

Supplementary information

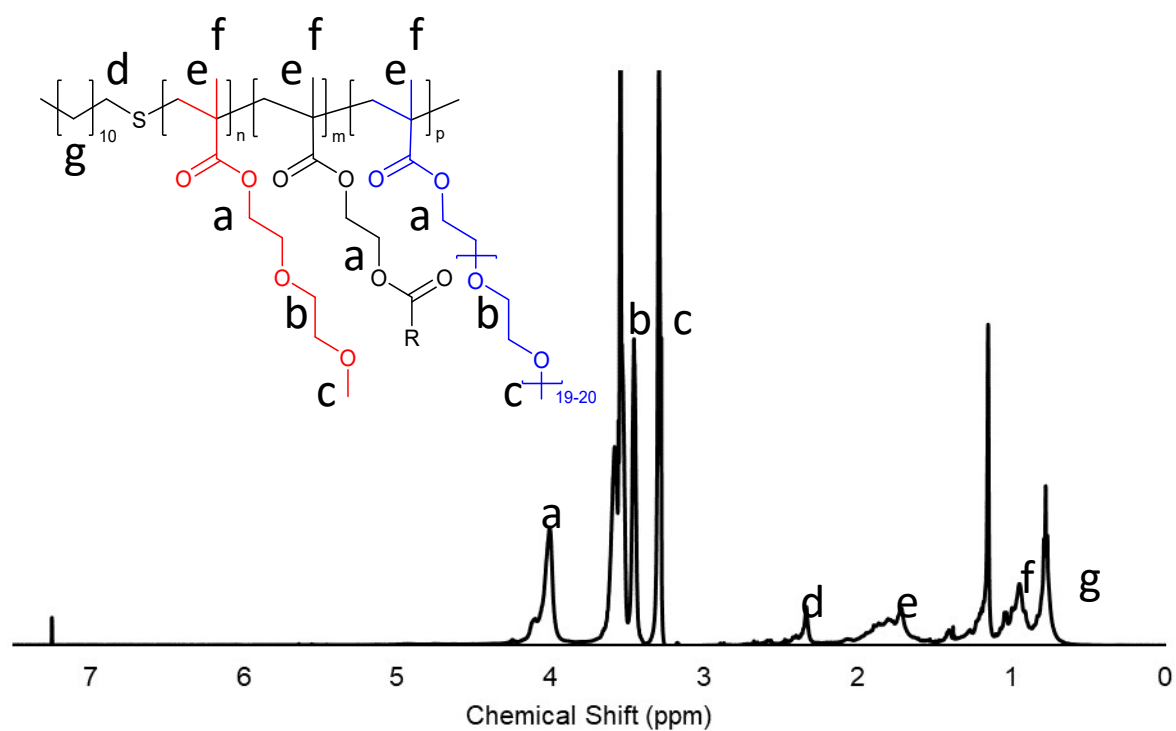


Figure S1. ^1H NMR spectrum of P1 with annotation.

