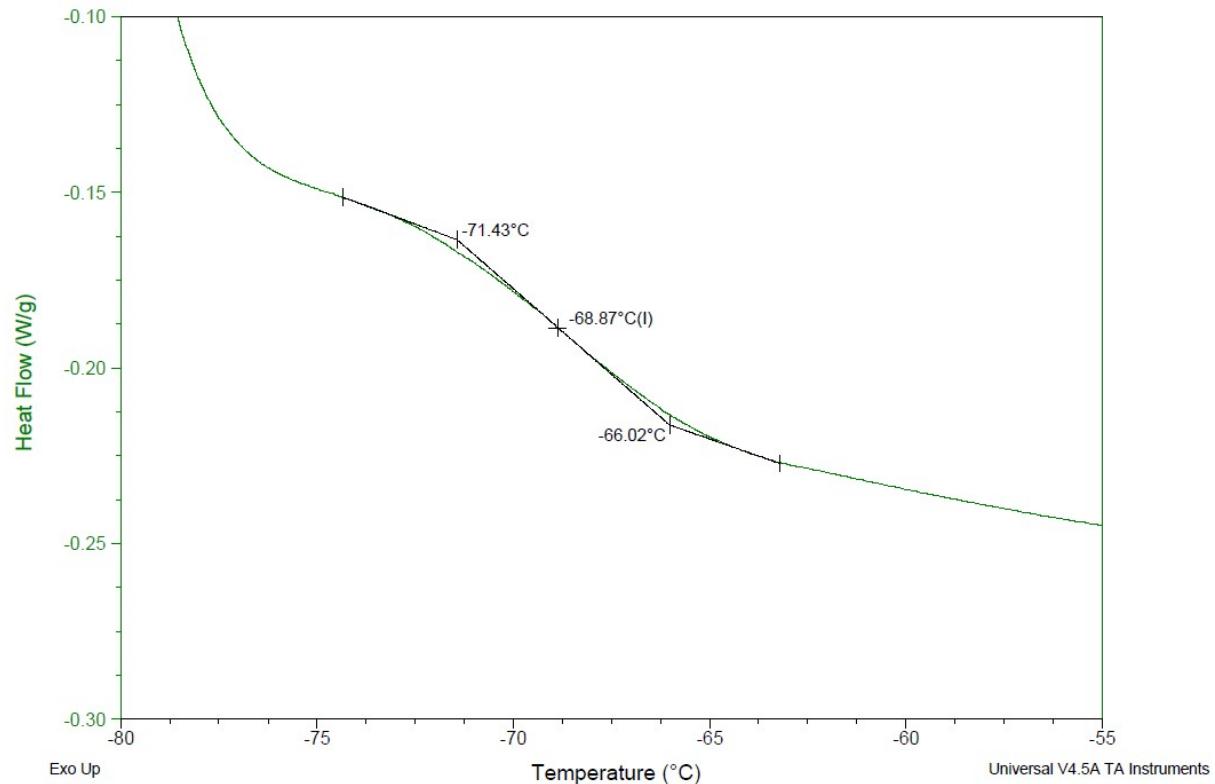


Figure S24. DSC thermogram (3rd heat cycle) of PC (Table 1, run 2)

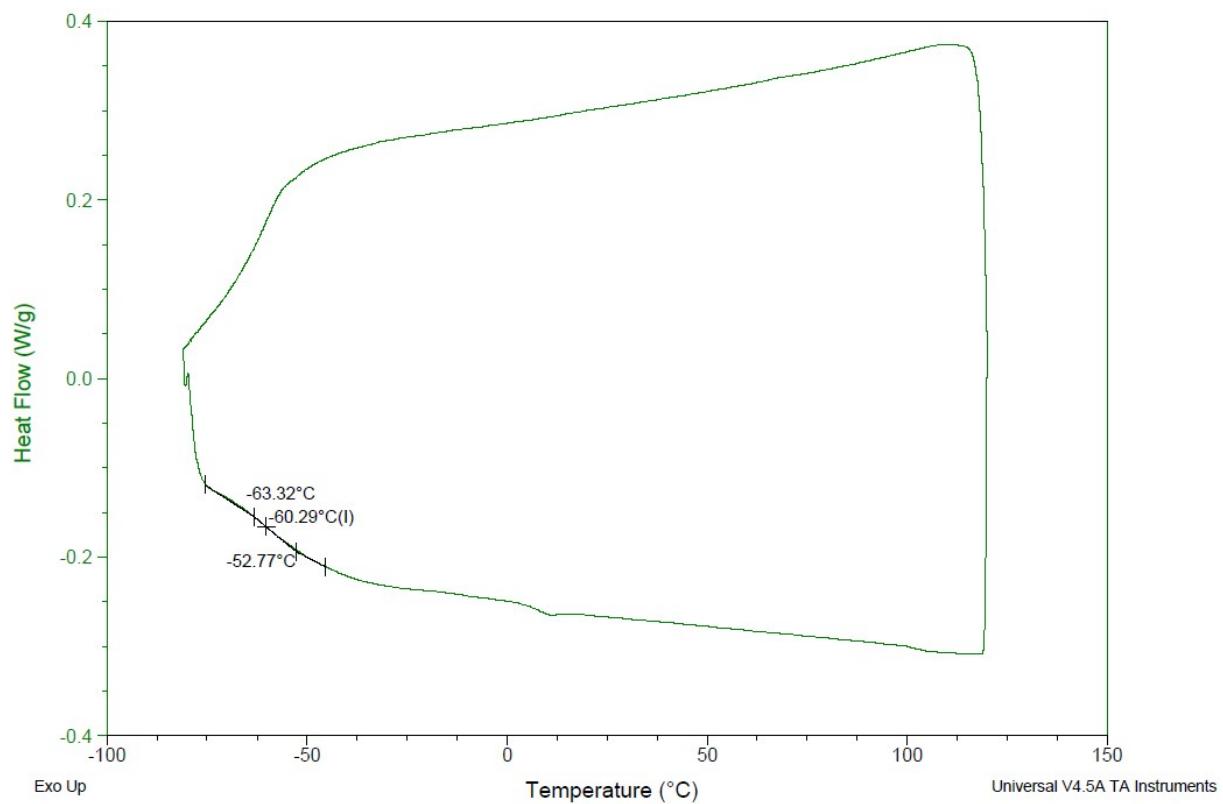


Figure S25. DSC thermogram (3rd heat cycle) of PC (Table 1, run 3)

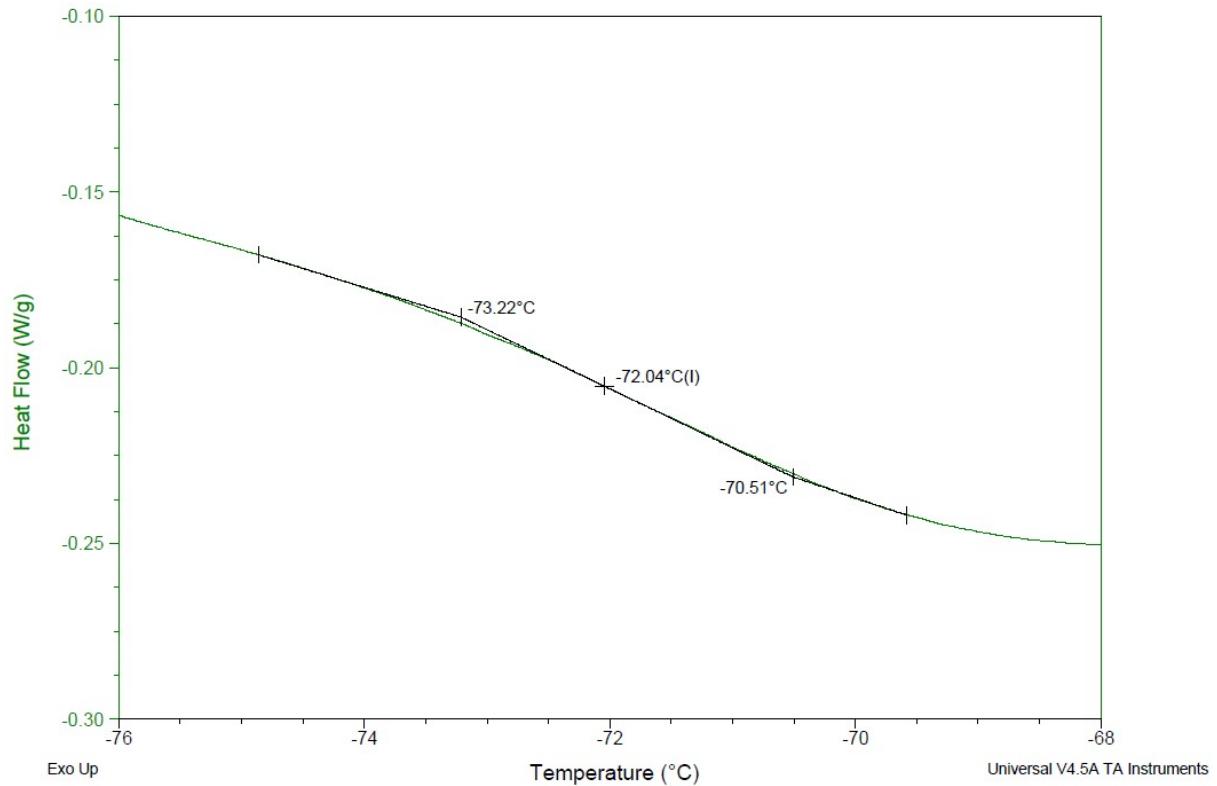


Figure S26. DSC thermogram (3rd heat cycle) of PC (Table 1, run 4)

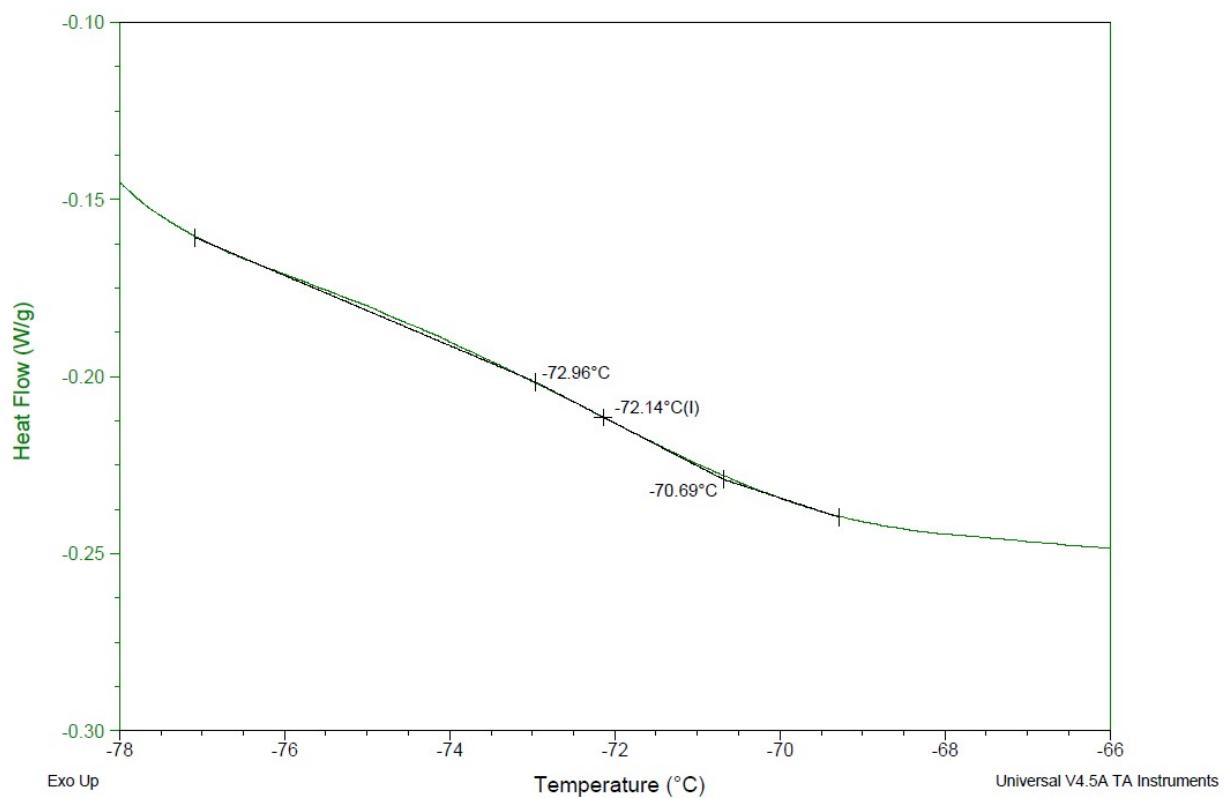


Figure S27. DSC thermogram (3rd heat cycle) of PC (Table 1, run 5)

