

Supporting Information

From Spheres to Worms to Vesicles: Kinetic Control of Nanostructure Formation from the Same Block Copolymer

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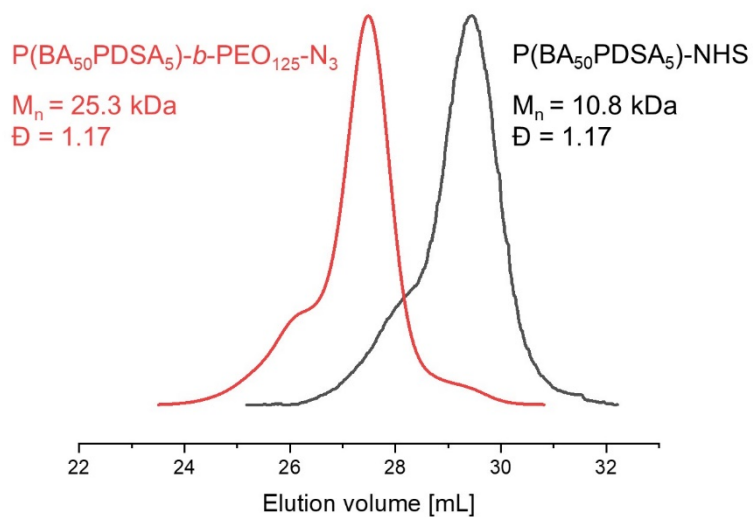


Figure S1: GPC measurements of P(BA₅₀-PDSA₅)-b-PEO₁₂₅-N₃ and P(BA₅₀-PDSA₅)-NHS (Eluent: DMAc + LiBr, PS-calibration, RI detector).

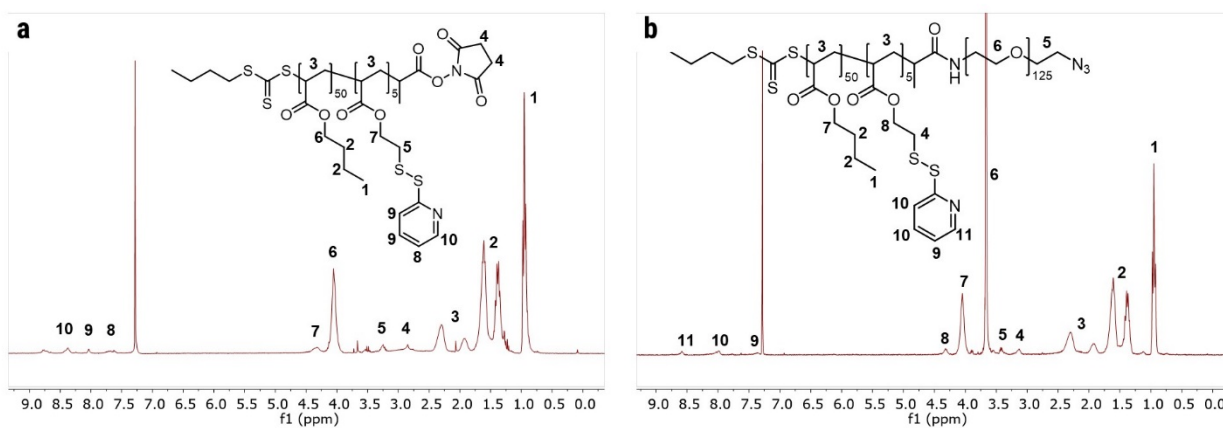


Figure S2: ¹H-NMR (300 MHz) spectra of a) P(BA₅₀-PDSA₅)-NHS and b) P(BA₅₀-PDSA₅)-b-PEO₁₂₅-N₃ in CDCl₃.