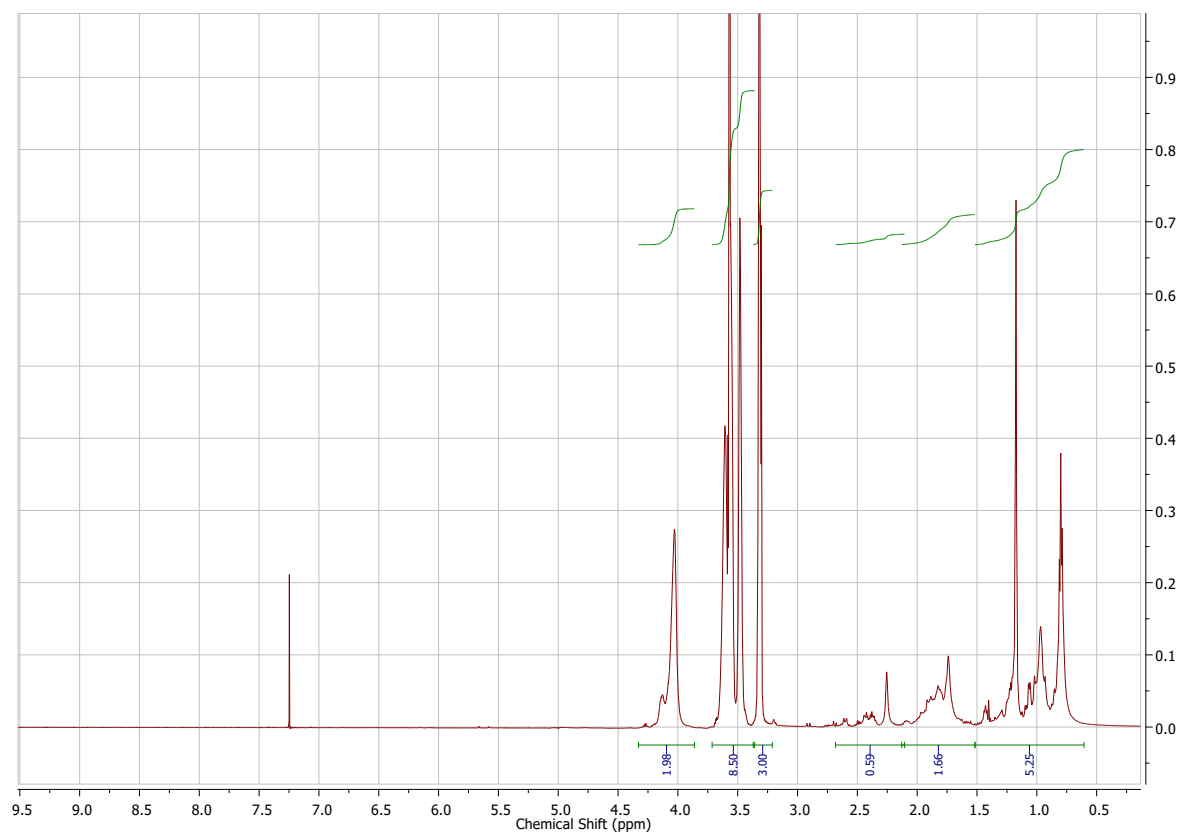


Figure S2. ^1H NMR spectrum of P2

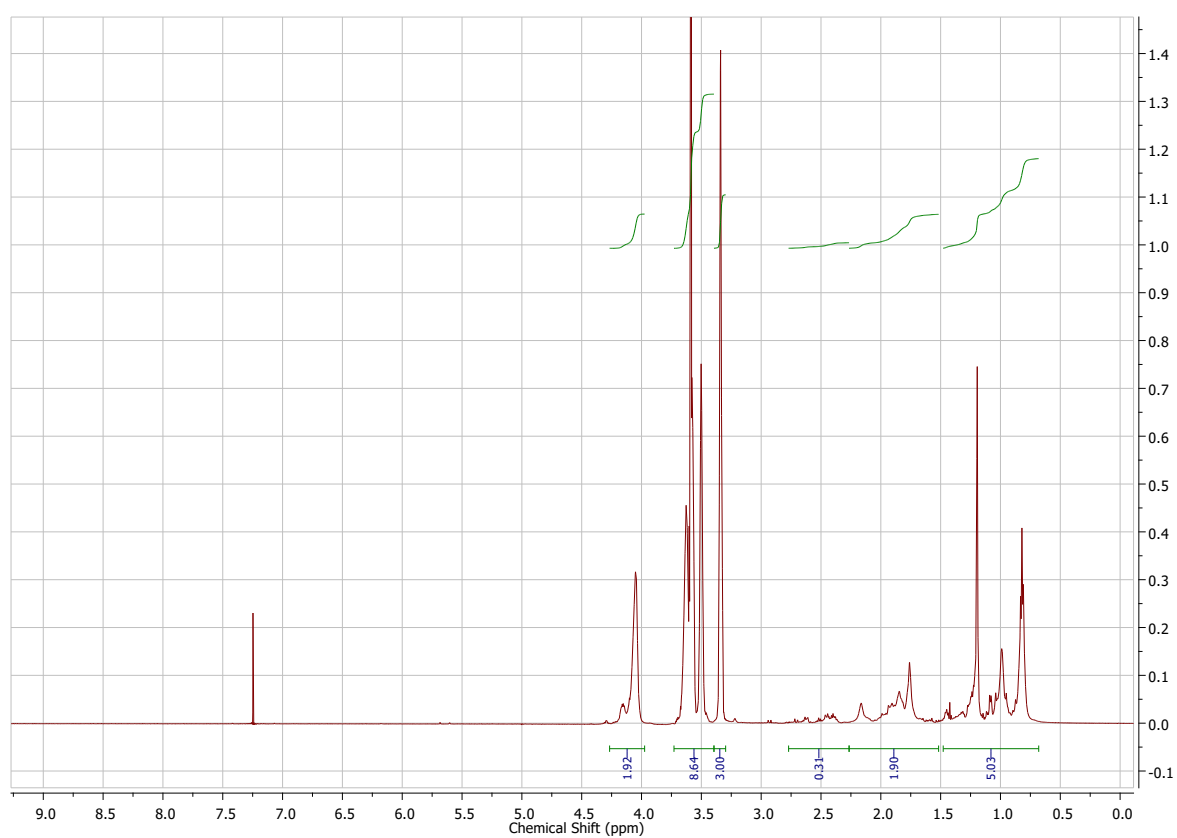


Figure S3. ^1H NMR spectrum of P3

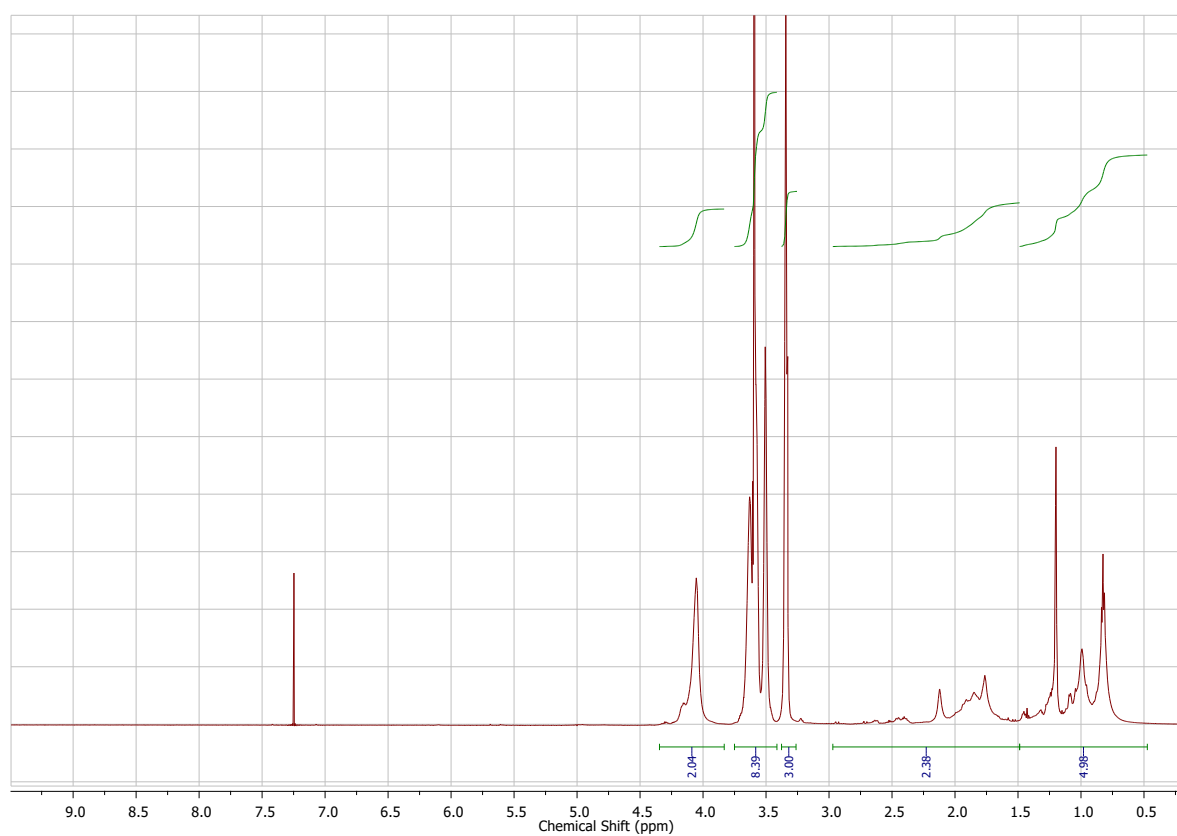