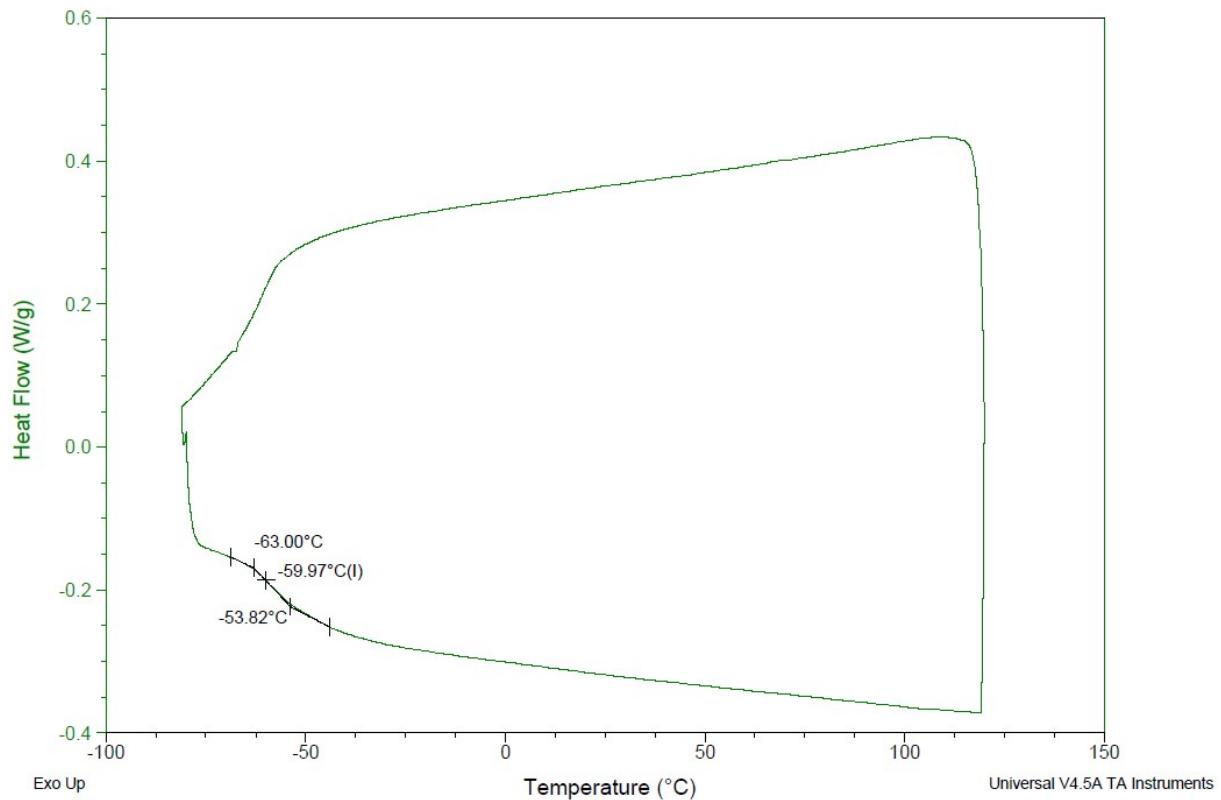


Figure S28. DSC thermogram (3rd heat cycle) of PC (Table 1, run 6)

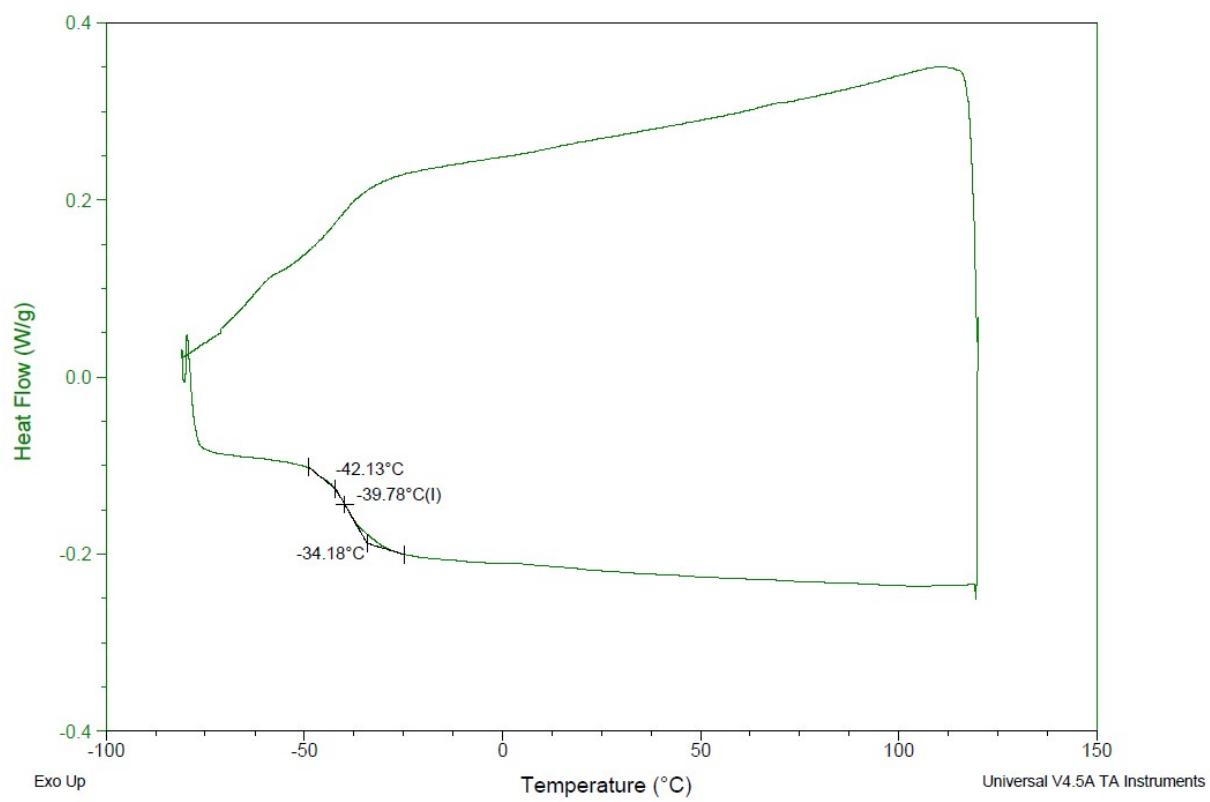


Figure S29. DSC thermogram (3rd heat cycle) of PC (Table 1, run 7)

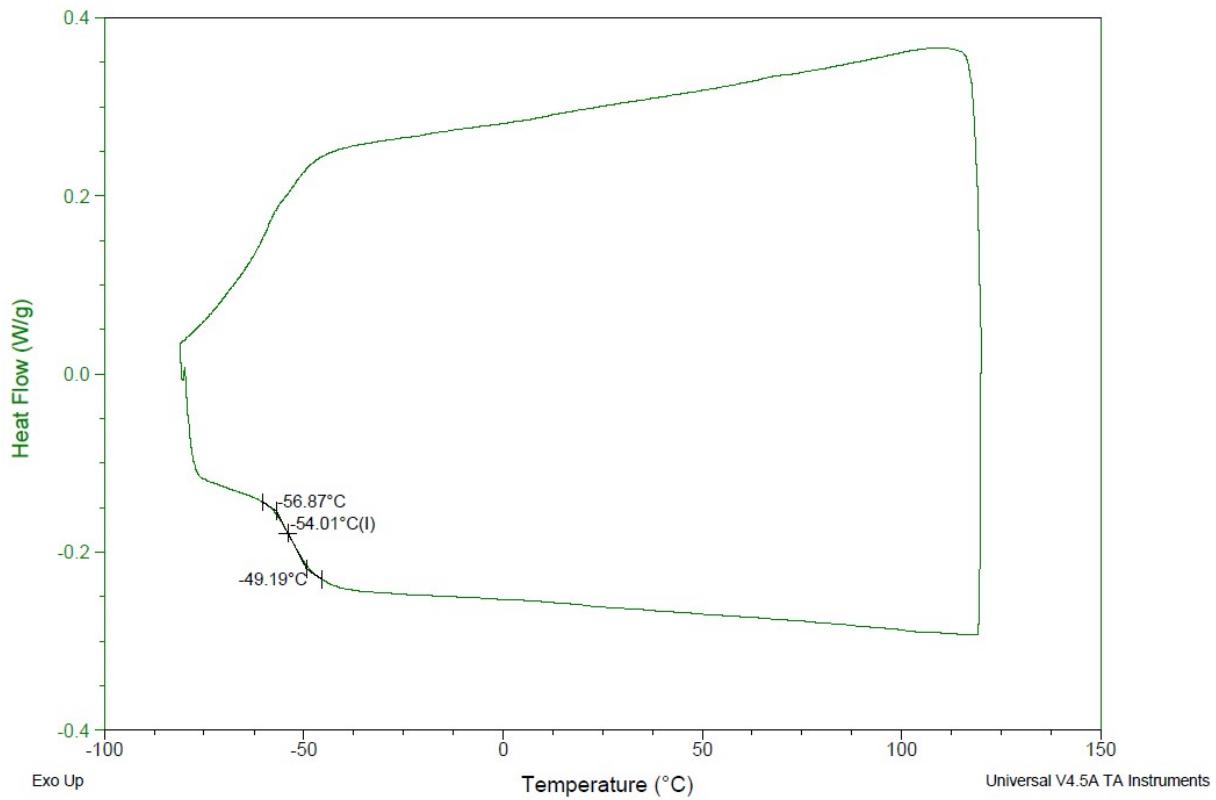


Figure S30. DSC thermogram (3rd heat cycle) of PC (Table 1, run 8)