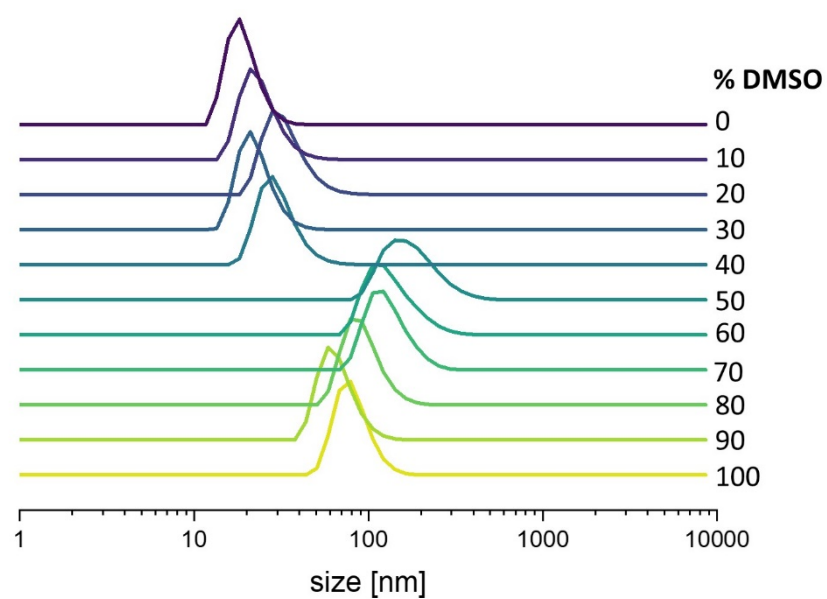


Figure S3: DLS measurements (number PSD), indicating particle size distributions with increasing DMSO content (0% to 100%) in starting solvent composition. Initial polymer concentration: 4 mg/mL, water addition rate: 2 mL/h.

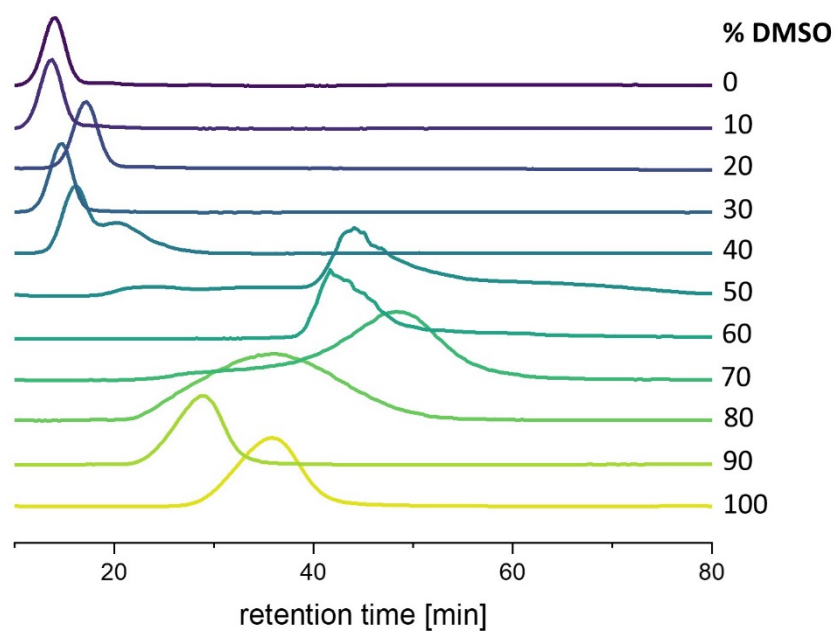


Figure S4: AF4 elugrams (UV detector at 280 nm) with increasing DMSO content (0% to 100%) in starting solvent composition. Initial polymer concentration: 4 mg/mL, water addition rate: 2 mL/h.