Figure S4. ^1H NMR spectrum of P4

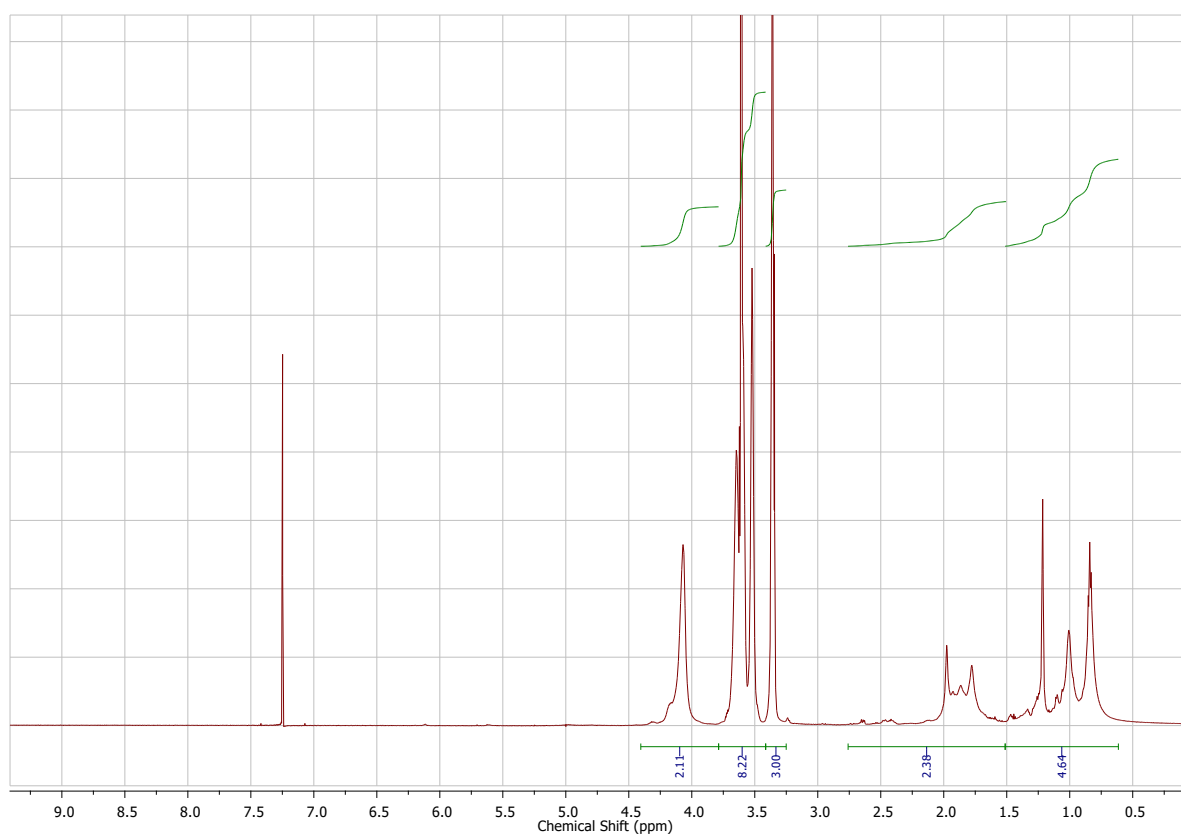


Figure S5. ^1H NMR spectrum of P5

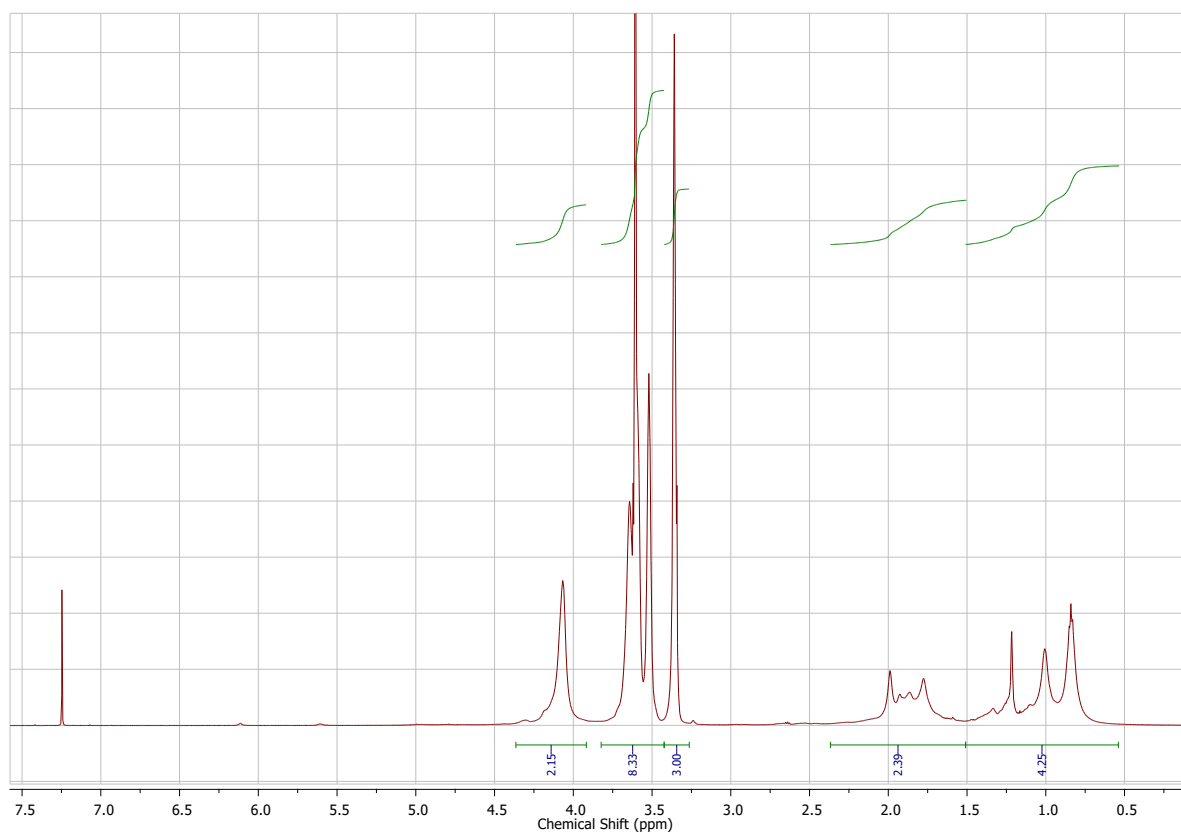


