

Figure S1. ATR / FT-IR spectrum of F98(Acr)<sub>2</sub>

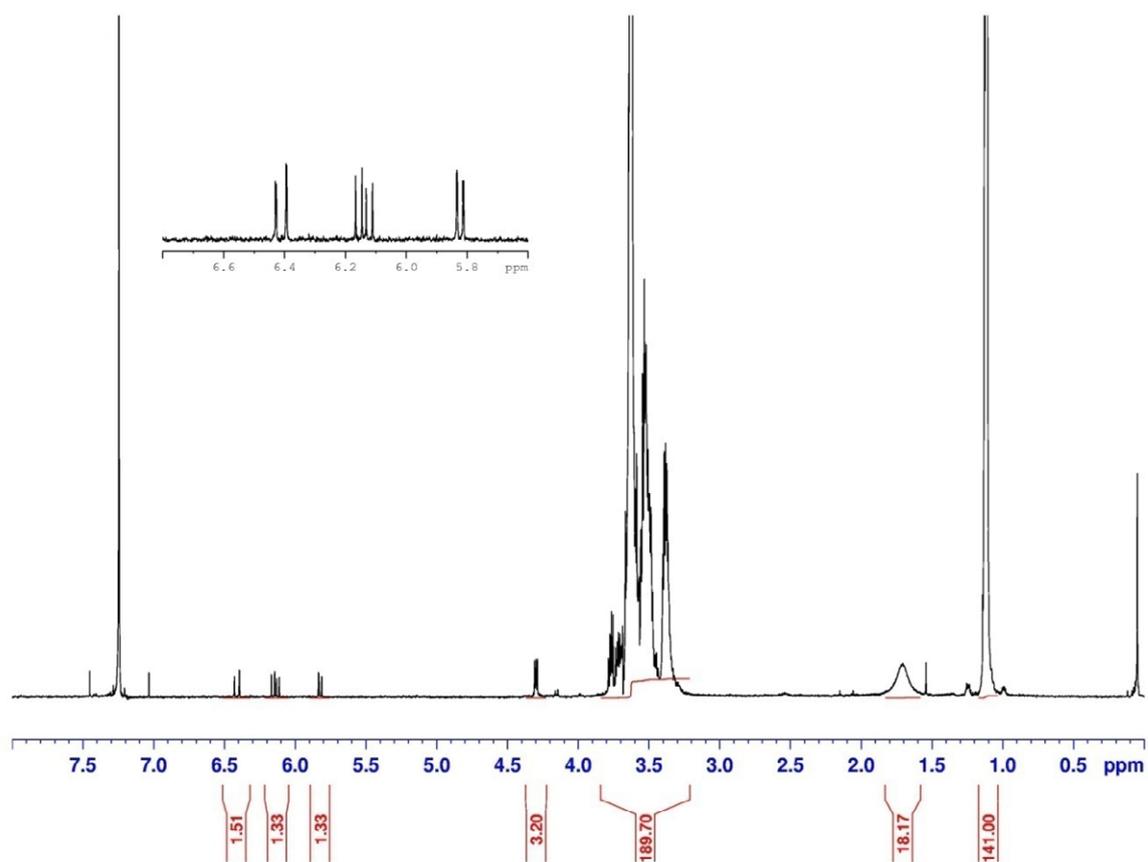


Figure S2. <sup>1</sup>H NMR spectrum of F98(Acr)<sub>2</sub>

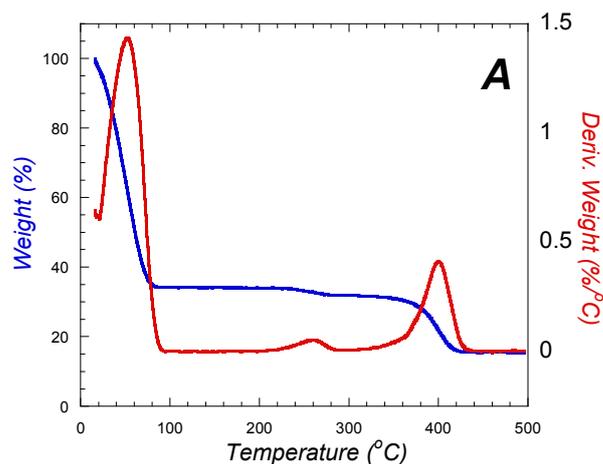


Figure S3A. Fast scan (10°C/min) TGA collected on the F98(Acr)<sub>2</sub> aqueous dispersion under a N<sub>2</sub> atmosphere, weight % (blue) and derivative weight loss, DTG, (red).