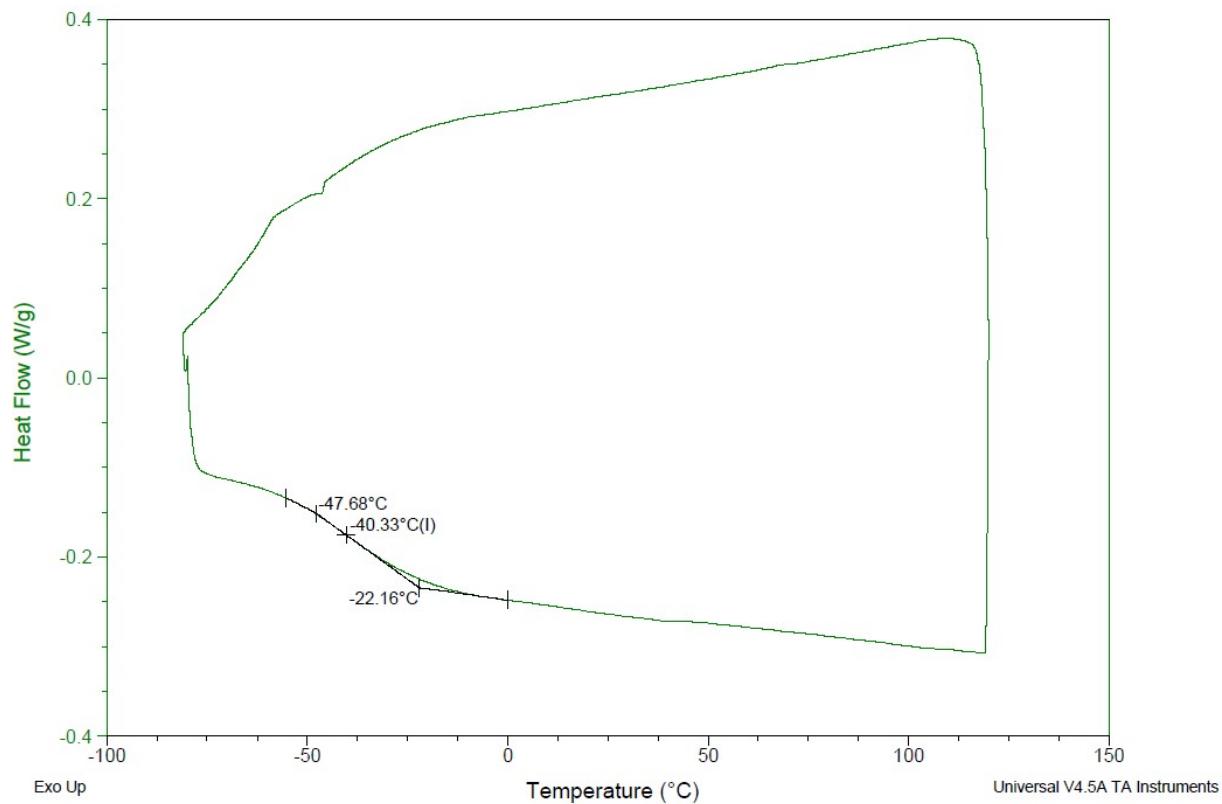


Figure S31. DSC thermogram (3rd heat cycle) of PC (Table 2, run 9)

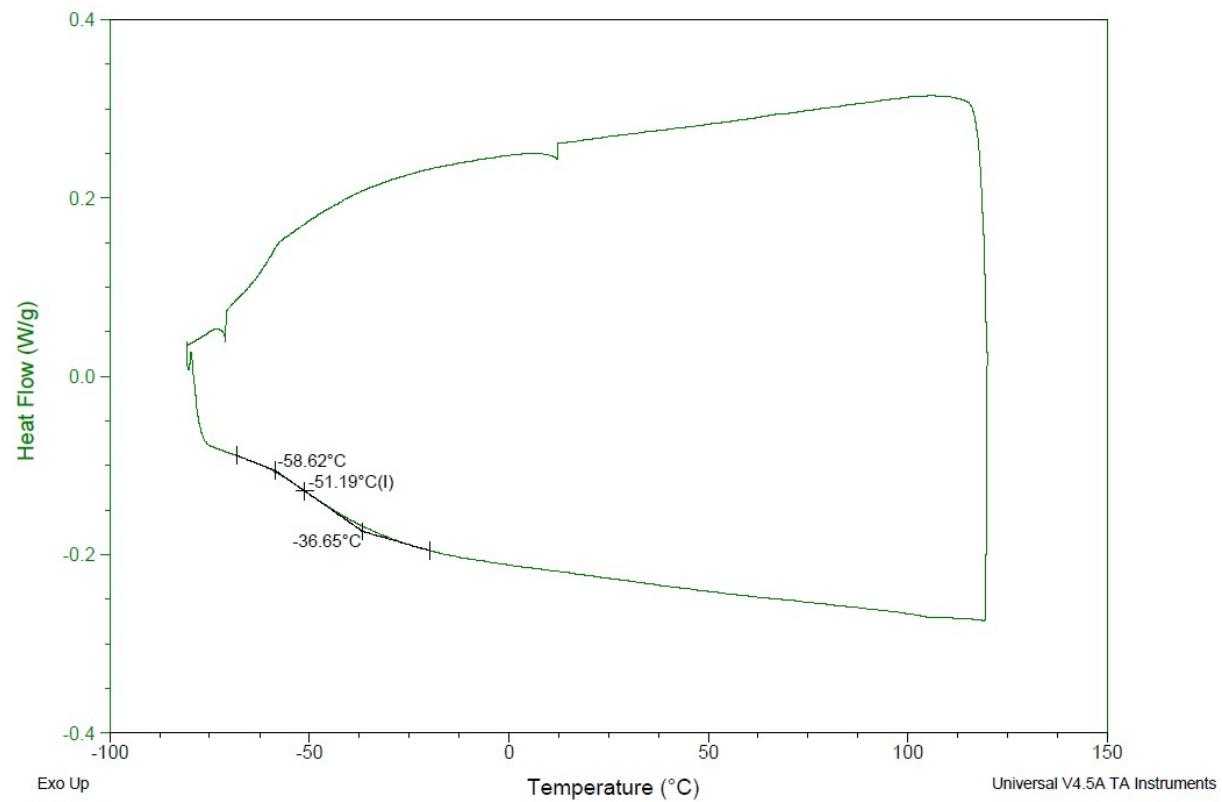


Figure S32. DSC thermogram (3rd heat cycle) of PC (Table 2, run 10)

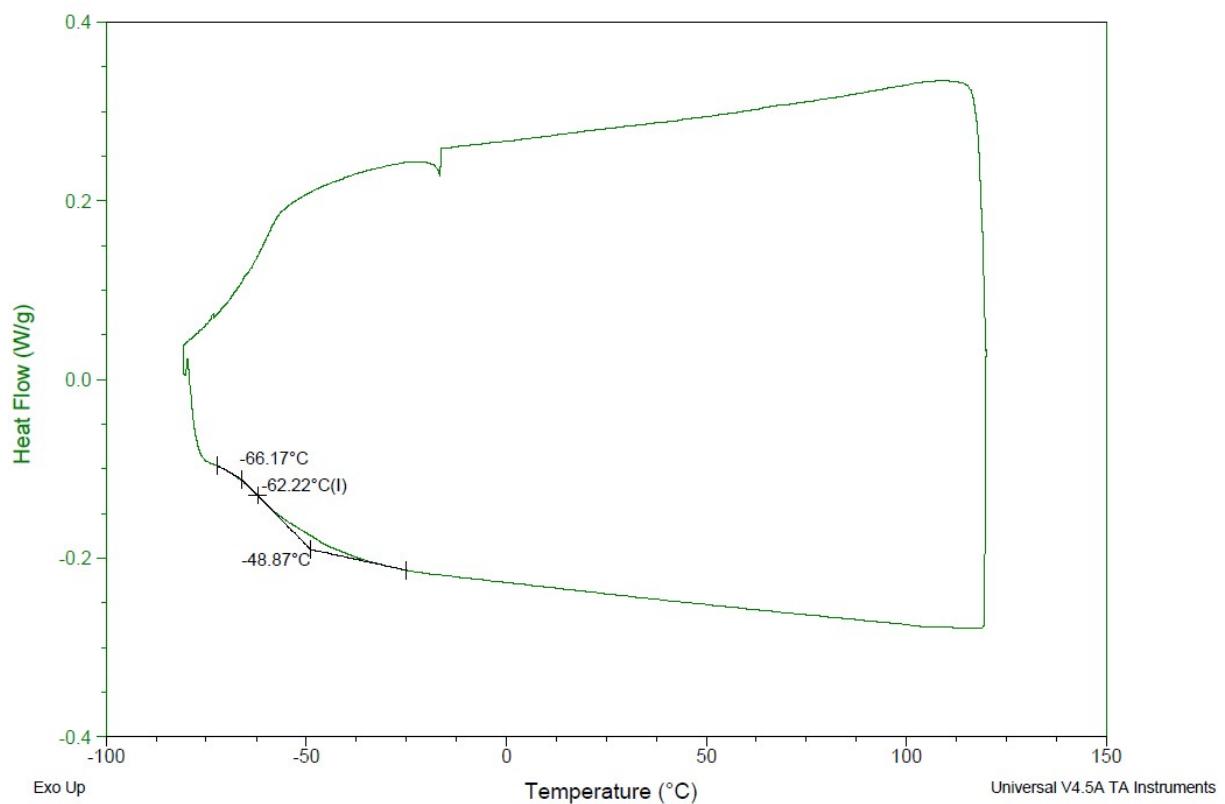


Figure S33. DSC thermogram (3rd heat cycle) of PC (Table 2, run 11)

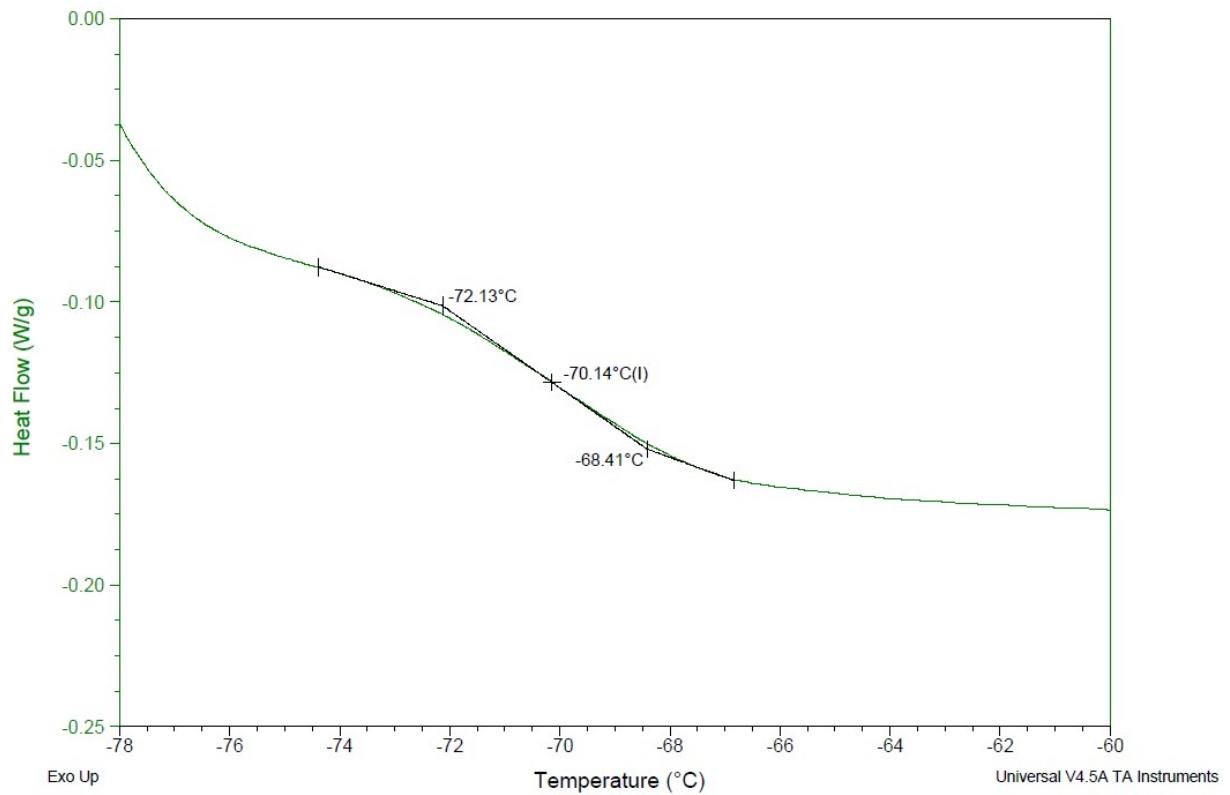


Figure S34. DSC thermogram (3rd heat cycle) of PC (Table 2, run 12)