Figure S6. ^1H NMR spectrum of P6

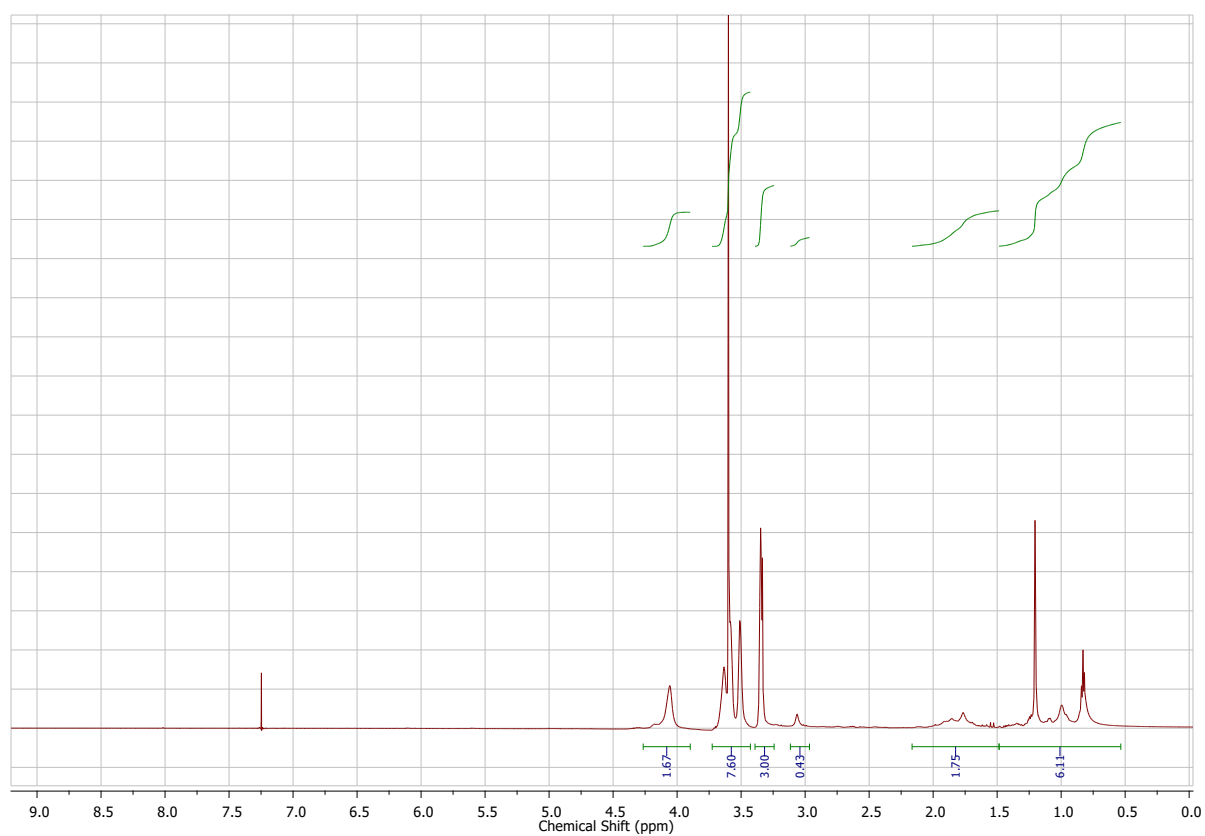


Figure S7. ^1H NMR spectrum of P7

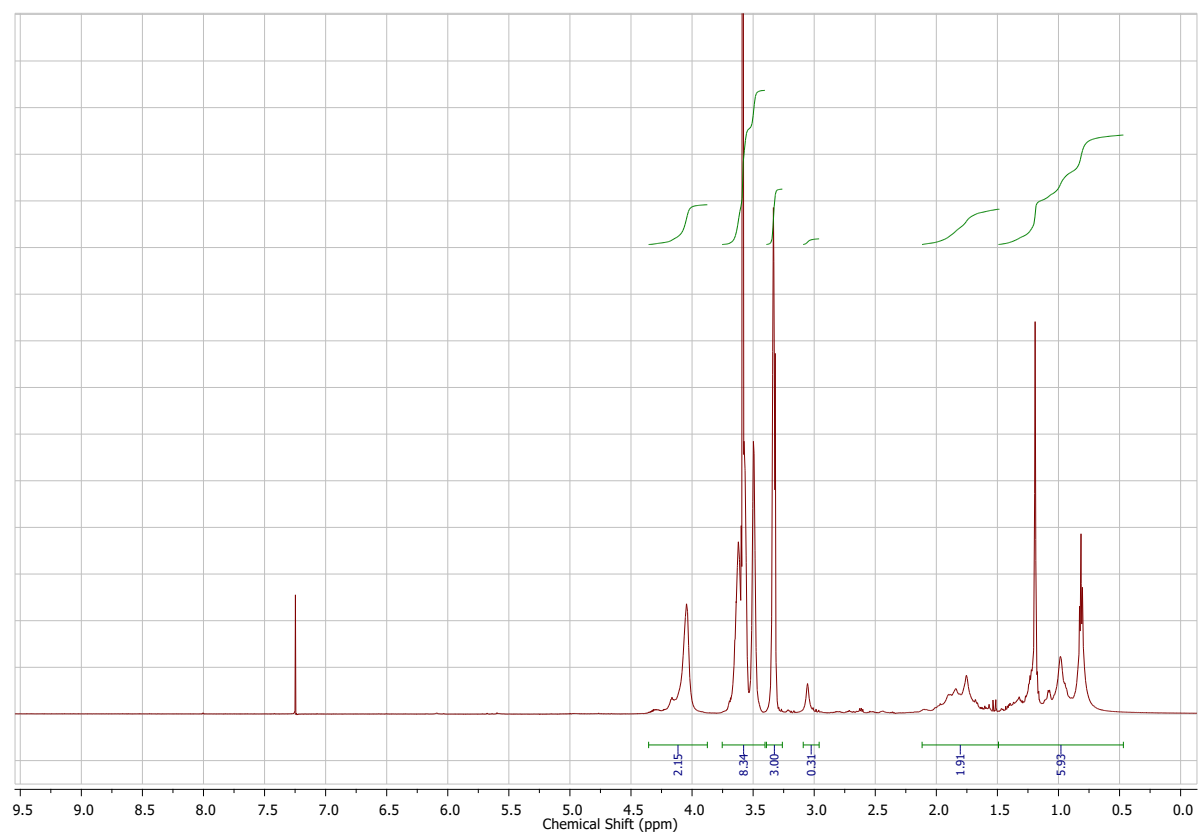


Figure S8. ^1H NMR spectrum of P8