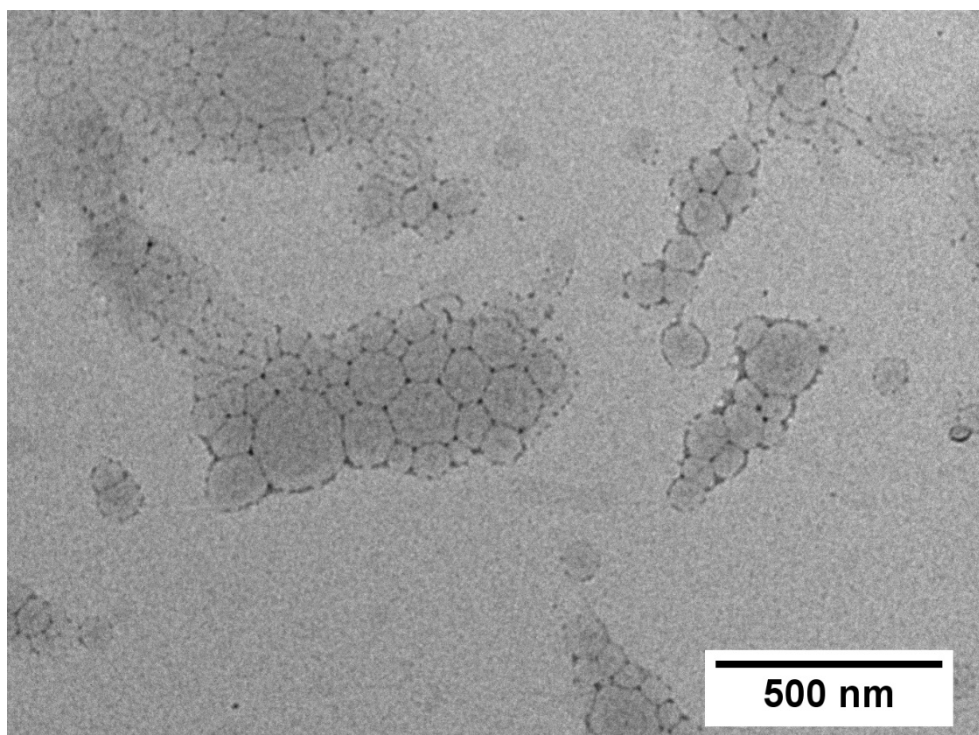


Figure S5: Non-cryo-TEM image from sample prepared with 4 mg/mL initial polymer concentration, 2 mL/h water addition speed and a solvent ratio of 80% DMSO and 20% acetone.

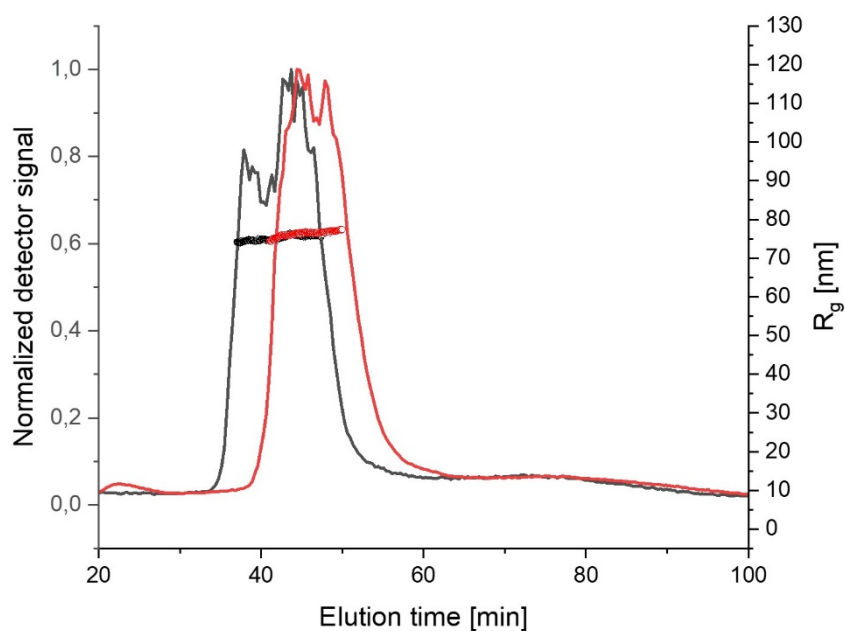


Figure S6: Investigation of stability of worm-like micelles by AF4 measurements (UV 280 nm), directly after assembly: elugram (black line), with according R_g (black dots) and 1 year after assembly: elugram (red line) with according R_g (red dots).