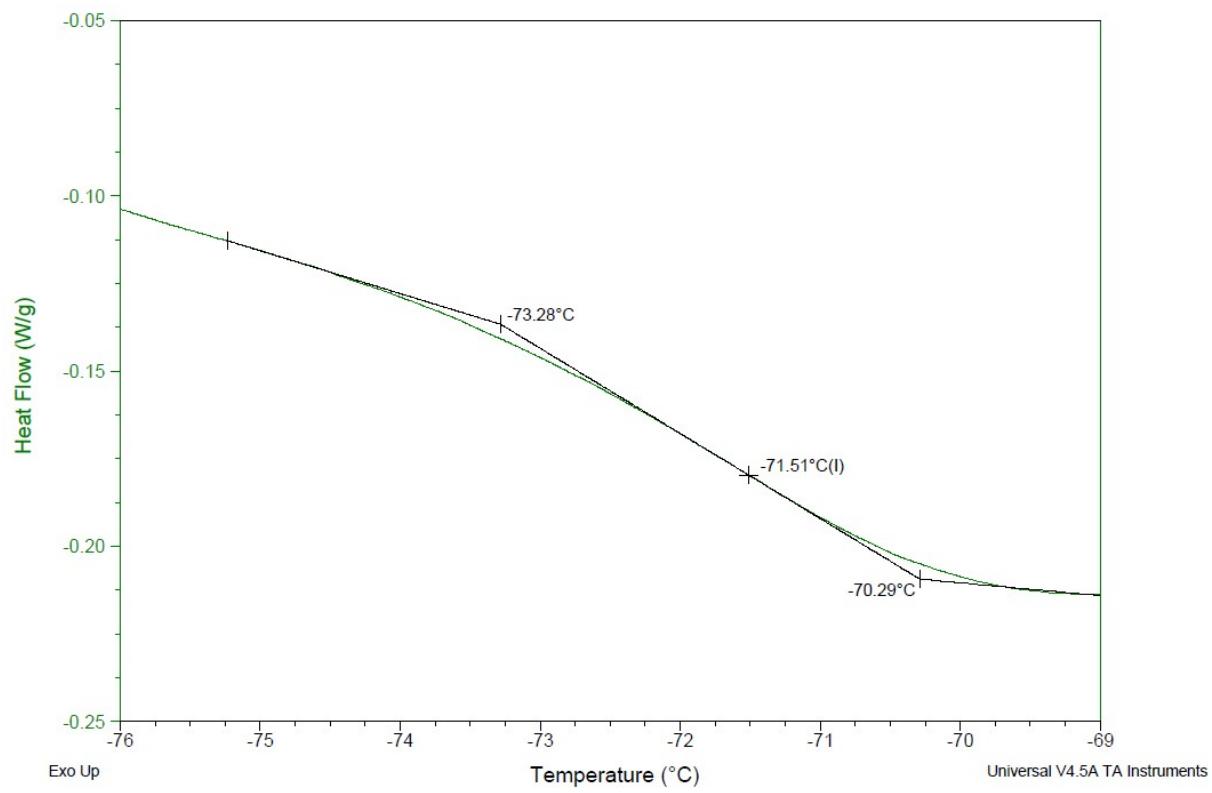


Figure S35. DSC thermogram (3rd heat cycle) of PC (Table 2, run 13)

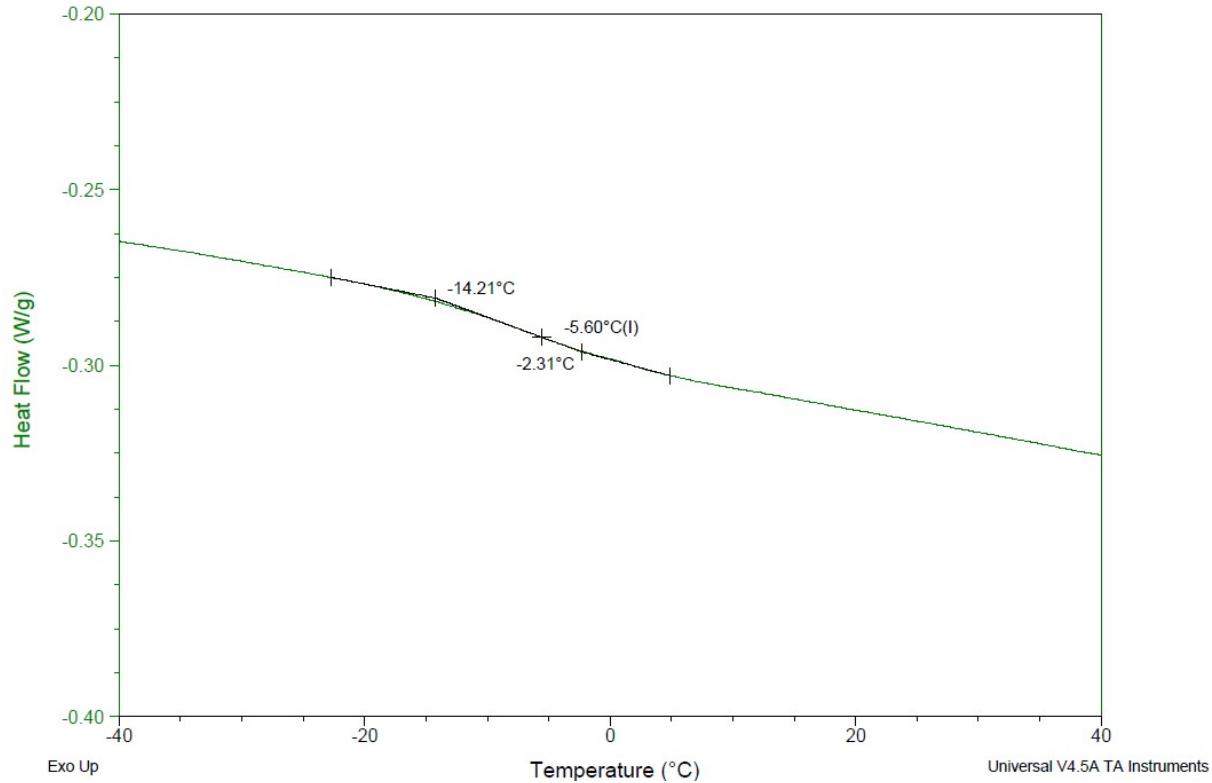


Figure S36. DSC thermogram (3rd heat cycle) of PC (Table 1, run 6) after UV irradiation for 6 h

I. TGA

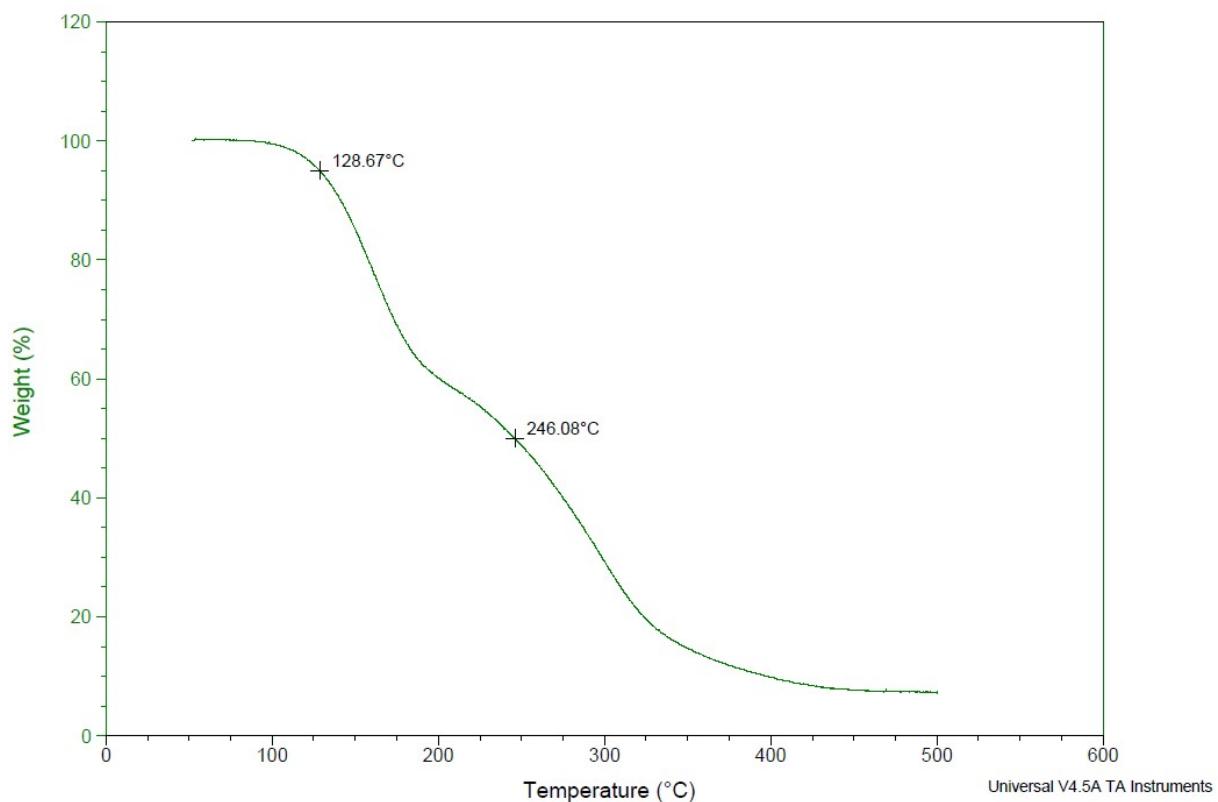


Figure S37. TGA thermogram of PC (Table 1, run 1)

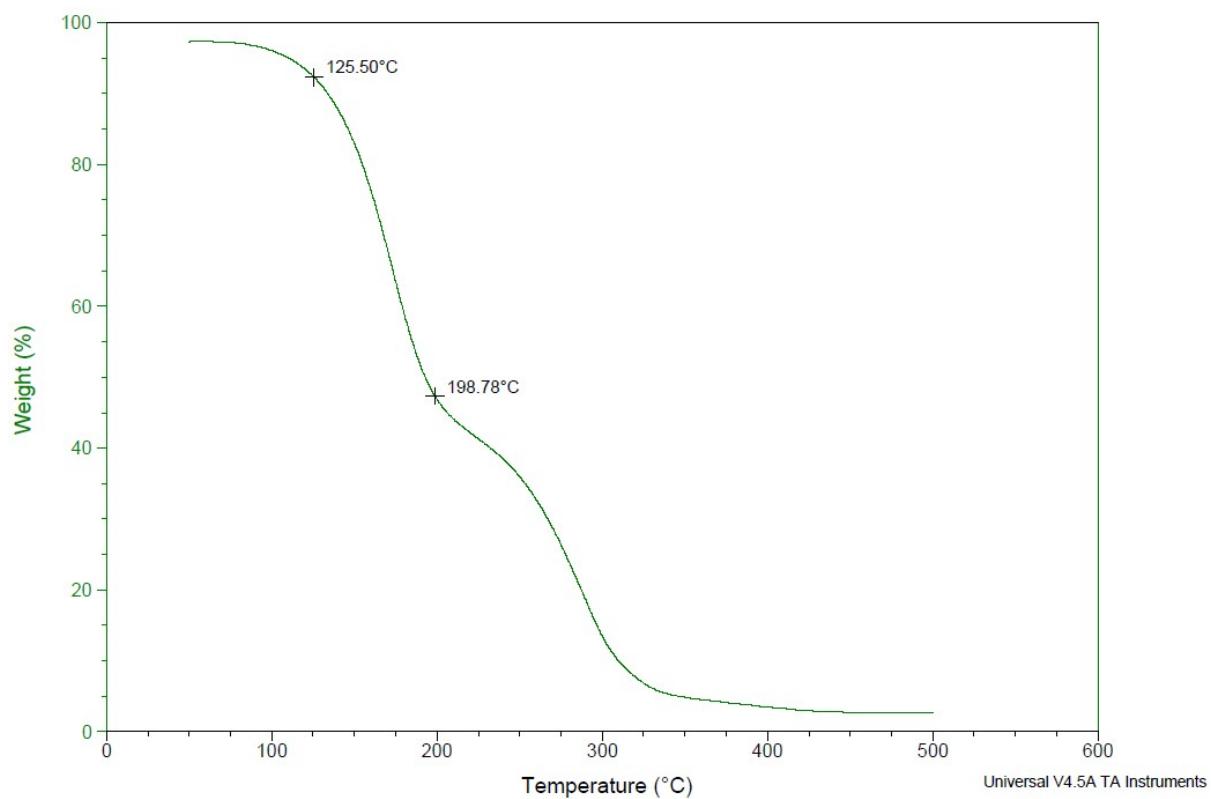


Figure S38. TGA thermogram of PC (Table 1, run 2)