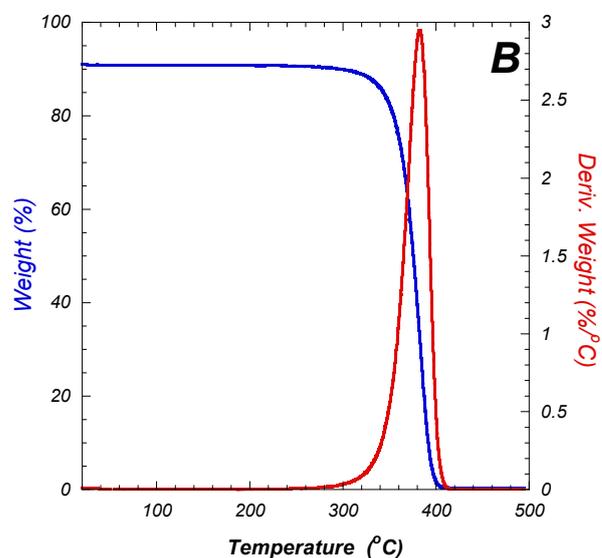


Figure S3B. Fast scan (10°C/min) TGA collected on the F98 solid polymer under a N<sub>2</sub> atmosphere, weight % (blue) and derivative weight loss, DTG, (red).

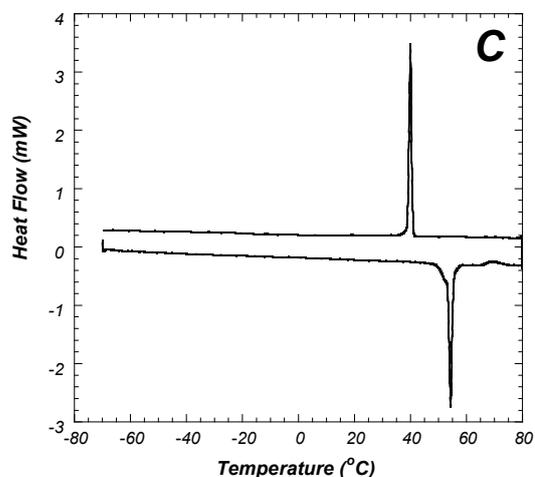


Figure S3C. Second heating scan (2°C/min) collected on the diacrylate end-functionalized triblock copolymer reconstituted complex fluid prior to UV irradiation.