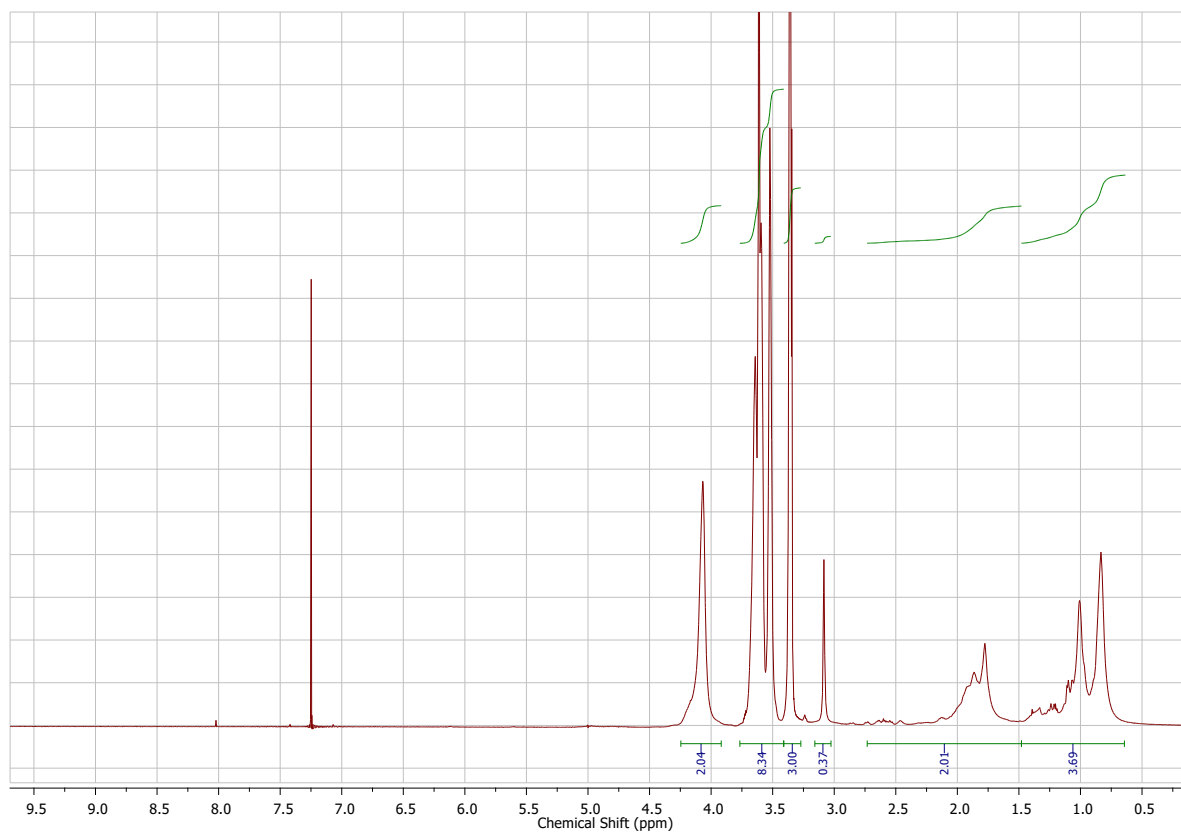


Figure S9. ^1H NMR spectrum of P9

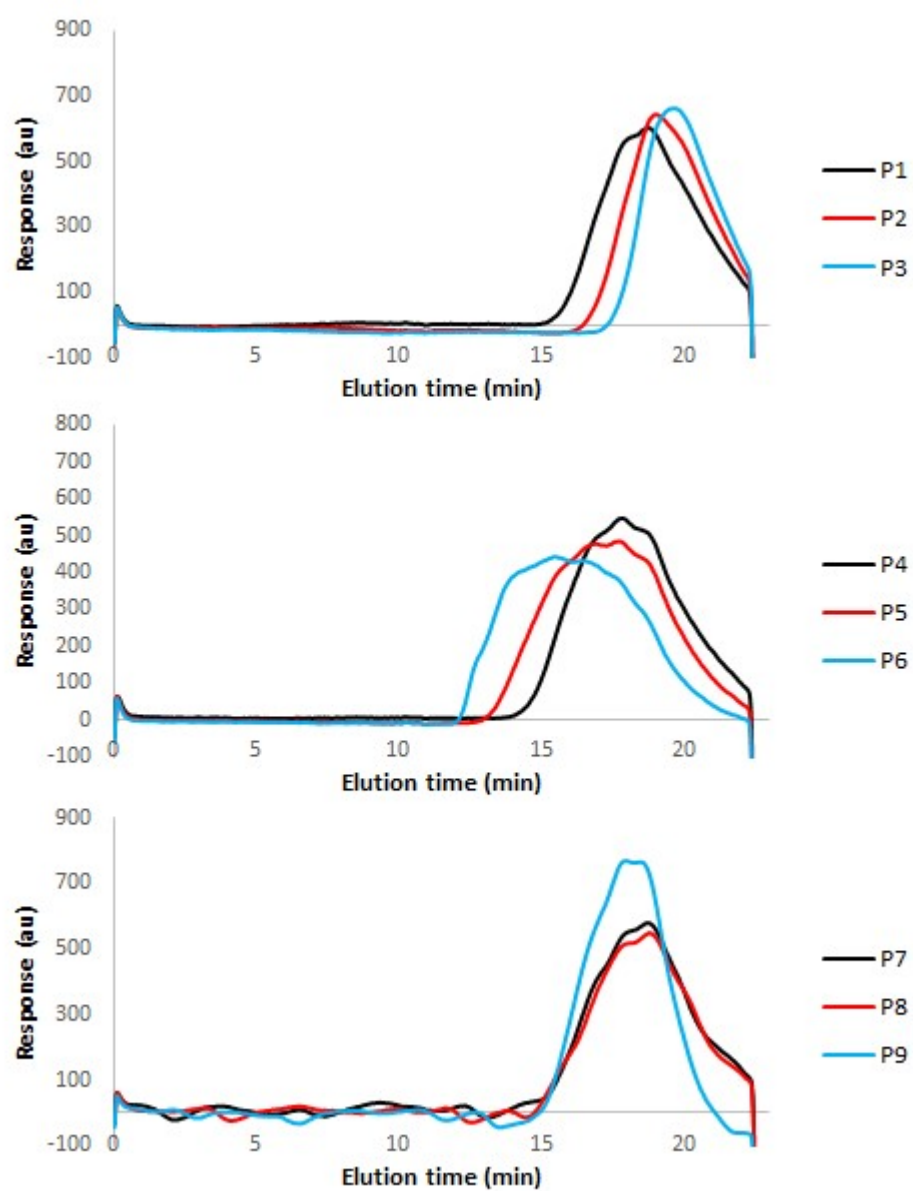


Figure S10: GPC chromatograms for P1-9.

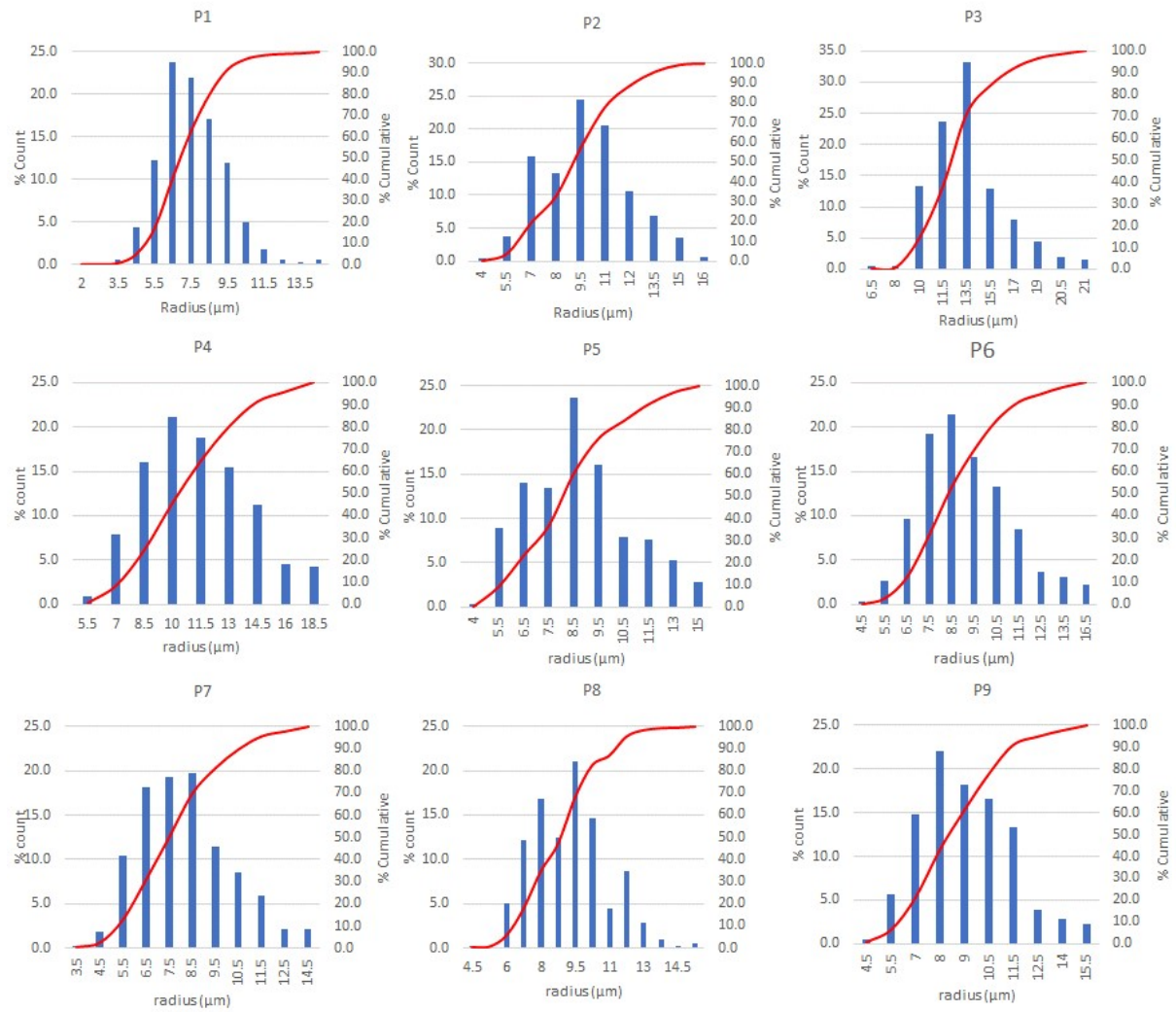


Figure S11. Emulsion droplet size distributions measured by light microscopy at 10 wt% BCS concentration. % counts are shown in blue, with cumulative data in red.