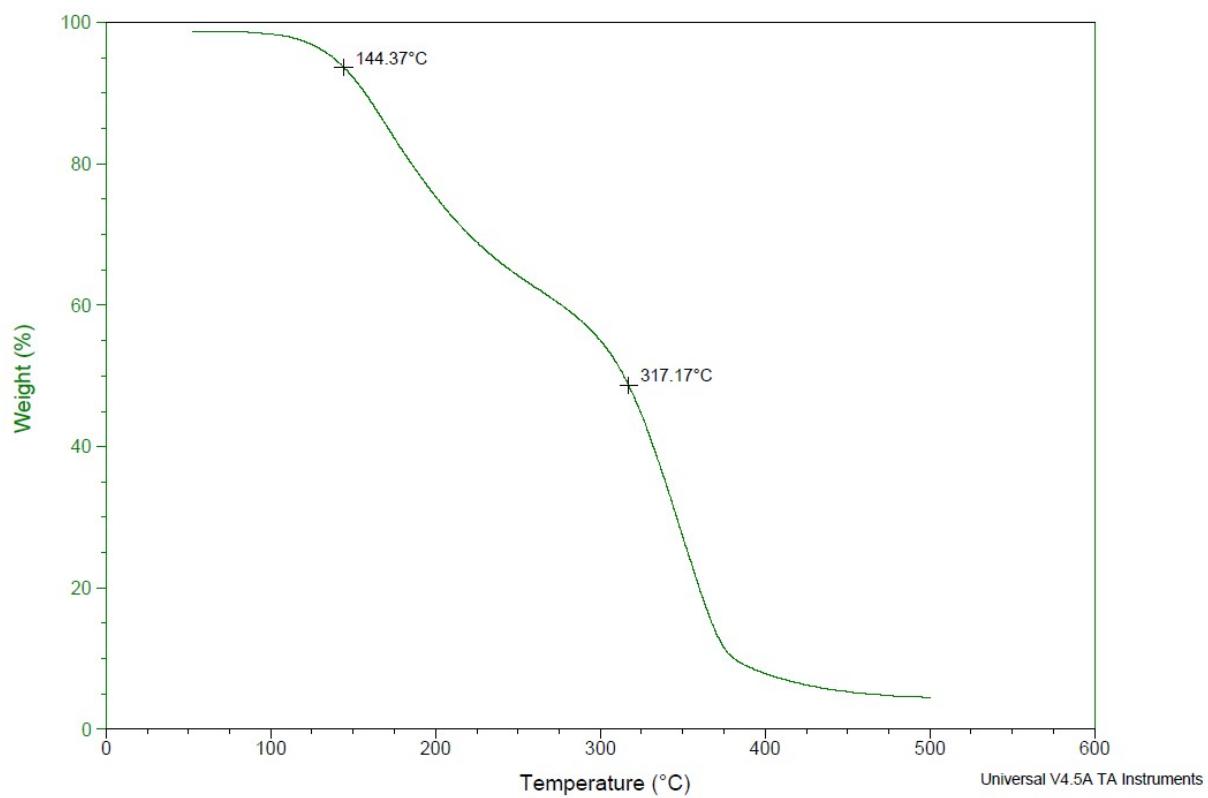


Figure S39. TGA thermogram of PC (Table 1, run 3)

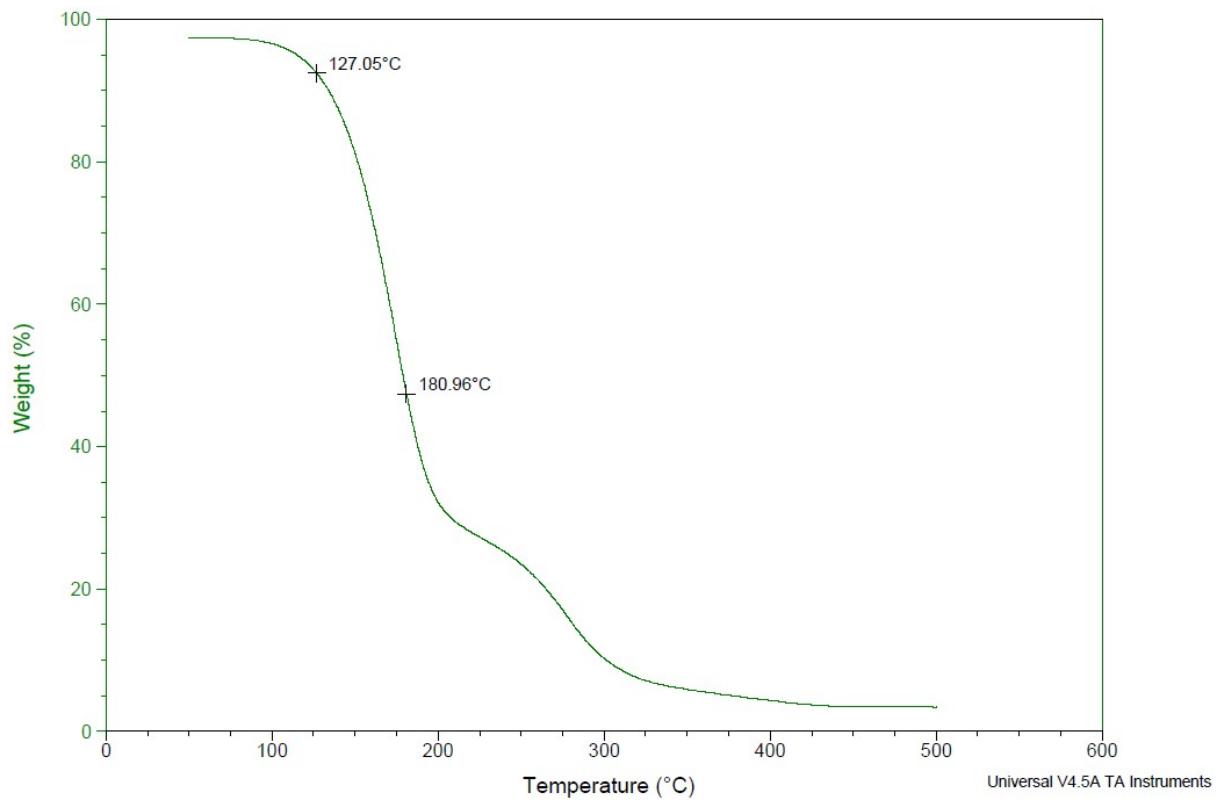


Figure S40. TGA thermogram of PC (Table 1, run 4)

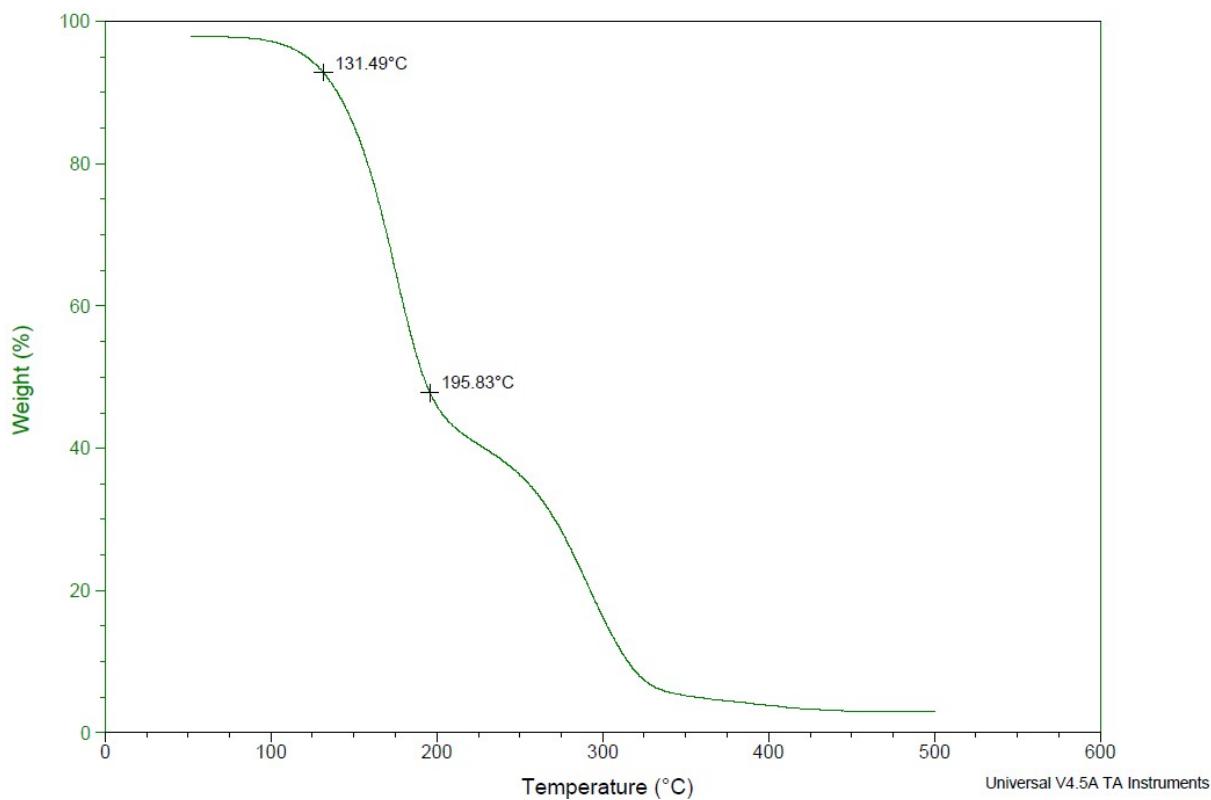


Figure S41. TGA thermogram of PC (Table 1, run 5)

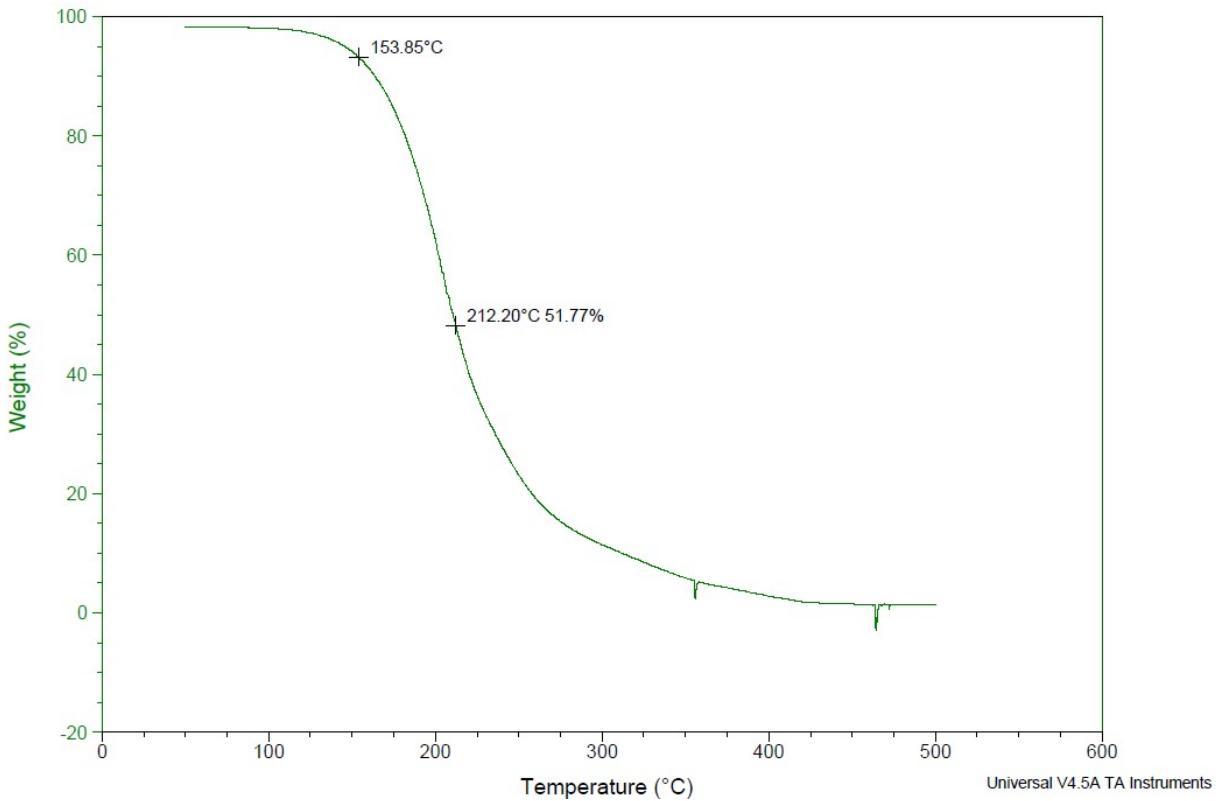


Figure S42. TGA thermogram of PC (Table 1, run 6)