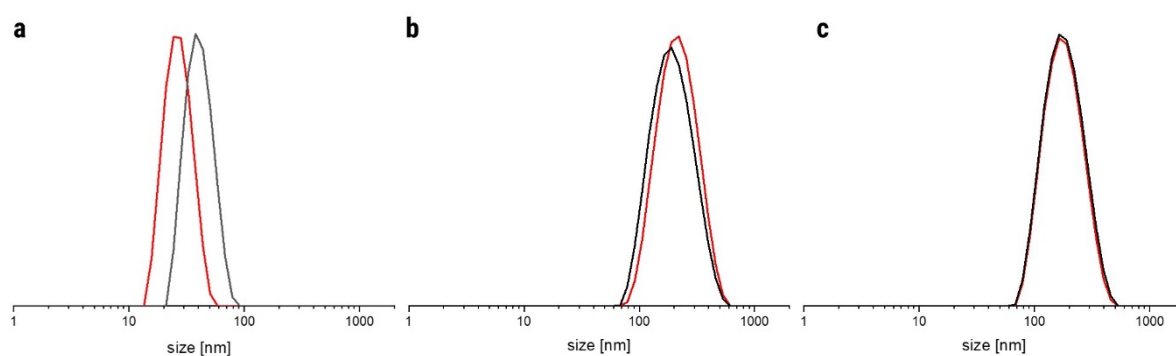


Figure S7: Investigation of stability by DLS measurements of non-crosslinked a) spherical micelles; b) worm-like micelles; c) vesicles; without heating (red) and after heating at 80 °C for one week (black).

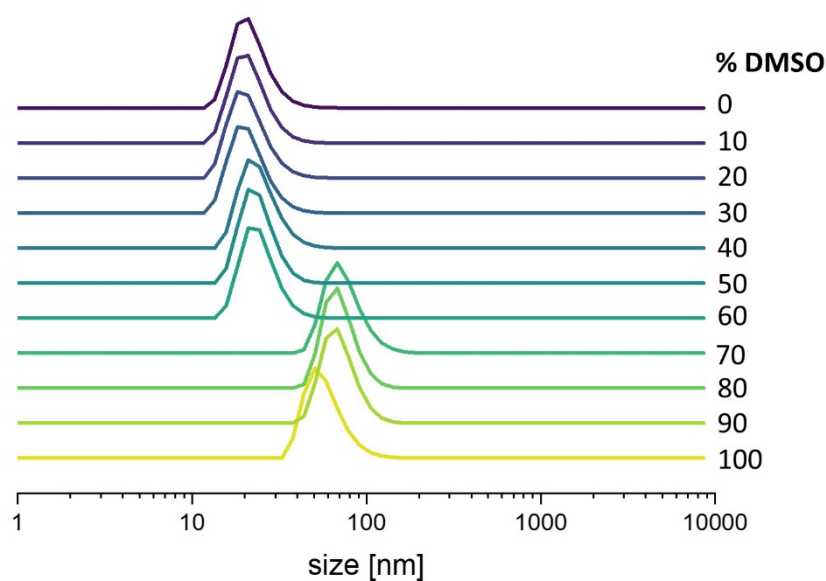


Figure S8: DLS measurements (number PSD), indicating particle size distributions with increasing DMSO content (0% to 100%) in starting solvent composition. Initial polymer concentration: 1 mg/mL, water addition rate: 2 mL/h.