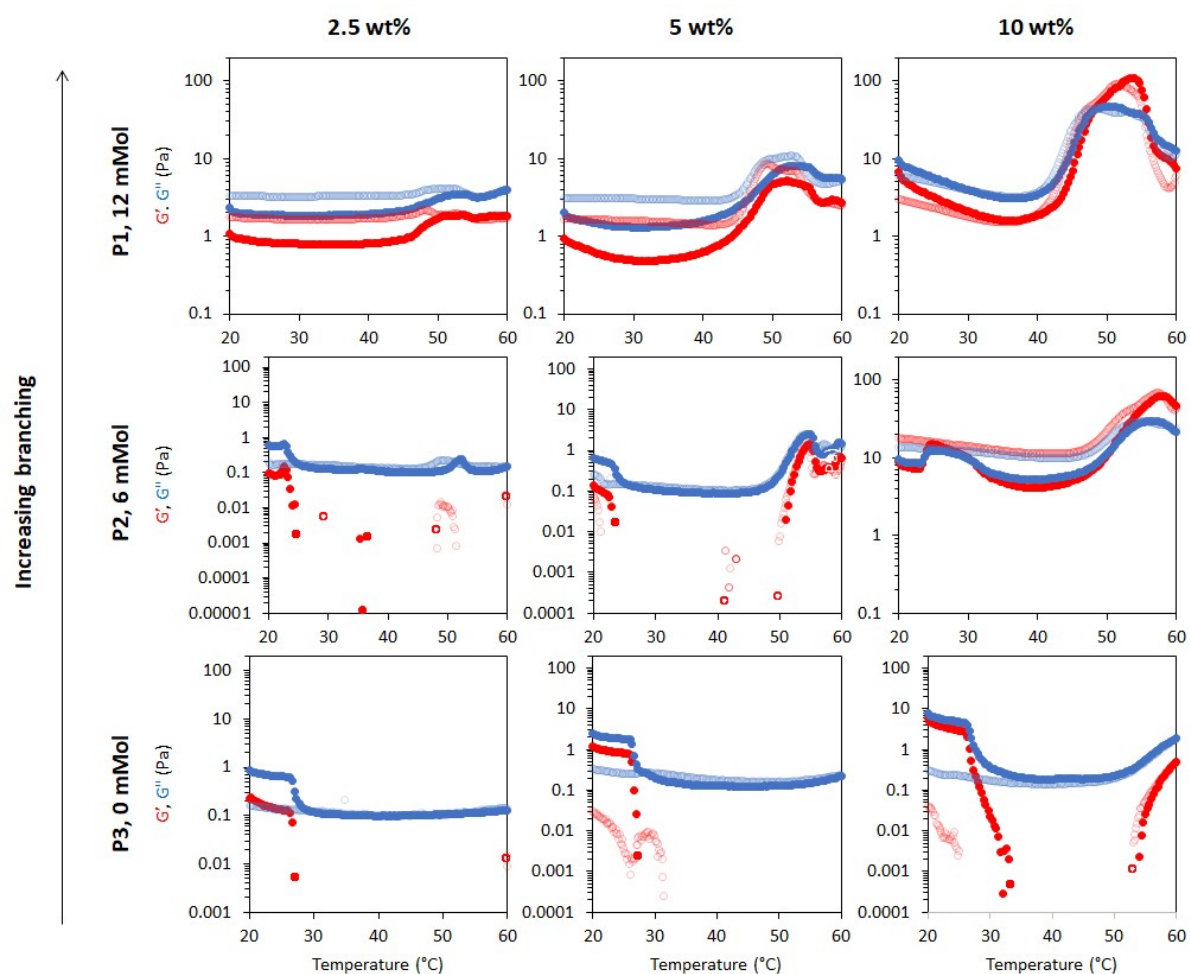


Figure S12. Rheological behaviour of emulsions stabilised by thermoresponsive BCSs, where P1 is the sample with “full cross-linker”, P2 is with “half cross-linker” and P3 has no cross-linker. Emulsions were tested at 2.5, 5 and 10 wt% polymer concentration. G' is shown in red and G'' is shown in blue. Dark colours show the ‘up’ heating ramp whilst light colours show the subsequent ‘down’ cooling ramp.