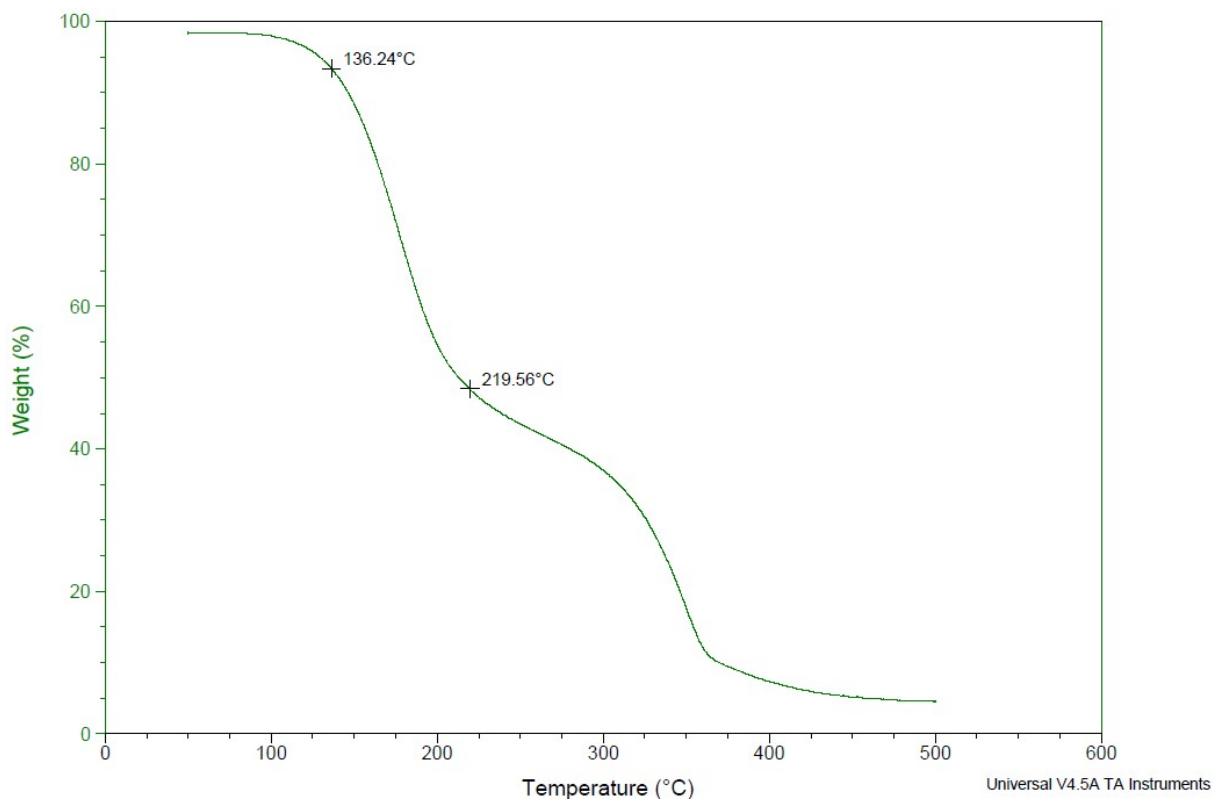


Figure S43. TGA thermogram of PC (Table 1, run 7)

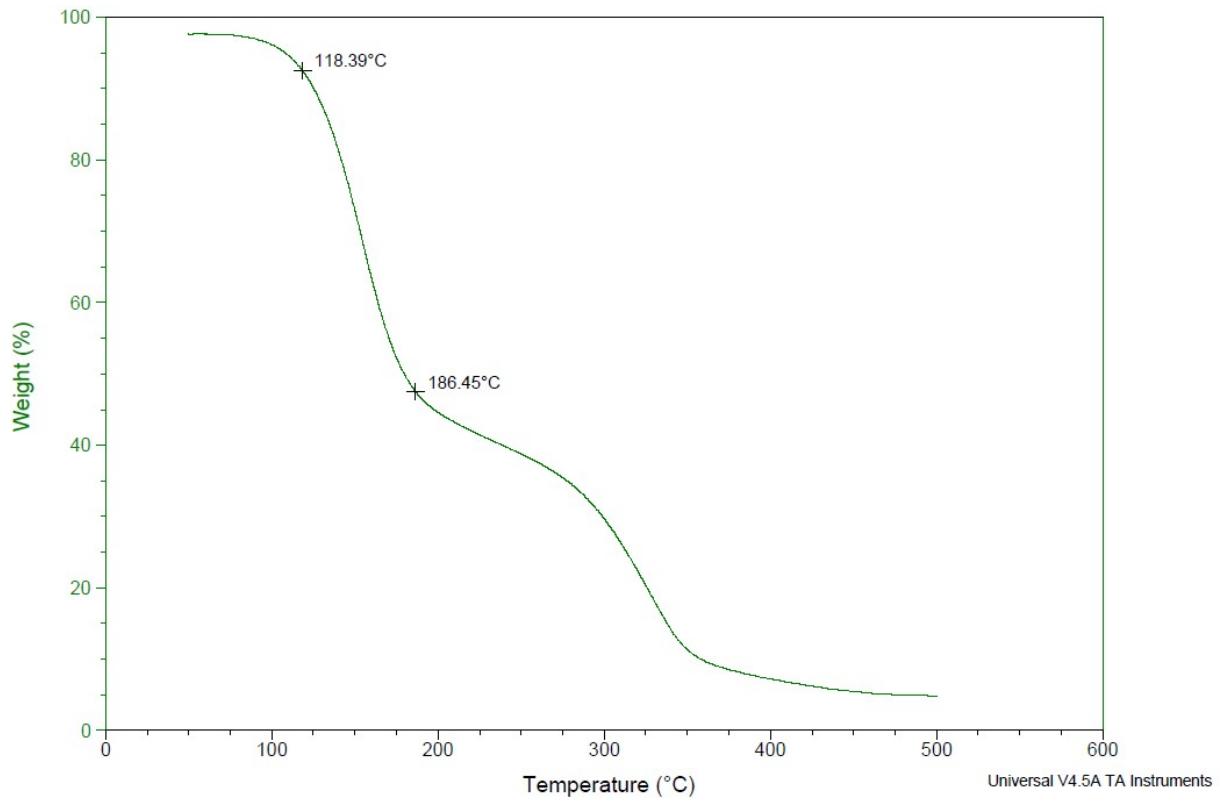


Figure S44. TGA thermogram of PC (Table 1, run 8)

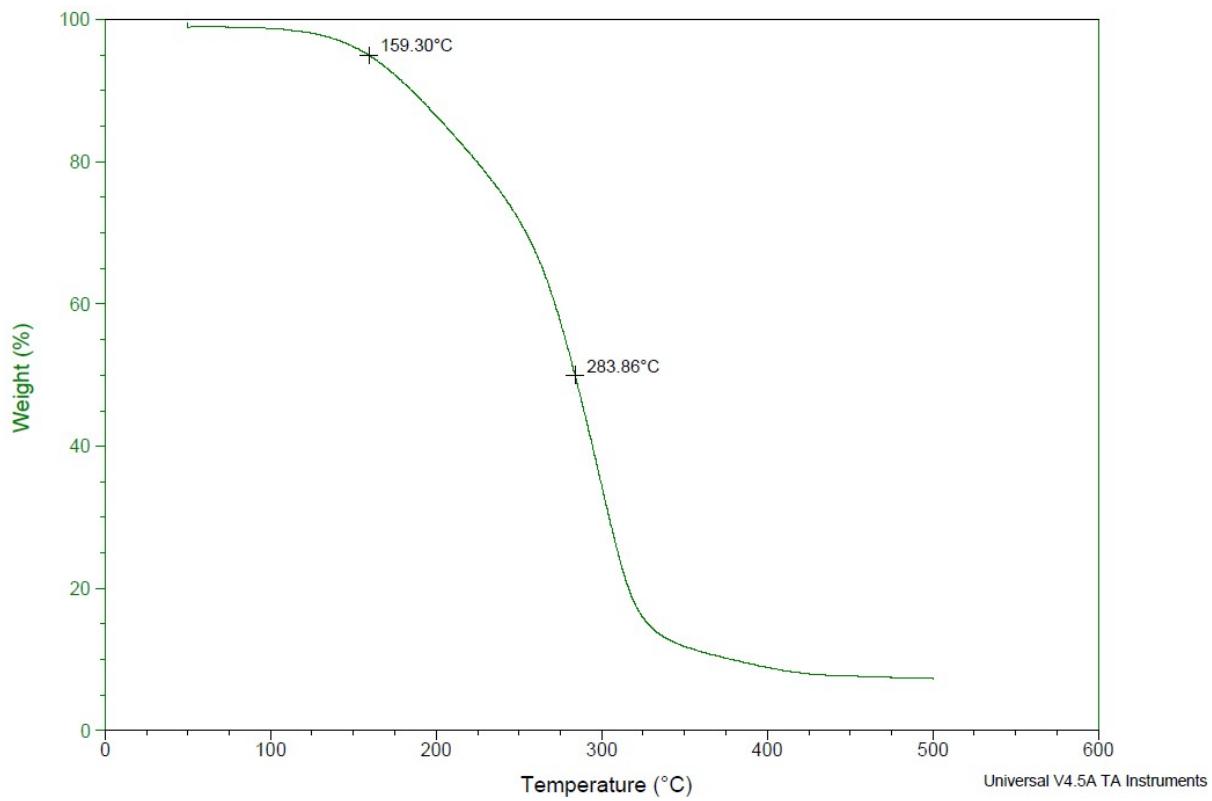


Figure S45. TGA thermogram of PC (Table 2, run 9)

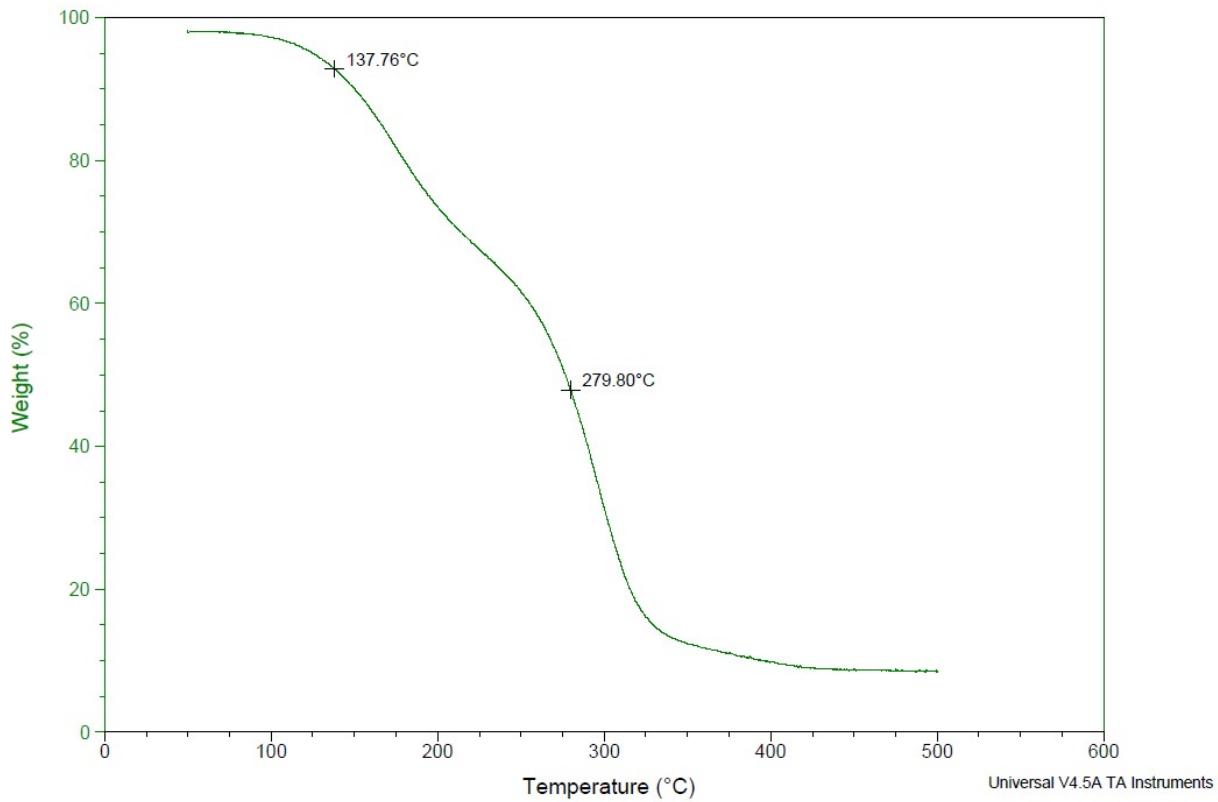


Figure S46. TGA thermogram of PC (Table 2, run 10)