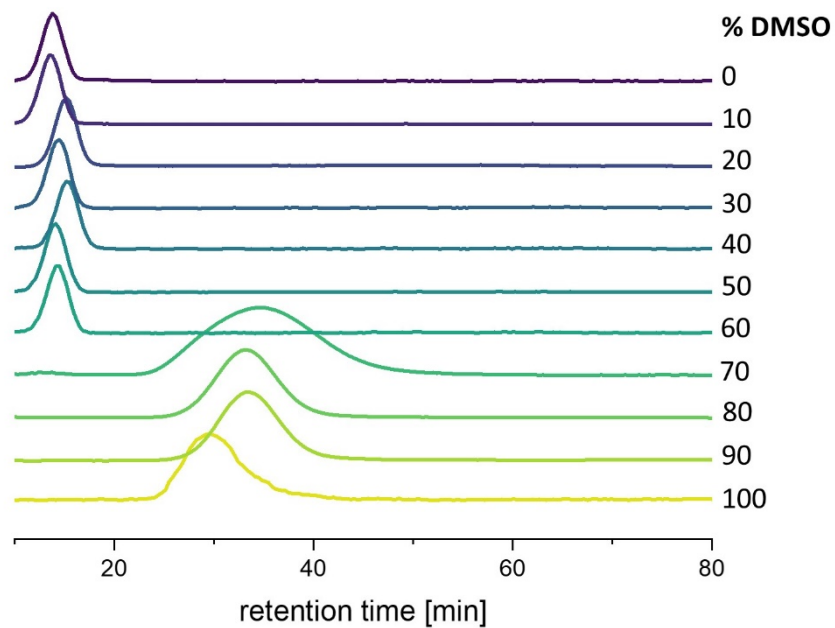


Figure S9: AF4 elugrams (UV detector at 280 nm) with increasing DMSO content (0% to 100%) in starting solvent composition. Initial polymer concentration: 1 mg/mL, water addition rate: 2 mL/h.

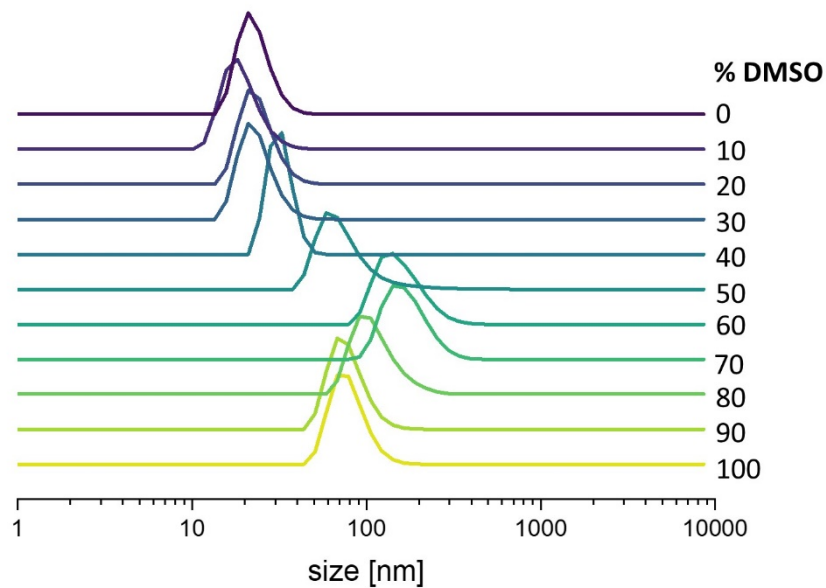


Figure S10: DLS measurements (number PSD), indicating particle size distributions with increasing DMSO content (0% to 100%) in starting solvent composition. Initial polymer concentration: 7 mg/mL, water addition rate: 2 mL/h.