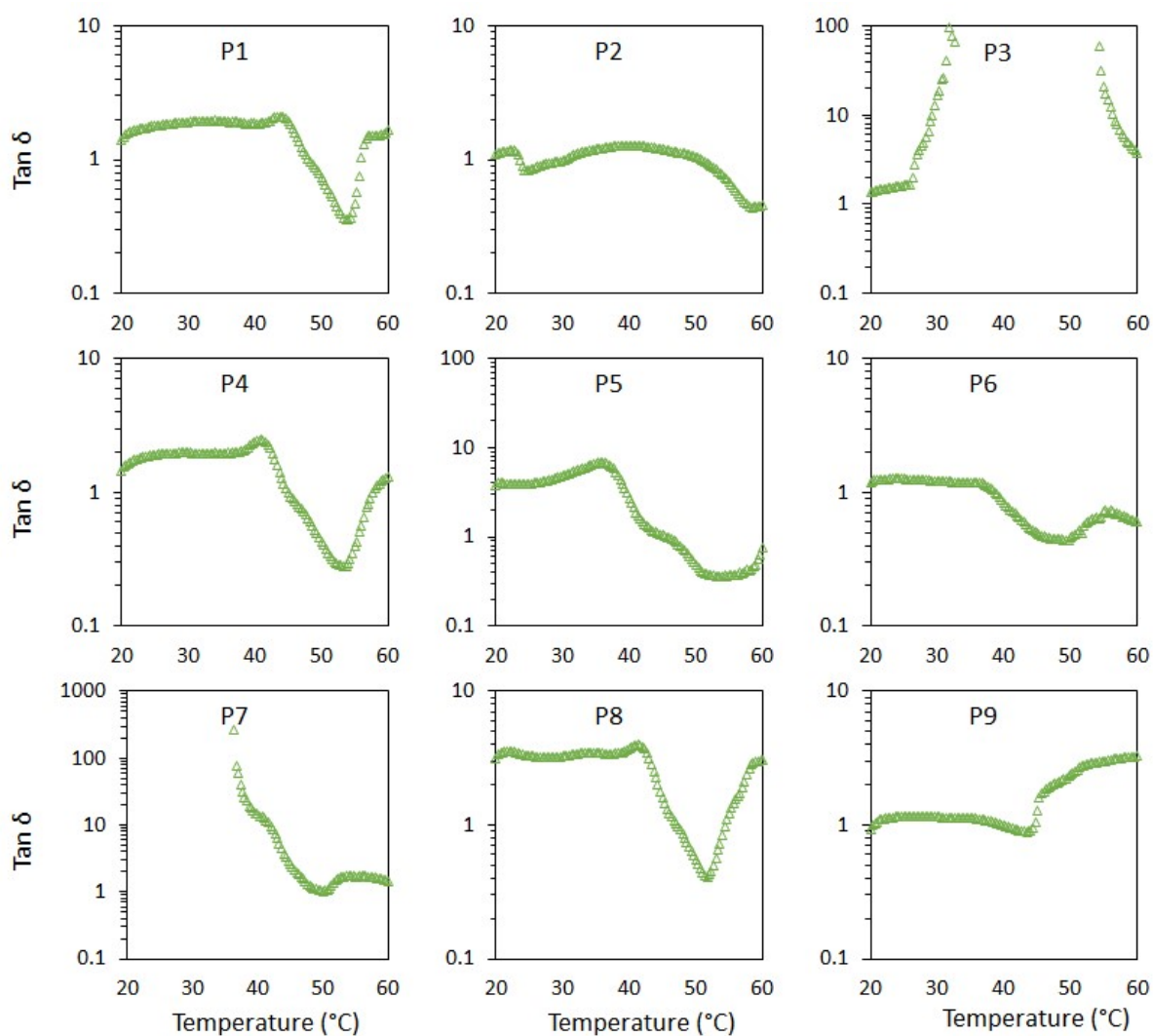


Figure S13. Evolution of $\tan \delta$ with temperature for emulsions stabilised with 10 wt% BCS P1-P9.

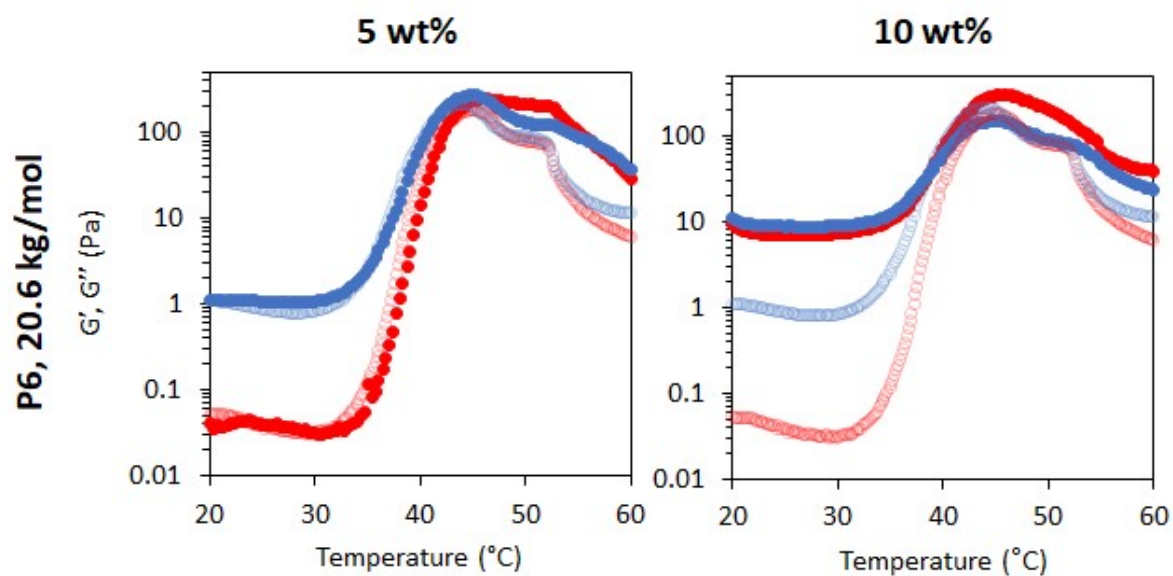


Figure S14. Rheological thermoscans for P6 emulsions at 5 and 10 wt %. G' is shown in red and G'' is shown in blue. Dark colours show the 'up' heating ramp whilst light colours show the subsequent 'down' cooling ramp.

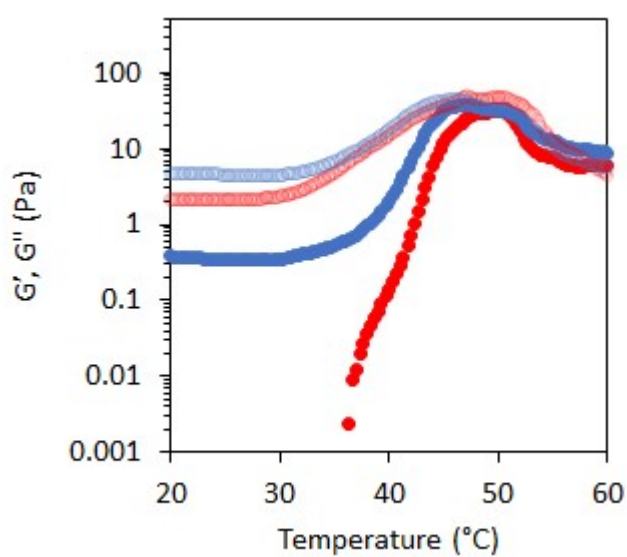


Figure S15. Rheological thermoscans for P7 emulsion at 10 wt %. G' is shown in red and G'' is shown in blue. Dark colours show the 'up' heating ramp whilst light colours show the subsequent 'down' cooling ramp.