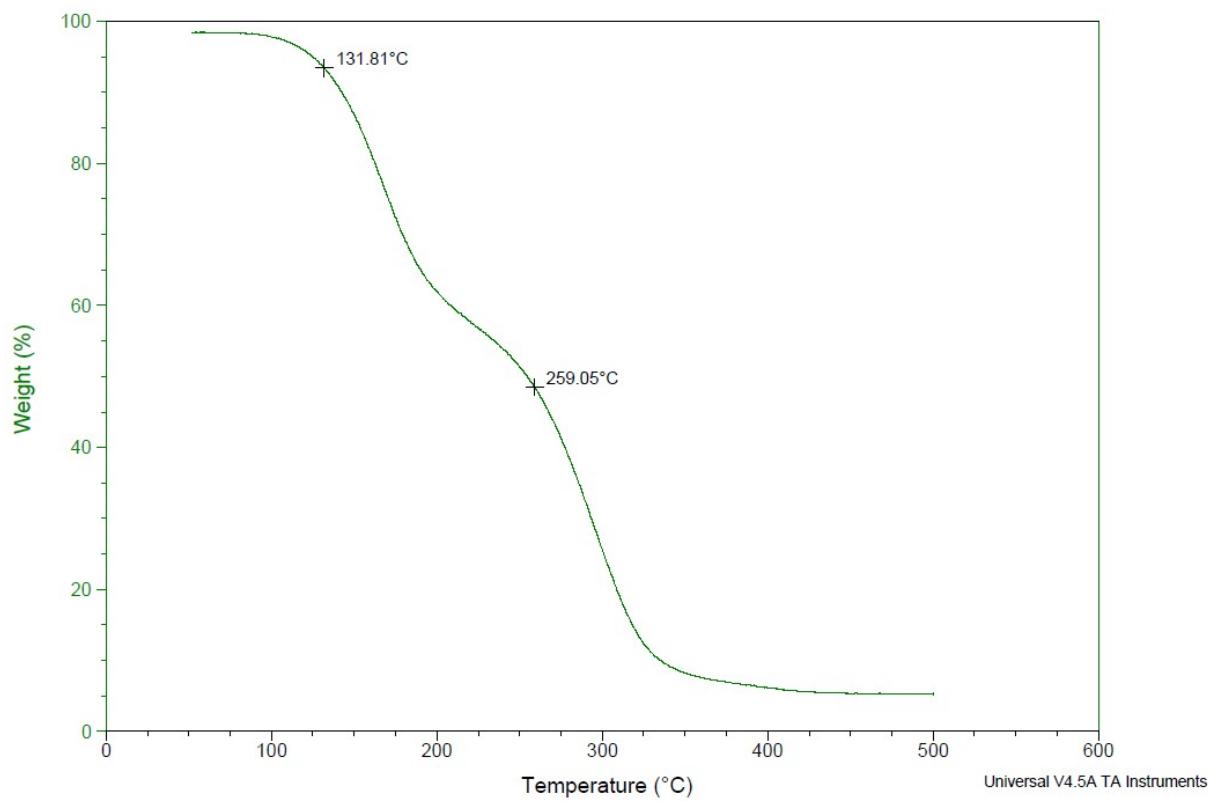


Figure S47. TGA thermogram of PC (Table 2, run 11)

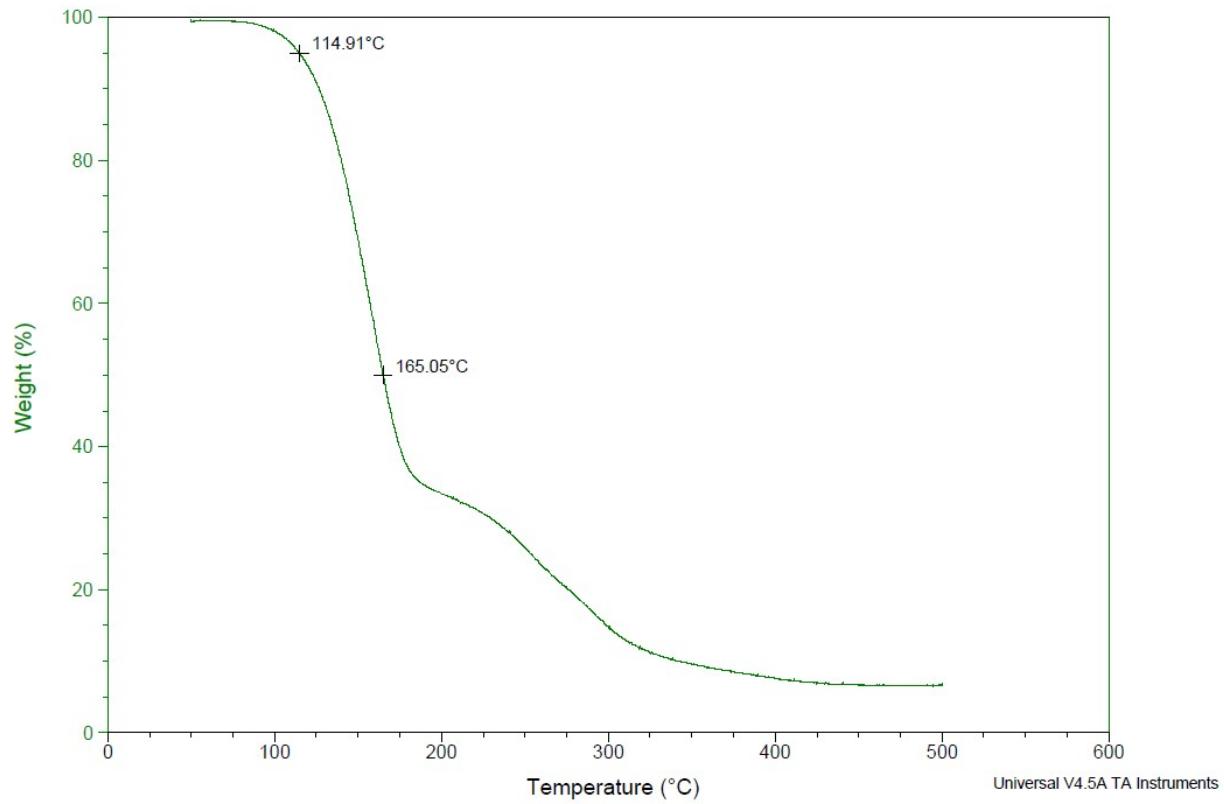


Figure S48. TGA thermogram of PC (Table 2, run 12)

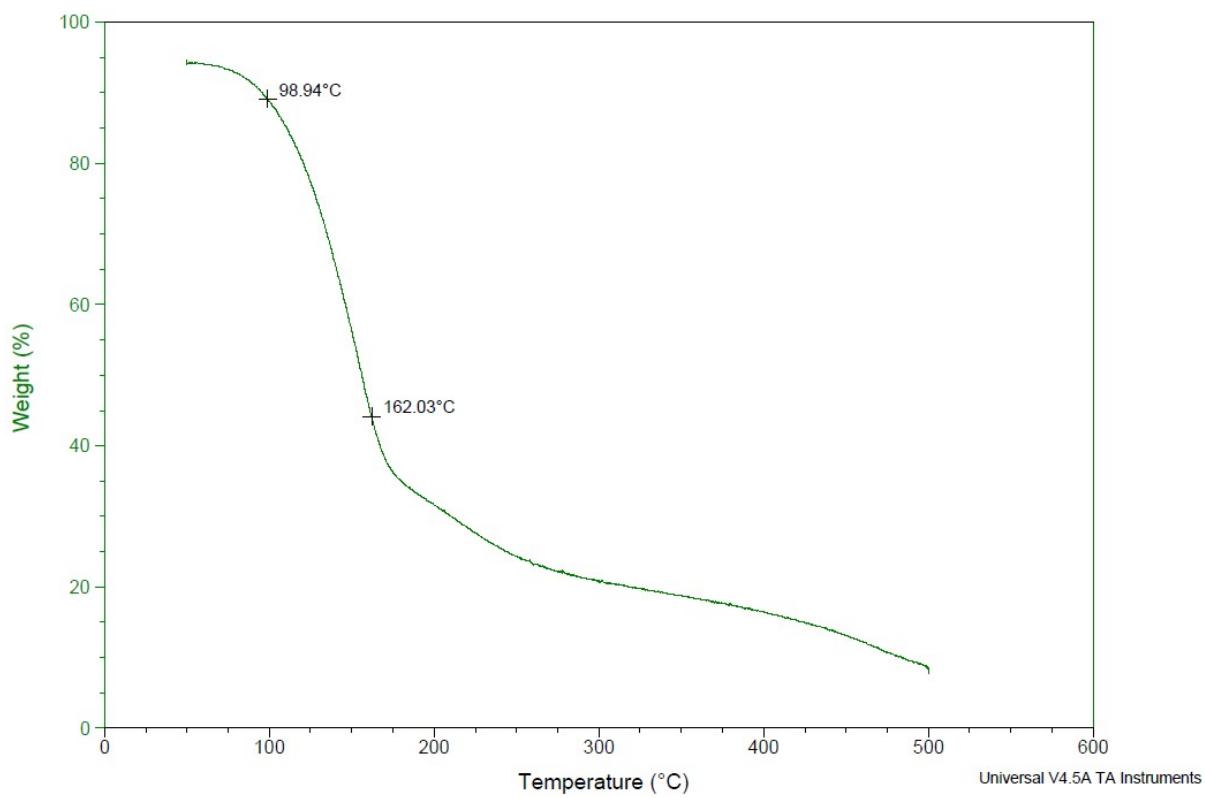


Figure S49. TGA thermogram of PC (Table 2, run 13)