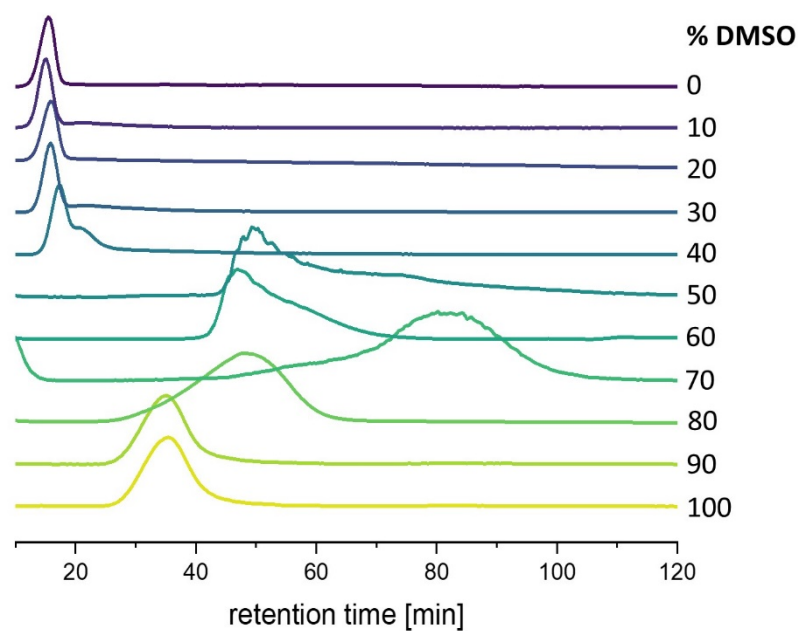


Figure S11: AF4 elugrams (UV detector at 280 nm) with increasing DMSO content (0% to 100%) in starting solvent composition. Initial polymer concentration: 7 mg/mL, water addition rate: 2 mL/h.

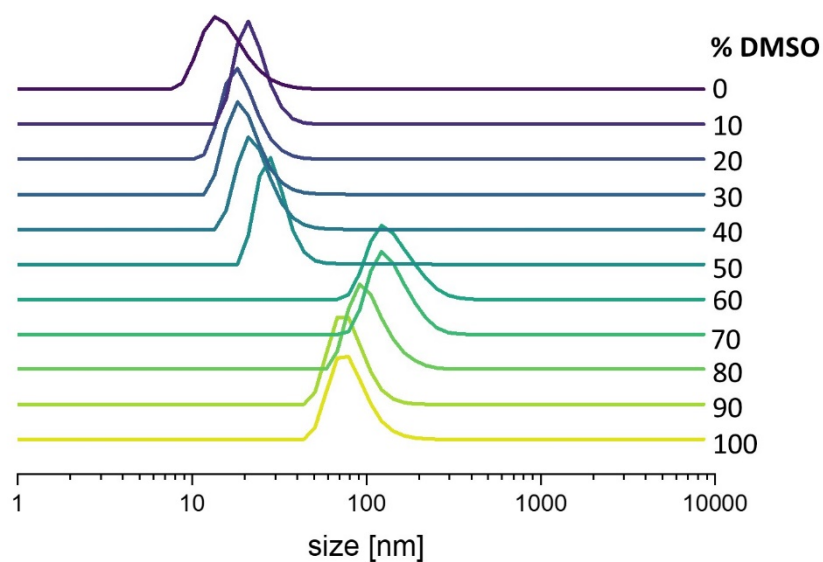


Figure S12: DLS measurements (number PSD), indicating particle size distributions with increasing DMSO content (0% to 100%) in starting solvent composition. Initial polymer concentration: 4 mg/mL, water addition rate: 1 mL/h.

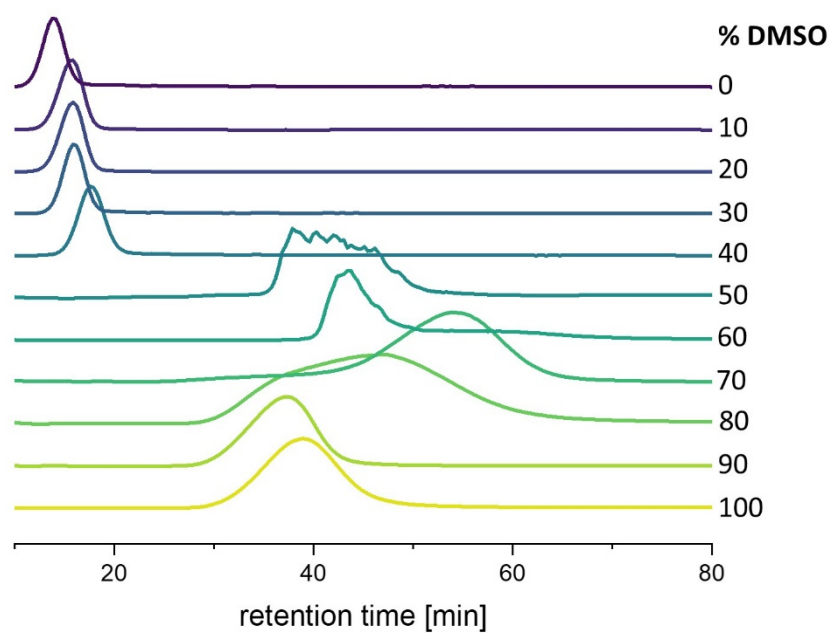


Figure S13: AF4 elugrams (UV detector at 280 nm) with increasing DMSO content (0% to 100%) in starting solvent composition. Initial polymer concentration: 4 mg/mL, water addition rate: 1 mL/h.