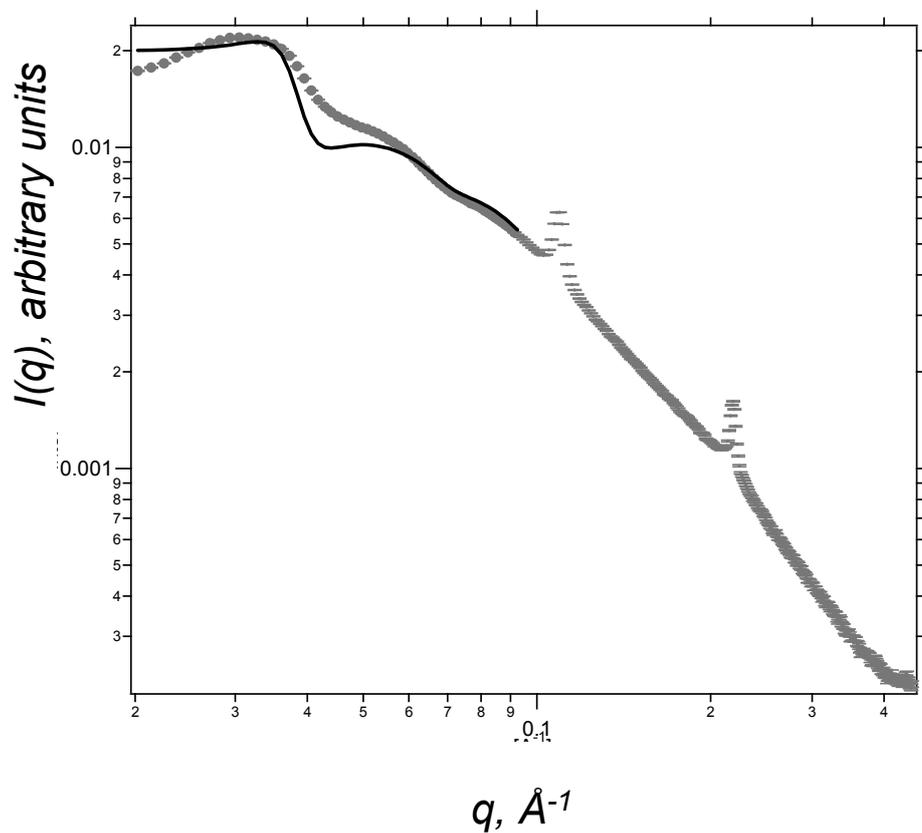


Figure S4. Non-linear least squares fit to low  $q$  SAXS pattern collected on a photocrosslinked aqueous dispersion of F98(Acr)<sub>2</sub> (23 % w/w) at 35 °C.

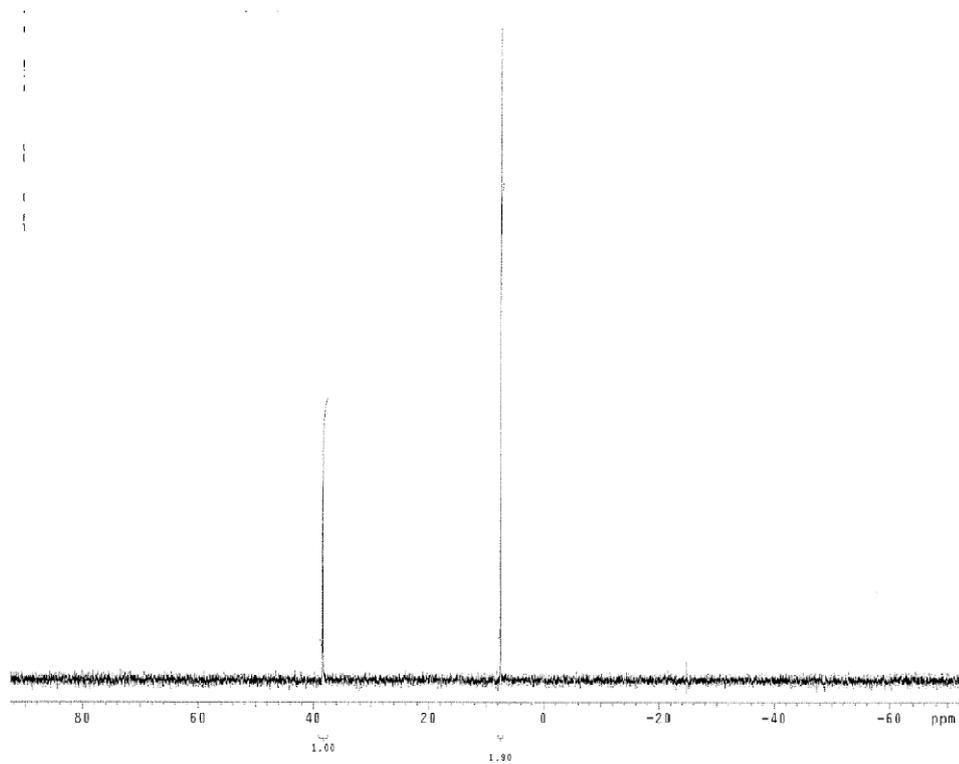


Figure S5. Representative  $^{31}\text{P}$  NMR spectrum collected on extract obtained by Soxhlet extraction in chloroform.