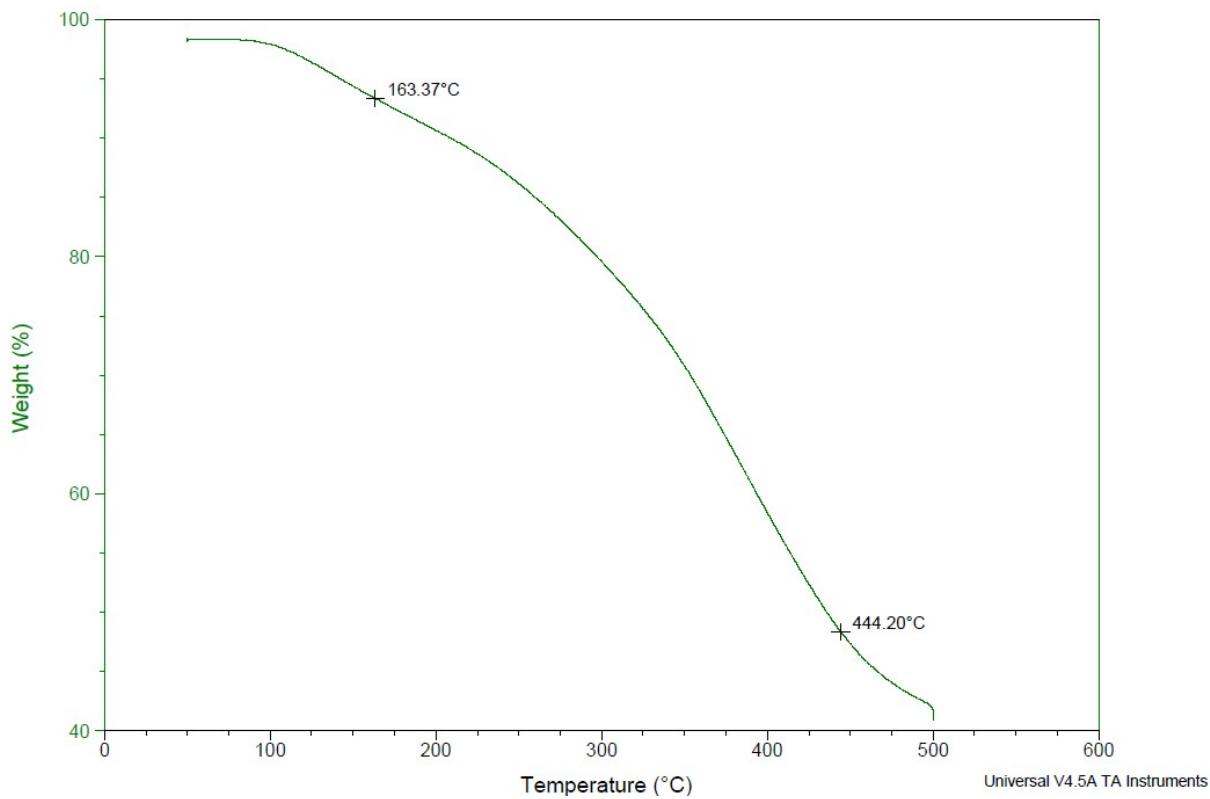


Figure S50. TGA thermogram of PC (Table 1, run 6) after UV irradiation for 6 h

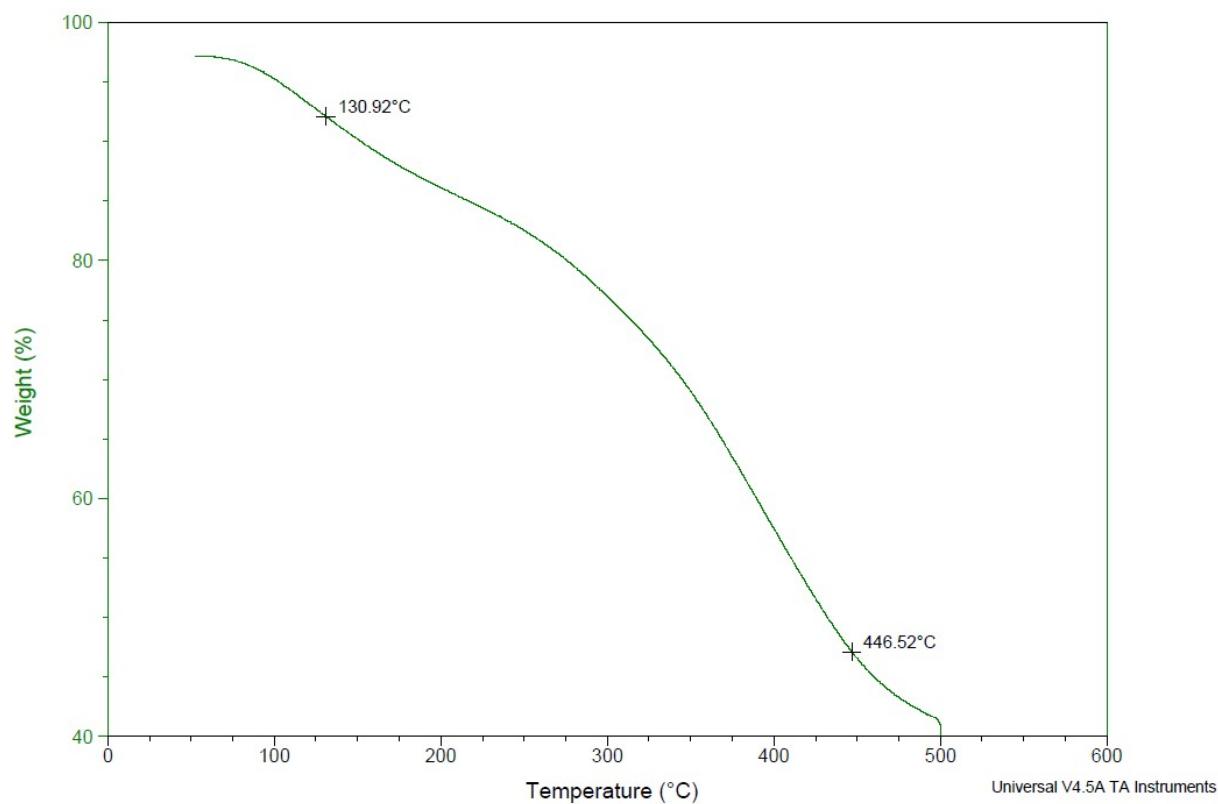


Figure S51. TGA thermogram of PC (Table 3, run 14)

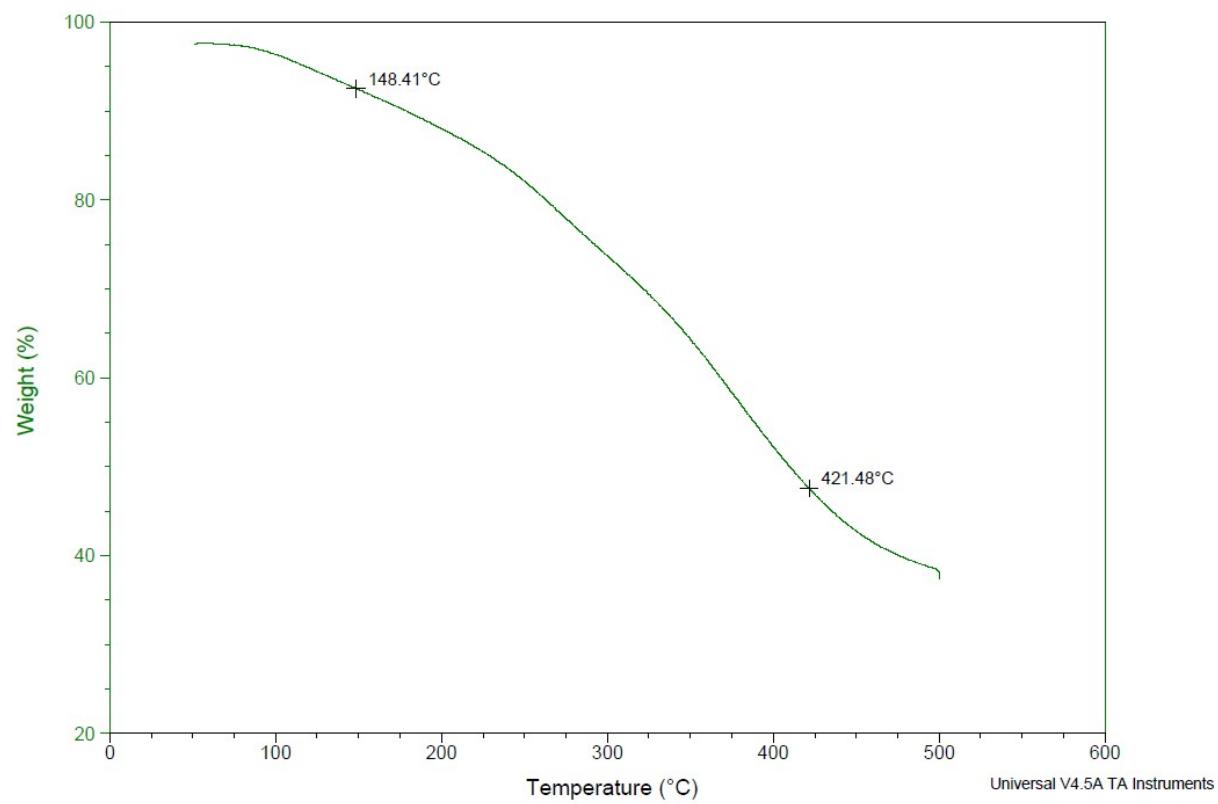


Figure S52. TGA thermogram of PC (Table 3, run 15)

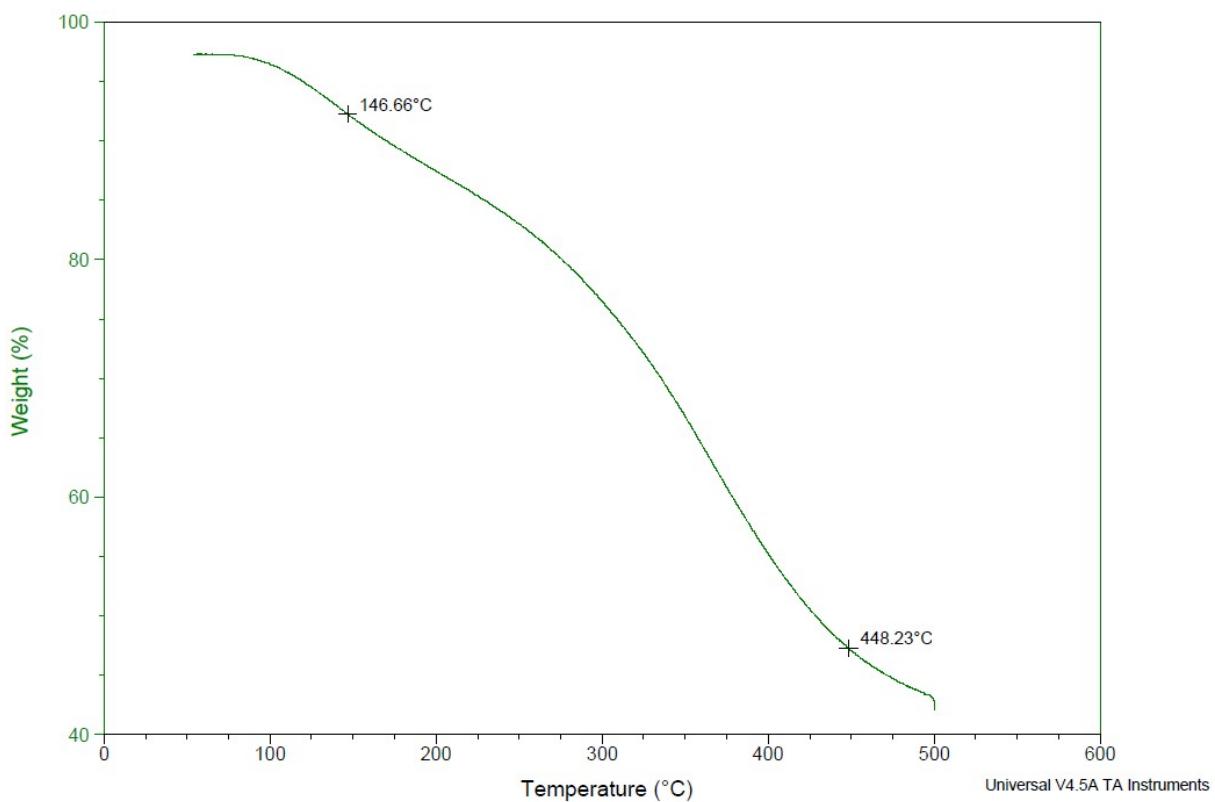


Figure S53. TGA thermogram of PC (Table 3, run 16)



Figure S54. PC picture (Table 1, run 6)