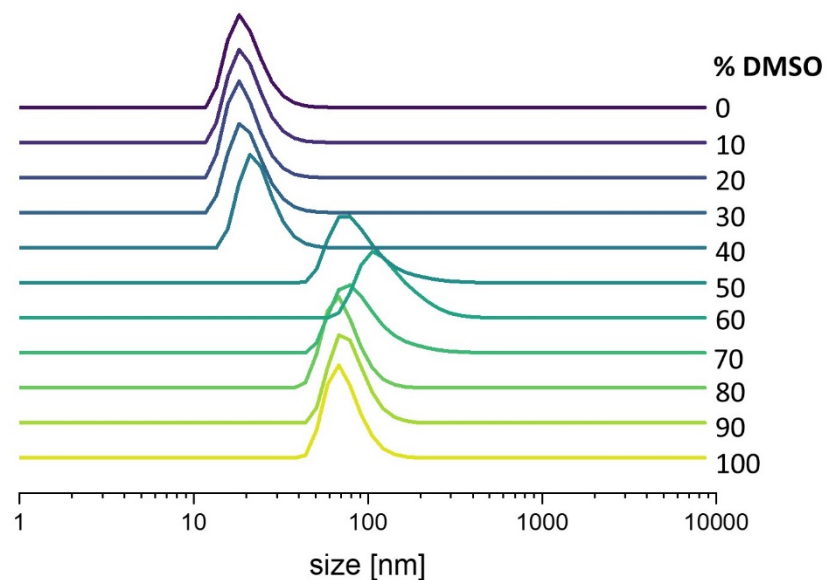


Figure S14: DLS measurements (number PSD), indicating particle size distributions with increasing DMSO content (0% to 100%) in starting solvent composition. Initial polymer concentration: 4 mg/mL, water addition rate: 4 mL/h.

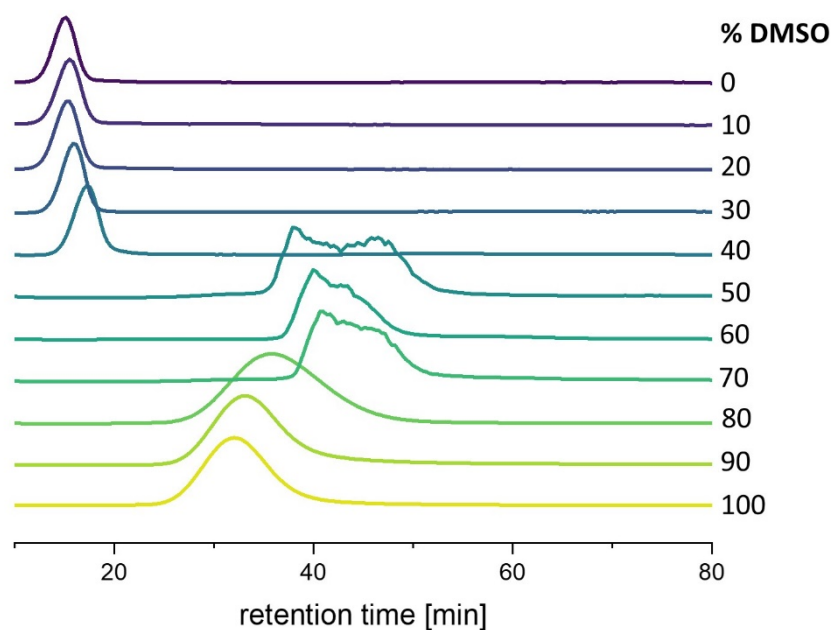


Figure S15: AF4 elugrams (UV detector at 280 nm) with increasing DMSO content (0% to 100%) in starting solvent composition. Initial polymer concentration: 4 mg/mL, water addition rate: 4 mL/h.

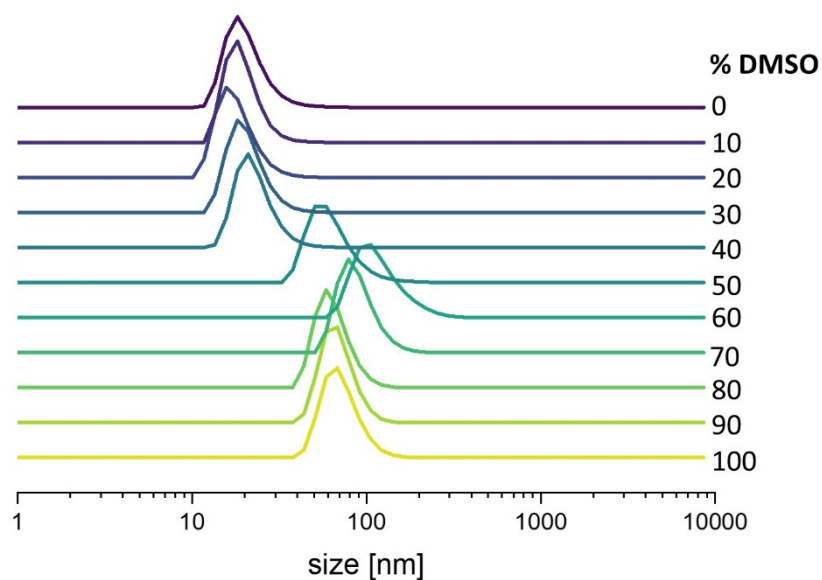


Figure S16: DLS measurements (number PSD), indicating particle size distributions with increasing DMSO content (0% to 100%) in starting solvent composition. Initial polymer concentration: 4 mg/mL, water addition rate: 20 mL/h.

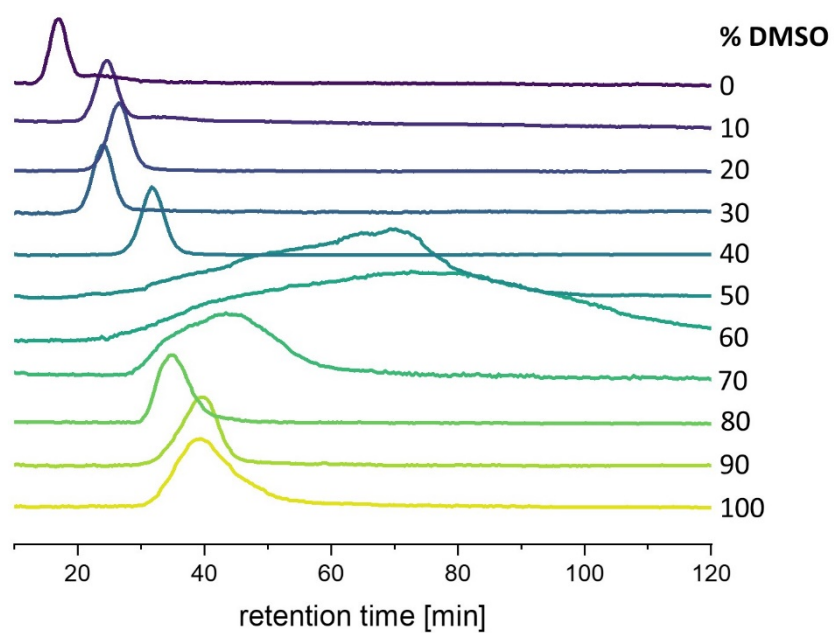


Figure S17: AF4 elugrams (UV detector at 280 nm) with increasing DMSO content (0% to 100%) in starting solvent composition. Initial polymer concentration: 4 mg/mL, water addition rate: 20 mL/h.